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## Multiple and Multimodal Literacies in Foreign and Second Language Learning in the Digital Age

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#### Abstract

In the twenty-first century, the concept of Literacy increasingly reflects the continuous evolution of information and communication technologies and the necessary skills for problem solving, critical evaluation of information and its presentation through a variety of multimedia channels. The past few decades have seen the term Literacy change dramatically and emerge, together with its many facets, as a key element in language teaching and learning. This research project traces the evolution of the different aspects that are part of the concept of Literacy through the lens of language education, analysing both the strengths and the criticalities highlighted by research. The emphasis is placed on the relationship between research studies and language classrooms, where the promotion of multiple, multimodal and digital literacies still seems difficult to achieve.

A mixed-methods research was used to collect data, mainly through a questionnaire built around the concept of Literacy in language education, exploring the relationship that respondents have with research, with the specific learning objectives established for the target language and with information and communication technologies. Qualitative data collection instruments, such as interviews and focus groups, were also used, and a documentary analysis focussing on the normative references that regulate teaching and learning of two languages (English in Italian high schools and Italian in Slovenian high schools) with reference to Literacy was carried out. Upper secondary teachers of English as a foreign language in Italy and of Italian as a second language in Slovenia were the participants.

Results of the study confirm the existence of a gap between the world of research and the school system, Literacy-wise, also due to the lack of specific learning objectives vis-à-vis Literacy established for language education. This reflects the general lack of familiarity found on the part of the teachers concerning these concepts and related terminology, as well as the difficulty encountered in discussing the possibility of introducing and implementing literacy-based approaches in language classrooms.


## INTRODUCTION

The existing literature abounds with studies concerning the concept of Literacy in its most disparate forms, within a language education environment (e.g., Cope and Kalantzis, 2000; Kress and Van Leeuwen, 2001; Valdés, 2004; Cole and Pullen, 2009; Cope and Kalantzis, 2009; Rowsell and Walsh, 2011; Ganapathy, 2014; Knobel and Lankshear, 2014; Yi, 2014; Troyan, 2016; Warner and Richardson, 2017; Kiss and Mizusawa, 2018).

Very different views clearly emerge from different branches of research, often associating Literacy either with definitions that can now be considered obsolete, or reducing it to basic reading and writing skills.

What is missing is an updated overview. What do we mean today by the word "Literacy"? How has the concept of New Literacies come about? What do the New Literacies refer to, and what do/might they entail when it comes to a formal language learning environment? But above all, is it something that is (or can be) introduced appropriately in everyday teaching, or are they theories and definitions dealt with in the most diverse case studies but which do not find practical application in formal language education contexts?

Perceived as a multifaceted, plural set of abilities and skills, Literacy is now a pivotal term in language teaching and learning, as it enables individuals to use languages for specific purposes through multiple different media. Over the course of a few decades, the meaning of Literacy has changed from 'alphabetization' to:
"the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve his or her goals, develop his or her knowledge and potential, and participate fully in community and wider society" (UNESCO, 2004, 2011).

The consequence of dealing with such broad and multifaceted definitions is the branching off of multiple different research directions, that range from investigating aspects linked to linguistic and cultural identity (Dooley, 2008; Danzak, 2011; Ntelioglou, 2012) to others of a socio-economic nature, such as access to tools and
devices (Fairlie et al., 2012; Urbančíková et al., 2017); or again, from exploring the relationship between 'digital native' students and 'immigrant' teachers (Rajeswaran, 2019), to reviewing the new role of learners as content creators (Lenhart and Madden, 2005). While it is true that taking them all into account in a single research project is not feasible, it is also true that many case studies remain sectoral - namely they might focus only on the use of a specific tool, a device or on a specific approach in language classes - which is why it is so difficult to obtain an overall picture of what the situation is today in the field of language education when it comes to literacy in language teaching and learning within a formal educational context.

The present research project stems from the observation of an open issue: "what we do in schools under the rubric of literacy, and particularly what we measure in our literacy assessments, has not caught up with [the] profound changes" that have been affecting society and language education (Cope et al., 2011). A first step in this direction, therefore, involves exploring whether research in the field of language education, Literacy-wise, and the school system are proceeding hand in hand or not, verifying the existence of possible discrepancies, determining the teachers' awareness of any such discrepancy, and devising possible attempts to reduce it.

In the following chapters, therefore, we will report an investigation into the concept of Literacy in relation to language education in upper secondary schools in Italy and Slovenia ${ }^{1}$. The investigation has a triple focus:

1. ascertain the presence or absence of specific learning objectives concerning the concept of Literacy in the normative references that regulate the learning of English as a foreign language in Italy and of Italian as a second language in Slovenia in upper secondary schools;
2. determine how aware the teachers from both countries are of the specific learning objectives vis-à-vis Literacy established for the language they teach on the one hand and of the evolution of the concept of Literacy in the field of research which concerns language education;

[^0]3. discuss the possible introduction or implementation of teaching approaches based on the concept of Literacy in the language classrooms of the upper secondary schools of both countries.

The main objective we set ourselves with this research project is not to focus on a single aspect of the concept of Literacy, e.g., on the use of a given tool or device, or on a longitudinal observation (over a period of time) of a given sample in a specific circumstance. On the contrary, the aim of this transversal cross-sectional ${ }^{2}$ study is to offer a sort of 'snapshot' of the existing situation in general, paying particular attention to the teachers' point of view as to what that situation Literacy-wise looks like in the language classrooms, in order to reflect on the present and hypothesise possible future developments, both for classroom teaching practice and for research.

Our findings report a general lack of familiarity on the part of the teachers about these concepts and related terminology. Such a situation makes discussing the possibility of introducing and implementing literacy-based approaches in language classrooms rather difficult. These results are in sync with those produced by the documentary analysis which highlights the existence of a gap Literacy-wise between the world of research and the school system. It is in the school system that we find a general absence of specific Literacy learning objectives for foreign and second language education.

The work that follows is organised into three parts. In Part One, the theoretical framework which this research project is based on is presented. On the one hand, a brief excursus of the evolution of the concept of Literacy and its many facets is provided with comments on theories and definitions (see Chapter 1), and, on the other, an overview of the state of the art is presented through reference to research studies and related results in the field of Literacy and language education (see Chapter 2).

In Part Two the research project is illustrated. The context in which the surveys were carried out is presented alongside the research questions and hypotheses underlying the research; the sample of participants - teachers of English as a foreign language (EFL) in

[^1]Italy and teachers of Italian as a second language (ISL) in Slovenia - are also described. The characteristics of the data collection instruments are illustrated and their methods of administration are indicated. Finally, the procedures of analysis are described in detail (see Chapter 3).

In Part Three the results of the research are presented. First the research questions for the EFL group are answered (see Chapter 4); secondly, the same research questions for the ISL group are answered (see Chapter 5). Finally, the results of the two groups (EFL and ISL) are compared (see Chapter 6). The last chapter of this section (see Chapter 7) is dedicated to the discussion of the results. In this Chapter we review whether, and how, our findings relate to those reached by previous studies and, in the light of these reflections, offer some suggestions for the future of multiple literacies in formal foreign/second language education. We also report the limitations of the present study and, in consideration of these, indicate some possible future directions for research.

## PART ONE

The first part of the present work is divided into two different chapters. Chapter 1 introduces the concept of Literacy, focussing on some of its main facets, and delineates a theoretical framework which follows the evolution of Literacy in the field of language education. Chapter 2 contains a collection of research studies (selected according to some parameters which make them relevant for this research project) consistent with the theoretical framework presented in the first chapter and with the objectives of the present research (see Chapter 3).

## CHAPTER 1. THEORETICAL FRAMEWORK

The word "Literacy" comes from the Latin word littera, which carries several meanings ${ }^{3}$ :

- Letter of the alphabet;
- Inscription;
- Alphabet;
- Writing;
- Missive;
- Decree, norm, law;
- Literature, education, study;
- (figuratively) the educated;
- (in the ecclesiastical sense) the Bible, the Holy Scriptures.

Etymologically speaking, the word comes from a suffixation process ${ }^{4}$ :

- at the root we find the word literate (as an adjective, "educated, instructed, having knowledge of letters," early 15th century, from Latin literatus / litteratus; as a noun, it has been known since 1894 to indicate "one who can read and write").

[^2]- to which the suffix -cy is then added (abstract noun suffix of quality or rank, from Latin -cia, -tia).

This first overview shows us how, right from the start, it is a word that opens up to many possible interpretations, and even more so if we consider the evolution it underwent in the last century, in many different areas, including education. The evolution of the meaning of the word itself was followed by a natural process of interweaving with many other concepts, which we will analyse in detail in the course of the next paragraphs.
The necessary premise is to specify that this research does not analyse every possible facet and interpretation of the concept of Literacy, but focuses on the (plurality of) meanings and values that it went on to assume, not so much in the field of education in general, but rather of language education, specifically. Since inspecting the entirety of the literature existing in this sector would be neither feasible nor useful, articles and research studies have been selected by filtering them on the basis of the focus of the research project; specifically, it was decided to focus on texts and articles that:

1. did not limit the concept of Literacy to a synonym of reading / comprehension / writing skills;
2. reported research studies that took place in upper secondary schools;
3. included technology when possible, without, however, focussing solely on the specific case of online distance learning; and
4. were as recent as possible, both for them to be still relevant, and to prevent any technological tools used to be perceived as obsolete.

The objective of this first phase of analysis of the existing literature was to examine both the theories and the research studies relating to this sector, to try and understand:

- how much and what kind of attention had been paid to this research niche;
- the direction taken by the research studies conducted so far, in terms of:
- instruments;
- proposed activities;
- educational level;
- learning, teaching or both;
- what aspects could emerge as interesting starting points for further research ideas, or even just as thought-provoking suggestions.

The review that will follow in the next paragraphs, therefore, is the result of a selection based on the aforementioned parameters, where significant texts and theories will be grouped according to the main themes that emerged and that are relevant for this research project. In addition, it was decided to analyse the normative references that regulate language teaching in the areas of interest of this research project, namely English as a Foreign Language (EFL) in Italy and Italian as a Second Language (ISL) in Slovenia.

This research is the result of an International Doctoral Program which sees the collaboration between the Ca' Foscari University of Venice, Italy (PhD Programme in Modern Languages, Cultures and Societies and Linguistics) and the University of Primorska (Koper), Slovenia (PhD Programme in Language and Interculturality). This has influenced the researcher's decision not to limit the investigation solely to the area relating to a foreign language context, but to open the study also to a second language context and to any differences between the two, as can be seen in more detail in the Chapters 4, 5 and 6 . The objective behind this normative analysis was to understand if and to what extent the concept of Literacy in it multiple facets (plural, digital, multimodal and new forms of literacies) was considered by the norms that regulate the school system of both countries and what relationship could thus be established between them and the studies and theories taken into account. While the analysis of the normative references is available in full for consultation in APPENDIX 16, the following paragraphs will focus on providing an overview of the theories related to the evolution that the multifaceted concept of Literacy has undergone over the years.

### 1.1 Theoretical overview

The last four to five decades of studies have witnessed Literacy undergo a significant change, from being considered as a synonym of the word 'alphabetization' to becoming:
"the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts" (UNESCO, 2004).

For a while now it has been brought to prominence as a pivotal term in language education; however, its complexity and elasticity makes it extremely difficult for researchers to agree on one universally accepted definition. It appears to be an everevolving concept, where a word already rich in meanings had to expand the limits of its definitions and nuances to convey the idea of a multiple, multifaceted set of skills and abilities that allow individuals to learn and use their target language(s) for specific communicative purposes within specific social contexts and through a variety of different media. Such a broad and constantly evolving starting point has prompted research to move in several different directions and to explore various aspects, within and outside of language education per se, from New Literacies Studies to Multiliteracies and multimodality. Each of these fields builds on several other disciplines and histories, including critical literacy and discourse studies (Lankshear and McLaren, 1993; Luke, 1996; Street, 1995), genre studies (Cope and Kalantzis, 1993; Cranny-Francis, 1993), and critical cultural studies (Hall, 1997).

> "Literacy concepts have not only been changing, they have been overlapping, as information literacy, multiliteracies/multiple literacies, new literacy, digital literacy, and web literacy are all used to describe similar skills necessary for 21 st century learning". (Pilgrim and Martinez, 2013, p. 60 )

This field of research is thus quite wide, both because of how elastic the concept of Literacy is, and also because it potentially affects every educational subject, since it is considered as a prerequisite of sorts. This means there are many different aspects that researchers may need to take into account, Literacy-wise, some linked directly to it, as regards all the elements that combine to form it (which will be examined more in detail in the following paragraphs), and others indirectly, by calling into question several factors related to social background. For example, applying the most recent definitions of Literacy in any educational setting implicitly requires that everyone has access to the same tools and instruments, such as a wi-fi connection or technological devices (Fairlie et al., 2012; Urbančíková et al., 2017). The heterogeneity of the class and the different origins of students or their families may be indirectly taken into consideration as well: the development of school literacies, especially if linked to language education, can lead to the development of literacies in a language other than one's native one, which may end up touching on areas linked to the cultural and identity background (Dooley, 2008;

Danzak, 2011; Ntelioglou, 2012). Another branch of research that has been gaining momentum relates to the idea according to which learners are taking on a new role as content creators (Lenhart and Madden, 2005; Harlan et al., 2012; Toffanin and Surian, 2018), thus rejecting the more traditional teacher-student dynamic where the former imparts notions and competences while the latter are asked to play a more passive role. On the one hand, this implies the need to redefine the different types of texts and discourses (Gounari and Grollios, 2010); on the other hand, the relationship between 'digital native' students and 'immigrant' teachers also needs exploring (Rajeswaran, 2019), but different conclusions are drawn each time depending on the range of digital skills that are considered. Indeed, the very definition of 'digital natives' is being challenged (Benini and Murray, 2014) in the light of studies that highlight highly sectoral skills by the generations in question.

Within the language classroom, be it native, second or foreign, and regardless of the level of formality of the learning environment, many studies have achieved positive results by experimenting with one or more tools and different approaches to see if and how different ways of making meaning could prove beneficial for the students, stimulating their motivation and different learning styles.

This quick series of examples, while encompassing only a few of the different areas that have long been the subject of research and observation, not only demonstrates the vastness of this field, but also suggests the specificity or sectoriality of the individual studies. Such a sectoriality, despite focussing on the very specific parameters that characterise formal contexts of language teaching and learning, makes it very difficult to obtain a complete picture of what the situation is today when it comes to the concept of Literacy in the field of language education.

The present research project thus stems from the observation of an open issue: "what we do in schools under the rubric of literacy, and particularly what we measure in our literacy assessments, has not caught up with [the] profound changes" that have been affecting society and language education (Cope et al., 2011). Not only that, the gap between theoretical multiliteracies approaches and common assessment practices (Botelho et al., 2014) appears to be significant enough to highlight other related issues as well: whether the school system is managing to keep up with the research conducted in this field or not and how so, how aware teachers are of any such discrepancy, and how reducing the distance between theory and practical application can be attempted.

These are some of the aspects that we investigate and describe in more detail in the second part of this work, as well as the lens through which we have examined the reference literature that will be reported in the next paragraphs.

### 1.1.1 The concept of Literacy

The first analysis of the term and the existing body of research predates the four or five decades mentioned in the paragraphs above: the first scholar to try and systematically organise theories and studies related to literacy education was Edmund Burke Huey in 1908. In his work, however, the focus was on the psychological and pedagogical aspects of reading, because for many decades a literate person was mainly considered able to read and write, sometimes to use numeracy, and literacy actually remained a synonym for alphabetization for a long time to come. The first shift was felt at the end of the fifties, thanks to a definition provided by UNESCO in 1958, which was later called 'baseline literacy', and which claimed that "a literate person is one who can, with understanding, both read and write a short simple statement on his or her everyday life" (UNESCO Educational Sector, 2004). Still one of the most quoted definitions of literacy, it was followed by a period of relative openness and experimentation, due to a trend that started catching on in the sixties and seventies and that began to focus on the possibility of widening the concept enough to include the development of professional skills, political awareness and social growth. The idea behind it was that both the individual and the community could function and develop properly as long as illiteracy was eliminated. This led UNESCO to propose, in 1978, a new definition whose focus was on the functional aspect of literacy: consequently, we read that "a person is functionally literate who can engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and the community's development" (UNESCO, 1978). Paulo Freire, a firm supporter of the idea that literacy could be pivotal in promoting social consciousness (Ryan, 1974), criticised the teacherstudent dichotomy traditionally proposed in class, where the teachers were supposed to impart their knowledge to their students, who were seen as nothing more than empty canvasses, and endorsed, on the contrary, a more active way of learning. All this, however, still did not find space in the field of language education, which was in the early days of communicative language teaching and was focussed on reading, writing,
and the relationship between the two. Krashen, Terrell, Ehrman, and Herzog (1984), for example, saw reading as disconnected from those social contexts which promoted and encouraged the natural acquisition of language and its production through speaking and writing, and handled it as an important source of comprehensible input. Comprehension-oriented models dominated the discussions of literacy in the eighties and early nineties (Warner and Dupuy, 2017), where comprehension was considered related to questions of communicative purposes, rather than seen as a cognitive process. Writing definitely had the upper hand, and Reichelt and Lefkowitz (2012) think back to those decades as a "writing to learn" phase, right until the mid nineties, where we see a shift in the reading-to-write paradigm: reading went from being a receptive skill to an active way of engaging with texts, strongly interwoven with writing, and such new integrative approaches paved the way for more discourse-oriented models of literacy. In those same years, the role of background knowledge began to take on importance, as Bacon (1987) demonstrated how relevant culturally-specific experiences, texts and values are to literacy, while others, like Garcia (1991) and Evans and Gonzalez (1993), worked towards the inclusion of such background information in the pool of learning objectives. We are therefore in a moment of bifurcation: not only did different definitions of literacy coexist, but there were two different schools of thought, that is to say that there were both studies that still approached literacy focusing, de facto, on skills such as reading (and therefore mainly understanding), and sometimes writing, and studies which instead identified literacy as something far wider than that. Researchers could not really agree on what that something was, though, as we see that, depending on the circumstances, it is considered as the ability possessed by each individual to use comprehension and production skills in order to achieve communicative goals; as a tool for critical thinking; and as a set of social and cultural practices that vary according to the context, to name the most prominent options.

Literacy was seen as:

- Reading and writing skills;
- Communicative skills;
- Learning skills;
- Social skills.

Despite conveying different things to different people, at this point it was obvious to many that literacy was very much broader than reading and writing, or than mere
alphabetization, and carried a less text-centric view by focussing, instead, on a more unified relationship between readers, writers, texts, culture and language learning. This, with hindsight, leads us to some considerations: first of all, the concept of Literacy, far from being abstract, materialises as a result of education rather than a variable series of processes. Reading and writing are neither universal nor autonomous in nature, but arise from particular social and cultural contexts and needs, and are shaped by them (Scribner and Cole, 1981; Heath, 1983; Street, 1984). Secondly, narrower and more traditional views of literacy are largely incompatible with the goals of both language learning and teaching as well as communication within a social context, because they focus on prescriptive norms rather than on appropriateness of use. This is the scenario in which the 1996 Delors Report fits: coming from the Delors Commission, the International Commission on Education for the Twenty-First Century, the report proposes a reform of formal education by including two key concepts, 'learning throughout life' and the four pillars of education, namely, a) learning to know; b) learning to do; c) learning to be; d) learning to live profitably with others. Such an integrated approach to education has since had a significant role in influencing teacher training, policy debates and curriculum development, by building on the notion of 'lifelong learning' (UNESCO, 2015). At this point it became clear that acquiring and developing any form of literacy could neither be limited to a specific learning environment nor to a specific purpose. "What we need is a more fluid approach to learning as a continuum, in which schooling and formal education institutions interact more closely with other less formalized educational experiences from early childhood throughout life" (UNESCO, 2015). A lifelong process, then, which is not age-related, which involves a continuum of learning, and, above all, which is not confined to a specific learning environment, be it formal, informal or non formal, and which takes place at any time: before, during or after school. New methods, contents and spaces of learning have been redefining the educational landscape, in terms of new opportunities, less structured learning processed, a different viewpoint on the classroom and teacher authority. According to the definition UNESCO provided in 2004, Literacy is now:
"the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve his or her
goals, develop his or her knowledge and potential, and participate fully in community and wider society" (UNESCO, 2004, 2011).

For our specific field of research, therefore, it is the premise for each subsequent learning opportunity. However, both its evolution process and its most recent definitions show us one thing: literacy is plural. It is plural not just because of the significant changes it has undergone over the decades, nor even because of its many different definitions, but mostly because it concerns the use people make of a complex list of skills to achieve different communicative goals when speaking different languages and when practicing it in different contexts, for different communicative purposes, via a variety of different media.

> The idea of being literate in the $21^{\text {st }}$ century is characterised by a steady sense of evolution and change- to be literate in today's world suggests knowing and being able to acquire knowledge in multiple areas, as there are many different ways to be literate.

This plurality has led research to explore many different aspects, not all necessarily linked to an educational context. For the purposes of this research project, the next paragraphs will provide an overview of the plural characteristic of the concept of Literacy (or Multiliteracies, see §1.1.2), of its multimodal aspect (§1.1.3), of Digital Literacy (§1.1.4) and of New Literacies (§1.1.5), which combine already existing Literacy traits with new ones, and which are central to participation in society and linked to the transformations it has undergone over the last decades at a technological and cultural level.

### 1.1.2 Literacy is plural

We tend to think that a plural vision of literacy is the result of the new digital and globalised dimension we live in, which has been affecting when, how and with whom we communicate, thus redefining the communication landscape before moving on to redefine the educational one. This is partly correct, and we will analyse the impact these transforming changes have had on language and literacy education in the next paragraphs; the truth, however, is that the plurality of literacy is not a new concept per
se. Literacy is best described in terms of literacies, so much so that many studies have addressed the idea of new literacies to respond to the complex demands of contemporary globalised societies (see paragraph §1.1.5). Many advocates of the plurality of literacies (Buckingham, 1993a; Spencer, 1986; Cope and Kalantzis, 2000) have emphasised how this had to do with multiple modes and media of communication just as much as it has to do with the inherently social nature of literacy, which means different things to different social groups, and takes different forms in different cultures. Considering the way multicultural modern societies tend to be, many researchers (Heath, 1983; Scribner and Cole, 1981; Street, 1984) have suggested that each social group acquires and uses literacy depending on the social contexts and purposes that require it; they provide it with different definitions; and reading and writing become social activities, so much so that sometimes it is no longer merely seen as 'literacy', but as 'literacy practices' or 'literacy events'. This social theory sees literacy as deeply interwoven with the social and cultural contexts in which it is situated, implying that they can no longer be considered separately and that acquiring literacy enables people to do things and achieve goals.

This first step in this direction, terminology-wise, is generally attributed to the New London Group, who coined the term Multiliteracies. Before the New London Group, several theorists had challenged the notion of a single literacy, including Street (1984; 1995), but in 1996, two years after coming together to re-examine the basics of language education, the New London Group (or NLG) published "A Pedagogy of Multiliteracies: Designing Social Futures". At first, they were interested in exploring two specific "multi" dimensions of "literacies", in their plural sense-the multilingual, not strictly related to languages, and the multimodal. On the one hand, multilingualism seemed to require a more adequate educational response in the context of globalisation, but also to better negotiate discourse differences. Multimodality (see 1.1.3 below), on the other hand, tackled meaning making as increasingly multifaceted and multimodal, integrating several different modes. Consequently, in their manifesto, the group described a view of literacy that took into account the different languages and cultures that are merging in our multicultural societies as well as multiple channels of communication (Cope and Kalantzis, 2000).

The term Multiliteracies:

- describes a more contemporary view of literacy which acknowledges multiple communication forms and contexts of cultural and linguistic diversity within a globalised society;
- is tied to multimodality: a similar term, 'multiple literacies', depicts multiple possible modes of communication and meaning-making, which affect the ways in which readers approach a literacy situation.

A special focus was placed on education and literacy teaching, as the group argued that traditional literacy curricula, focussing on grammar, standard national forms of the language and the literary canon, presented strong limitations; a current literacy pedagogy needed to reflect the cultural and linguistic diversity that characterises modern societies, and work with the new information and multimedia technologies to account for the new types of texts. The term Multiliteracies, however, was not only supposed to engage with ICTs or with the results of the ever more frequent transnational migrations, but was coined to capture the idea of a literacy which was not confined to the coding of oral or written language, but rather extremely plural in terms of discourses, texts, textual engagement and media. According to Cope and Kalantzis, former members of the NLG, Multiliteracies is a term that is supposed to reflect the increasing diversity offered by contemporary multicultural societies, while dealing with multiple forms of expression, linguistic representations, and communication channels (Cope and Kalantzis, 2000). Since the creation of meaning is seen as an active and cyclical process, subject to constant changes due to a dynamic use of language and communication resources, Multiliteracies, as a term, has also provided a general principle related to education, according to which learning develops in social, cultural, and material contexts as a result of collaborative interactions (Warner and Dupuy, 2018). Learners are no longer seen as mere decoders of language, but as creators of meaning in their own right, whose meaning-making process is influenced by their attitudes and experiences, by the social and cultural context surrounding them and by the resources available to them, which is why language education needs to support their growing agency and promote different types of texts and modes of expression.
The title of the manifesto, however, includes the word pedagogy because, in fact, literacy-based education calls on the integration of four pedagogical components, where literacy and literacy teaching are no longer about "what texts mean in an absolute sense, [but] what people mean by texts, and what texts mean to people who belong to different discourse communities" (New London Group, 1996). The NLG bases its pedagogy on
the interaction of four components, thus basically reframing the four knowledge processes of experiencing, conceptualising, analysing and applying, respectively, and proceeding to create "learning environments in which the blackboard, textbook, exercise book and test are augmented and at times replaced by digital technologies" (Kalantzis and Cope, 2005, page vi).

The four components, together known as the framework of 'knowledge process', are:

- situated practice, where activities allow learners to engage in authentic textrelated exercises with known and new texts and to build on their own experiences;
- overt instruction, where learners understand the construction of texts, acquire the forms and recognise form-meaning connections thanks to active intervention and scaffolding by the teacher;
- critical framing, where activities are supposed to help learners link meanings to social contexts and gain a critical perspective;
- finally, transformed practice, which allows learners to apply the knowledge developed through the previous phases in new contexts appropriately and creatively.

Six elements are also considered pivotal in the meaning-making and learning process: linguistic, visual, audio, gestural, spatial and multimodal (see §1.1.3). The hope of the New London Group was that literacy teaching in the $21^{\text {st }}$ century would ultimately be able to turn towards communication, instead of focussing on learning linguistic properties and structures of the language, thus presenting a broader view of literacy education, one that included culturally-focussed instruction and multimodal texts. It is centred on the idea of a 'social and culturally responsive curriculum' (Jewitt, 2008a, p.245), where learners are enabled to take a more informed and critical approach to the understanding of: a) texts, that are shaped by specific socio-cultural backgrounds and values; b) the existence of different representational forms; c) the existence of different types of texts and channels; d) the possible different meanings of each text; e) contextual factors, from social and cultural values to economic and political environments. Anstey (2002), amongst others, supported the idea of integrating the Multiliteracies pedagogy as a new, promising instructional approach, claiming that
literacy education should shift its focus, from the mastery of the 'old-fashioned' literacy skills, to their use in diverse social contexts. According to Yi (2014), however, the benefits of engaging English Language Learners in Multiliteracies-based pedagogies, though potentially huge, are not widely acknowledged yet. An explicit discussion about benefits and challenges brought about by the introduction of new kinds of literacy practices is still lacking in this branch of research and whether Multiliteracies can address the increasingly significant cultural and linguistic diversity while accommodating a variety of different learning and teaching modalities or not is still seen as a challenge. As Valdés states:
> "the view that there are multiple literacies rather than a single literacy, and that these literacies depend on the context of the situation, the activity itself, the interactions between participants, and the knowledge and experiences that these various participants bring to these interactions, is distant from the view held by most L2 educators who still embrace a technocratic notion of literacy and emphasize the development of decontextualized skills" (Valdés, 2004, p. 79).

"The 'new basics'", according to Cope and Kalantzis (2006), "are about a kind of learning which facilitates an active engagement with new and unfamiliar kinds of text, without arousing a sense of alienation and exclusion" (p. 37), which explains why "assessment techniques need to be altered, in many cases quite radically, to promote new learning and to measure more accurately the skills required for success in the twenty-first century" (Kalantzis et al., 2003, p. 16). It would thus prove extremely beneficial if Multiliteracies assessment was meaningfully integrated into instruction (Kress and Van Leeuwen, 2001; Hansford and Adlington, 2008; Cope et al., 2011; Adsanatham, 2012).

The plurality of literacy, UNESCO states, "refers to the many ways in which literacy is employed and the many things with which it is associated in a community or society and throughout the life of an individual" (UNESCO, 2004, page 13). In the educational context, this widely acknowledged plurality addresses several different issues, from the formality of the learning environment, to the more or less traditional literacy practices and so forth, thus calling for a new form of Literacy which imparts the ability to understand increasingly complex language and literacy codes; the ability to use the multiple modes (§1.1.3) in which those codes are transmitted and put to use; and the
capacity to understand and generate the richer and more elaborate meanings they convey (Lo Bianco and Freebody, 1997).

Multiliteracies, guiding diversity into literacy education (Dooley, 2008), sets itself the task of developing both a diverse pedagogy and a theory of communication and meaning-making able to keep up with a rapidly, radically changing world. In the specific field of language education, reconceptualising literacy as Multiliteracies means reconsidering educational goals and outcomes in order for them to be more linguistically and culturally sensitive and inclusive, but it also means changing perspective on several other aspects related to teaching and learning.

### 1.1.3 Literacy is multimodal

It is through the notion of Multiliteracies (§1.1.2) that the concept of multimodality is put in the foreground as a key construct within literacy research (Kress and van Leeuwen, 2001). According to Rowsell and Walsh, between the two, multimodality actually "comes first in that it informs how we make meaning, and multiliteracies, as a possible pedagogy, gives us tools for doing so" (Rowsell and Walsh, 2011). Multimodality deals with how individuals make meaning and with their ability to understand how said meaning is constructed through the combined potential of several different modes and resources presented via different types of media. The distinction between 'mode' and 'medium' provided by Kress and van Leeuwen shows how the latter is the material selected to carry the message and make it available to others (like a printed book, a video, and so forth), while a mode is described as "a socially shaped and culturally given resource for making meaning" (Kress, 2009). Although this social aspect of modes may not be the focus point of every multimodality-related study, they are still widely considered as sets of resources for the interaction with the outside world and the construction of meaning through sensory systems such as sight, hearing and touch and different media, like books, games or digital devices. Re-examining previous assumptions about learners, text types and discourses, as well as language teaching and learning modalities, has become more and more necessary now that, according to Kress, the information revolution has "dislodge[d] written language from the centrality which it has held, or which has been ascribed to it, in public communication" (2000, p. 182). Traditional printed texts can no longer be considered as the primary carriers of meaning
(Kress, 2009) and different media offer not only different modal possibilities, but also several possible combinations of audio, visual, linguistic, gestural, and spatial modalities. For example:

- visual meanings concern images, colours and page layouts;
- audio modes refer to sounds, music, rhythm and tone;
- spatial modes focus mainly on the learning environment, while
- gestural designs involve behaviours and gestures, body language and proximity;
- tactile meanings require interacting with objects and props and, finally,
- linguistic modes focus on grammatical structures and lexicon, both oral and written.

When three or more sensory systems interact by combining different elements from different meaning-making modes, possibly presented through different media, in order to work towards a single communicative intent, we can refer to multimodality (Bearne and Wolstencroft, 2007).

The dimensions of multimodal literacy, tied to the notion of "multiple literacies", add to the complexity of online learning and expand the ways readers acquire information and comprehend concepts.

Because of the dynamic relationship that multimodality establishes between the various modes, independent modes differ from multimodal designs, where the whole body is somehow involved in the learning process, thus capturing the multifaceted nature of human perception and expression (Kress, 2000a, 2000b; New London Group, 2000). The field of "multimodal studies" (O'Halloran and Smith, 2011) has thus explored different perspectives and has operated under four key assumptions, namely that: "(a) all communication is multimodal; (b) analyses focused solely or primarily on language cannot adequately account for meaning; (c) each mode has specific affordances arising from its materiality and from its social histories which shape its resources to fulfil given communicative needs; and (d) modes concur together, each with a specialized role, to meaning-making; which is why relations among modes are crucial to understand every instance of communication" (Jewitt, 2014).

To try and define the paper-based, static conventions and rules of school language education, Lotherington (2010) proposed the idea of two-dimensional literacies. Classroom literacies (see paragraph $\S 2.1 .2$ ) are flat, and no longer able to keep up with the multiple platforms of communication that society offers, where dynamic and interactive digitally-mediated communication add a third and a fourth dimension, namely space and time. Much research on multimodality has examined the different facets that are more or less strongly connected to it, from the influence of social aspects, to convergence, which explores whether, and to what extent, different modalities can be considered interconnected and interdependent (Walsh, 2008). When it comes to multimodal literacies in language education, however, the learning and teaching process still focusses mainly on the bilateral relationship between text and images on the one hand and auditory modality on the other, thus excluding a multitude of modalities that help construct meaning and understanding in this digital age. What classroom literacies are most in need of is a wider understanding of how different representational and communicational resources allow (and potentially cooperate) for meaning to be constructed, and how multimodal approaches can both affect the learners' motivation and interact with their different learning styles. According to Castro and Peck (2005), the six visual, auditory, tactile, kinaesthetic, group and individual learning styles can either help or hinder language learning achievements, and it appears that learning environments where learning style awareness and matching are promoted and supported produce more successful results than those where they are not (Abdulwahed and Nagy, 2009; Gaur, Kohli and Khanna, 2009; Pfeifer and Borozan, 2011). The reason behind this is that the different and varied sensory inputs brought into play by the six modes mentioned above relate to different learning styles and therefore allow students to use their predominant learning modalities while reinforcing the others. Nevertheless, despite strong suggestions according to which multimodal approaches are better suited to heterogeneous classes, most lessons and teaching methods still appear to be predominantly geared towards auditory and visual learners.

Education, Kellner (2004) suggests, needs an urgent revision involving a more critical view of the past and present and envisaging a different future. However, moving towards multimodal literacies in the classroom has been a rocky path so far. Despite the fact that Cope and Kalantzis (2009a) have framed a grammar of multimodality around the linguistic, visual, spatial, gestural, and audio modes of expression, and that Sinclair
(2010) has visualised students as knowledge-makers in contemporary education as well as in new literacy movements which focus on literacy as social practice (Heath, 1983; Street, 1984, 1995), the school system has been shown to underutilise technology even where hardware and devices are available. Some researchers have recently highlighted the need for further research studies to investigate the potential of multimodal literacy instruction in language classrooms in order for learners to develop literacy skills (Alvermann, 2002; Ranker, 2008). This in no way means denying or diminishing the importance of traditional print-based literacy practices; it rather means engaging the students in developing "the ability to understand the combined potential of various modes for making meaning" (Royce, 2002, p.192).
It turns out that, when it comes to such combinations, research tends to focus on the digital or the multilingual: ICTs are extremely helpful tools when it comes to creativity and multimodality, as they engage "multipurpose, multifunctional technologies that involve layers of complexity and application in L2 learning that are unique among the technologies of the modern world" (Levy, 2009, p. 779).

### 1.1.4 Literacy is digital

$21^{\text {st }}$ century literacies, often described as multicultural, multilingual, and multimodal, as well as also strongly intertwined with the new technological modes of representation (Cole and Pullen, 2009), require the recognition of new vocabulary being coined and introduced into the lexicon: from new words coined, such as 'webpage' and 'spellchecker', to already existing words assuming new meanings, such as 'send' and 'chat'. New collocations have also come in use (digital text, real time) and, being relatively recent constructions, it took time for learners to be able to find them in dictionaries. The new media are reshaping discourse conventions, as well as genres and communication needs, taking into account multimodal forms of expression and learning, because "much of our everyday representational experience is intrinsically multimodal" (Cope and Kalantzis, 2009, p. 363).

Meaning-making can no longer be confined to verbal language alone, and the recent impact that digital technologies have had on text production has helped to highlight the ever-growing multimodal character of texts. Brown describes technology as an extremely valuable tool that provides language learners with multiple opportunities to
have "genuine, meaningful communication" in the target language (Brown, 2007, p. 54), thus paving the way for the concept of digital literacy.

> In order "to become fully literate in today's world, students must become proficient in the literacies of the 21 st century technologies" (IRA, 2009, p.1).

In 1997, Gilster formally introduced the term 'digital literacy’ (which had already been applied throughout the 1990s) and described it as:
"the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers" (Gilster, 1997, p. 1).

This new definition had to make its way through several already existing denominations, like "network literacy" (McClure, 1994, the ability to manipulate digital information, term synonymous with internet literacy), "informacy" (Neelameghan, 1995, the ability to retrieve and share information which combines information with traditional literacy), or "mediacy" (Inoue, Naito and Koshizuka, 1997, the ability to work with a variety of different media). Not only that, the term was forced to compete with a rapidly increasing list of other, new, terms coined by recent research which already included the word "literacy", such as ICT literacy, e-literacy, computer literacy, media literacy and so forth. Moreover, as it was seen as a useful life skill rather than a concept associated with formal education, Gilster did not initially provide an actual list of skills and abilities that would characterise it, and stated that digital literacy was not so much about mastering keystrokes, but rather about mastering ideas. He later went on to suggest four core competencies of digital literacy: Internet searching, hypertext navigation, knowledge assembly, and content evaluation. The extent to which they are related to one another or whether any of the four aspects is more important than the others is not specified.

In order to keep up with the unceasing technological advancements, research in digital literacy continues to evolve. This makes finding a unique, universally accepted, definition extremely complicated, and indeed many further definitions have been proposed over the years. According to Martin, for example:
"digital literacy is the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process" (Martin, 2005, p. 135).

Jones-Kavaller and Flannigan (2006) consider digital literacy to be the ability to read, interpret and reproduce media such as texts, images and sounds through digital manipulations, as well as to gain new knowledge from digital environments and be able to re-apply it.
Ferrari considers being digitally literate as the ability to understand and use media, together with different tools and devices, in order to successfully communicate with others, and to be able to critically evaluate (see §1.1.5) new information (Ferrari, 2012). Every definition ends up describing digital literacy as an extremely plural set of skills, so much so that some researchers go so far as to refer to them as digital literacies $(\mathrm{Ng}$, 2012; Dudeney, Hockly and Pegrum, 2014), and define them as
"the individual and social skills needed to effectively interpret, manage, share and create meaning in the growing range of digital communication channels" (Dudeney et al., 2014).

The fact that many different terms other than "literacies" continue to be used somewhat interchangeably is worth noticing, with some mentioning "skills", others "competencies", or "understandings", as well as "aptitudes", "capacities" or "knowledge" (BCSD, 2017, p. 23). Over the years, "digital" has slowly worked its way up, dismissing "online," "networked," or "computer-based", while "literacy(ies)" and its complex, multiple meanings has been established as the most frequently used term, compared to those listed above (Dore et al., 2015).

UNESCO (2011) states that 'digital literacy' has become a sort of umbrella term which witnesses the interaction between different sets of basic skills, from searching, retrieving, manipulating, synthesising and evaluating digital content (information literacy) to interacting with various types of media (media literacy); from using digital
hardware and software (computer literacy) to communicating via both traditional and innovative means (communication literacy), and so forth. Regardless of the nomenclature, though, most definitions end up addressing "the growing range of digital communication channels" (Dudeney et al., 2014) that act as a starting point from which anyone can apply their own ability to process information in a multimodal environment (Gilster, 1997; Rivoltella, 2008; Meyers et al., 2013).
No matter how we may choose to describe this term, however, it is not merely a list of skills: rather, it is based on a perspective view which considers the practices and tools of digital literacies as strongly tied to specific contexts and linked to the Multiliteracies paradigm discussed in the previous paragraphs (§1.1.2). It is described more and more as an ensemble of capabilities that enable individuals to live and work in a digital society which is constantly changing and which requires citizens to become digitally functional.

A recent UNESCO Broadband Commission for Sustainable Development report ${ }^{5}$ suggests that digital literacy incorporates "basic functional digital skills" that allow users to access digital devices and applications, "generic digital skills" that allow the users to use them meaningfully, and "critical information literacies", which enable them to critically consume information and which are considered part of so-called of "high level skills". As we now live in a technology-driven environment with access to abundant information and rapid technological changes, effective citizenship in the $21^{\text {st }}$ century requires that individuals exhibit "a range of functional and critical thinking skills related to information, media and technology". ${ }^{6}$
According to Spires and Bartlett (2012), the cognitive and social processes associated with digital literacies focus on: (a) locating and consuming, (b) creating, and (c) communicating digital content. The responsibility to prepare students when it comes to digital literacies no longer falls solely on the school system, but is an acknowledged responsibility of all learning spaces, formal, non-formal and informal. Since this is an aspect that can prove extremely beneficial for learning, as it provides access to a broad range of resources and tools and might contribute to a more efficient use of educational software and of computer programs for completing school assignments, its role within

[^3]formal education environments needs to be concretely implemented. As for language education specifically, the National Center for Education Statistics ([NCES], 2018) stated that public schools in USA have been witnessing a steady increase in the population of English Language Learners (ELLs), from two million in 1990 to 4.8 million in 2015. As their number is expected to represent a quarter of total learners by 2025 (Capps et al., 2005), a more appropriate teaching pedagogy empowering ELLs as critical consumers and producers of information appears to be necessary.

> "ISTE ${ }^{7}$ developed the National Educational Technology Standards (NETS) for student success in a digital age which include skills related to creativity and innovation; communication and collaboration; research and information fluency; critical thinking, problem solving and decision making; digital citizenship; and technology operations and concepts". (Pilgrim and Martinez, 2013, p.64)

One of the main incentives in this regard has long been the fact that, starting from the early 2000s, learners were actually referred to as 'digital natives' (Prensky, 2001, p.1) or 'net geners' (Turner and Carriveau, 2010, p.17), that is to say, native speakers of whatever language is necessary in order to easily comprehend and navigate the use of ICTs. Digital immigrants, on the other hand, are those individuals who struggle with ICTs as they were born before the rapid diffusion of digital technologies. Keengwe and Onchwari (2009) assert that digitally fluent teachers can help learners to increase their problem-solving abilities and improve both their conceptual skills and their verbal and nonverbal communication. While more will be said about this in the following paragraphs, it might be interesting to highlight the fact that the view on digital natives has been shifting over the years, and the disparity now lies "between students who use technology to create, design, build, explore, and collaborate and those who simply use technology to consume media passively" (U.S. Department of Education, Office of Educational Technology, 2016, p. 20). Exposure to digital tools does not automatically lead to mastery in their use, and a new task that teachers need to keep in mind is making sure that learners understand the rights and responsibilities associated with technology use (Hollandsworth et al., 2011).

[^4]In assessing the relationship between ICTs and educational outcomes, Pagani et al (2016) reports how three main sets of studies can be identified in this specific branch of research: a first set focusses on the digital divide in terms of physical access and explores the role of computer ownership in the learning process (Fairlie, 2005; Schmitt and Wadsworth, 2006; Fairlie et al., 2012). A second group explores how ICT use impacts educational outcomes (Kubey et al., 2001; Jackson et al., 2006), while a third and smaller group of studies provides some evidence about the effects that digital literacy can have on educational outcomes (Amiri, 2009; Leung et al., 2012; LopezIslas, 2013).
With the definition of "literacy" gradually expanding to include "digital, electronic, and visual expressions" (Gentry and McAdams, 2013, p. 4253), the school system in now expected to prepare the students by integrating new $21^{\text {st }}$ century skills. As the Assessment and Teaching of $21^{\text {stt }}$-Century Skills Consortium (Australia, 2014) reports, success nowadays requires mastering several critical skills, such as information literacy, creativity and innovation, collaboration, problem solving, communication, and responsible citizenship. Digital literacy in education has evolved accordingly: having access to ICTs, for example, no longer is the focus point of the learning process, which rather focusses on being able to use it effectively (called the "second-level digital divide", Hargittai, 2002). It also favours a more critical approach when it comes to information retrieval and assessment, in order to reduce the likelihood of using unreliable sources.

### 1.1.5 New Literacies

Citing Leu, Kinzer, Coiro and Cammack (2004), the new literacies for the $21^{\text {st }}$ century can be defined as follows:
"The new literacies of the Internet and other ICTs include the skills, strategies, and dispositions necessary to successfully use and adapt to the rapidly changing information and communication technologies and contexts that continuously emerge in our world and influence all areas of our personal and professional lives. These new literacies allow us to use the Internet and other ICTs to identify important questions, locate information, critically evaluate the usefulness of that information, synthesize information to answer those questions, and then
communicate the answers to others" (Leu, Kinzer, Coiro and Cammack, 2004, p. 1572).

Over the years, this set of skills has taken the name of New Literacies, that is, a mixture of old and new skills related to Literacy.

> New Literacies include:
> - old skills, such as knowing how to read, write and argue;
> - new skills related to new concepts, such as critical -thinking, scientific reasoning and multicultural awareness.

Identifying, locating, evaluating, synthesising, communicating, according to Leu, Kinzer, Coiro and Cammack (2004), are some of the key words related to this notion. Some principles that appear to be common across this field of research (Leu, Kinzer, Coiro, Castek and Henry 2013, p.1158) explain how New Literacies are deictic, multiple, multimodal, and multifaceted; central features are critical thinking, new social practices and new forms of strategic knowledge; the Internet and related technologies, which are both the defining forms of literacy and the main learning means for recent generations, require additional new literacies for learners to exploit their potential to the fullest. As for the deictic nature which the 'new literacies' idea is usually attributed, it implies distinguishing between lowercase new literacies and uppercase New Literacies (Kinzer and Leu, 2016). On the one hand, lowercase 'new literacies' address specific areas of research and case studies within this specific field of research, while uppercase 'New Literacies', on the other, include the most consistent findings from many lowercase 'new literacies' studies and focus on the theories behind them, looking at them in various contexts and from different lenses and trying to recognise eventual patterns. So, 'New Literacies' refer to theories and definitions, while 'new literacies' concern case studies, experiments and hypotheses.

[^5]Coiro et al. (2008) concludes that most lowercase new literacies perspectives share four elements, as they:
a. include the new skills, strategies and social practices required by new ICTs;
b. are central to full participation in a global community;
c. regularly change based on how their defining technologies and social practices change;
d. are multifaceted and our understanding of them benefits from multiple points of view.

Much like in the case of Literacy (see §1.1.1), studies relating to New Literacies have moved in several different directions: some researchers have explored the skills required to understand, create and interact with messages, especially through the Internet (Castek, Beach, Cotanch and Scott, 2014; Coiro and Dobler, 2007; Leu et al., 2007); others have worked with various age ranges or demographic groups in order to see how they relate to digital technologies and tools (Black, 2005; Ito et al., 2009; Leu, et al., 2015). Some apply new literacies to new discourses or semiotic contexts (Kress, 2003; Gee, 2007; Abrams, 2015), or literacy practices in various text genres (Kinzer et al., 2011; Kinzer, Hoffman, Turkay and Chantes, 2012). Also, the fact that different features (in any possible sense, from hardware and software to context and experiences) require different literacies, clarifies how new literacies thus means different things to different researchers.

Kalantzis et al. (2003), for example, listed ten New Literacies key skills that everyone needs in order to be successful within an information-based society:

1. Autonomy and self-direction;
2. Flexibility;
3. Problem-solving skills;
4. Multiple strategies for tackling a task;
5. A flexible solutions-orientation to knowledge;
6. Ability to be collaborative and communicative;
7. Ability to work productively with linguistic and cultural diversity;
8. Intelligence in multiple ways;
9. Broad knowledge;
10. Ability to engage with the different interpretative frameworks and contexts of specific information.

According to the conceptual model developed (and eventually validated) by Aviram and Eshet-Alkalai (2006), the skills necessary for users to tackle the challenges brought by modern digital environments can be cut down to five:

1. Working effectively with different digital environments (from graphical communication to user interfaces), called photo-visual literacy;
2. Creating authentic material by reproducing and manipulating pre-existing digital content, from texts to images, from audio pieces to videos, or reproduction literacy;
3. Constructing knowledge by navigating through knowledge domains and hypermedia environments, branching literacy;
4. Consuming information critically, or information literacy;
5. Using platforms and chatrooms to communicate effectively online, socioemotional literacy.

This requires for users to be able to process and evaluate information in real time, a real-time critical thinking skill.

According to Wilber (2012), the new literacies notion should, in fact, be always new, referring to things that were not possible before, and to new "ways of being" (Lankshear and Knobel, 2011).
The way in which new literacies are defined and perceived, and especially how they are addressed, has significant repercussions on both the 'hows' and the 'whats' of education. Knobel and Lankshear (2014) affirm that:
"Ultimately, a concern with "new literacies" is a concern with preparing students as best we can for a world in which there are few constants and the near future will involve artifacts, social relations, processes, routines, and practices barely imaginable now. Studying new literacies offers useful footholds for thinking about how and why extant literacy practices are changing and new
ones emerging in the present, why others are remaining constant, and what's to be done about it" (Knobel and Lankshear, 2014, p.101).

The rise of 'new literacies', concerned with the evolution of meaning-making practices that include (but are not limited to) technological proliferation and change (see §1.1.4), is pivotal in understanding how to wield these new technologies effectively, but also places new demands on everyone, not just on students. We are all expected to know where to find information quickly, and to be able to evaluate it and synthesise it properly from a number of sources. We need to be able to communicate with others, offer and monitor solutions, keep up-to-date, and move much more quickly than we once had to. For teachers and educators, this means figuring out how students move through materials as they read and retrieve them and how digital materials make teaching and learning fundamentally different processes.

First and foremost, it is pivotal for learners to develop a "critical and cultural understanding of language, literacy, and communication" (Kern, 2000, p.134) and critical literacy pedagogy is a vital part of the process. In 2008, the British Library (Joint Information Systems Committee, 2008) commissioned a report which explained how the so-called "Google generation", despite their ability to access materials, lacked the capabilities to process them properly. According to them, millennials are open to manipulation and misinformation, as it is difficult for modern youth "to develop effective search strategies", and they spend little time "evaluating information either for relevance, accuracy or authority" (p.12). The importance of critical literacy and learner autonomy in digital environments has been increasing not only because of the explosive growth of online resources and materials, but mostly because language educators have grown more and more convinced that we should be preparing students for a globalised, multilingual world where knowing how to properly use, access and evaluate online tools and services for learning purposes is crucial.
$21^{\text {st }}$ century literacies involve both critical thought and knowing that texts, bearing the ideologies and purposes of both their producers and their users, are not neutral. Phipps and Gonzales (2004) and Glynn, Wesely and Wasell (2014), amongst others, have argued that language education can actually play a significant role in social justice and that a Multiliteracies approach can help learners become aware of how language shapes the very "misconceptions, untruths, and stereotypes that lead to structural inequality and
discrimination" (Nieto, 2010, p. 46). According to Van Sluys (2005), "critical literacy is social: disrupting the status quo, questioning, studying taken-for-granted assumptions, acting for change. It is reading the world and taking action" (p. 9). The Multiliteracies pedagogy, through the process of designing multimodal texts, should allow students to "critically analyse and interpret the social and cultural context and the political, ideological, and value-centred purposes of texts" (Mills, 2006, p.1).

## CHAPTER 2. RESEARCH STUDIES: AN OVERVIEW

The following paragraphs introduce some areas explored by research in the fields of literacy and language education, and the relationship between the two, before reporting a selection of research studies examined for the purposes of this research project, and their related findings. We then proceed by highlighting some issues observed in said research studies, and investigating if and how this all translates at the level of classroom literacies, that is, those forms of literacy that find space in language teaching and learning within the classroom.

## a. Cognitive and ideological perspectives

Just as the field of language education has been expanding into several different branches, the topic of Literacy has also been approached through many different ways and viewed through different lenses (see §1.1.1). In the eighties, some researchers explored the nature of literacy by focussing not so much on sets of skills, but rather on what it would be like to think of it as social practice (Street, 1984), where socialization and literacy expectations are linked (Heath, 1983); this often stood in direct opposition to the cognitive perspective, where individuals were expected to develop (sets of) qualitatively-varied skills regardless of the specific social context (Chall, 1983). Cognitivists believed that literacy was largely taught and learned, so much so that the model tied to this perspective earned the name of "autonomous", implying that literacy consisted of neutral, de-contextualised technical skills that are in no way dependent on social and cultural influences (Purcell-Gates et al., 2004). As for the socio-cultural perspective (largely credited to Vygotsky at first), which was then described as "ideological," it pointed out that literacy, being context-dependent and value-ridden, related to power structures in society (Street, 1984).

## b. Multilingual perspective

More recently, literacies have been described as multilingual in those contexts where different languages and language varieties are interwoven and where communities are seen through multilingualism (Martin-Jones and Jones, 2001). They have also been tied
to heritage language contexts, where several studies paid specific attention to the relationship that Multiliteracies pedagogies are able to establish between learners and the languages that they may have inherited. Teachers have also used the Multiliteracies pedagogy in order to engage learners by having them create multimodal and multilingual identity texts representing their experiences, languages, and cultures (Giampapa, 2010); to record digital podcasts to express their identities (Wilson, Chavez, and Anders, 2012), and to compose graphic stories depicting their background and their families' immigration experiences (Danzak, 2011).
There has also been a considerable body of research examining early education and the positive impact it can have on literacy learning and development (Neuman and Dickinson, 2011; National Early Literacy Panel, 2008). The focus is frequently placed on curricular changes (Zapata and Lacorte, 2017) and on the fact that a Multiliteracies curriculum (see §1.1.2) has often been proven to increase the learners' motivation to read (Choi, 2015) and to strengthen their commitment to language maintenance.

## c. Educational perspective

Research exploring language education is still largely dominated by communicative language teaching, and thus, as the pull back towards more conventional, pen-and-paper language teaching approaches is still strong (Kiss and Mizusawa, 2018), literacy development in the classroom is by far still built around the four traditional literacy skills of reading, writing, speaking and listening (Meyers et al., 2013). However, with the Ad Hoc Committee of the Modern Language Association (USA) stressing the importance of producing students who are "trained to reflect on the world and themselves through the lens of another language and culture" (MLA, 2007) instead of merely functioning as capable interlocutors in the target language, the last two decades have witnessed the surfacing of more literacy-oriented frameworks within the language education field.

Gallego and Hollingsworth (2000), for example, introduce a conceptual framework which builds on the idea of literacy as situated social practice and single out three aspects of the concept of literacy which, according to them, coexist but are often critical of one another:

- School literacies, where interpretive and communicative processes first need to be learned in order for students to socially adapt to dominant language contexts (including school), and then to be used or practiced correctly so as to properly tackle different school subjects;
- Community literacies, where interpretive and communicative traditions of culture and community can be appreciated, understood, and used; and
- Personal literacies, where examining different aspects and backgrounds of both the school system and the community produces the critical awareness about self and one's ways of knowing and believing.


### 2.1 Research studies

The above are just a few of the various different directions that Literacy-related research studies have explored over the years in the field of language education. The studies taken into consideration by this research project, however, focus on the same conditions set for the literature review reported in the previous chapter (see §1), namely, that

- they mainly involve upper secondary schools (sometimes academic education);
- they include technology, if possible, paying attention to the fact that the tools and devices used are not too outdated;
- Literacy is not understood as a broad synonym for alphabetization or for reading and writing skills only.

While it was not considered necessary for all conditions to be met simultaneously, as it would have been far too limiting, the following paragraphs will mainly report recent studies that examine different forms of literacies within a language education context, where the concept is not restricted to a loose synonym of 'alphabetization' and where technology is involved.

### 2.1.1 Previous findings

Amongst the publications (e.g., Paesani, 2006; Péron, 2010; Troyan, 2016) that focus on the relationship between reading and writing within a Multiliteracies paradigm (see §1.1.2), Troyan's work is one of the few attempts made in order to bring a

Multiliteracies approach in line with the American Council on the Teaching of Foreign Languages (ACTFL)'s Standards. These standards are supposed to encourage lifelong learning by measuring the skills that learners need to apply in order to add more global competences to their future careers and world experiences. In those same years, Ganapathy (2014) examined whether a Multiliteracies Approach was able to transform conventional learning settings into more relevant learning environments, in terms of productivity and performance, interest and motivation. As with previous studies (Shuhaimi, 2004; Grabill and Hicks, 2005; Tan and Mc William, 2009), Ganapathy's work and findings confirmed the effectiveness of a Multiliteracies approach in ESL classrooms, so much so that the need to take it into account in future curriculum organization in similar educational environments is mentioned.

Several factors, from the ever-evolving communication technologies to the growing significance of cultural and linguistic diversity, were involved in the process which saw Multiliteracies gain momentum in formal learning environments. The emergence of multiple Englishes was one of them - not so much in terms of different variants, but rather in terms of different 'functional' Englishes (technical, professional, hobbyist), of interlanguages and of sub-culturally and ethnically defined accents, registers and dialects (Lo Bianco, 2000). According to Angay-Crowder, Choi and Yi (2013), whose study included both conventional print-based and computer-based multimodal activities, Multiliteracies practices can lead to significant literacy outcomes for second language learners, as the learners are driven to expand their literacy repertoires and to compose texts and narratives. Consistently with these previous findings, Yi (2014) and Rajendram (2015) report how using the Multiliteracies pedagogy (§1.1.2), which promotes student engagement and allows the learners to demonstrate agency and leadership enabled language learners at all levels of education to actively participate in their own learning instead of merely receiving instructions from their teacher.

Student agency and ownership of learning are aspects which Kalantzis and Cope (2008) have always acknowledged as pivotal in the meaning-making process of the Multiliteracies pedagogy, as learners are seen as active designers of meaning. A Multiliteracies-based study conducted by Hepple, Sockhill, Tan and Alford (2014) found that adopting the Multiliteracies pedagogy resulted in students taking ownership of the project and exercising their agency, as well as in an all-round "construction of
knowledge and understanding in which all class members play an active role" (Wallace, 2001, p. 214, as cited in Hepple et al., 2014).

Other studies, which integrate digital elements (see §1.1.4) into Multiliteracies courses, claim similar findings. Reinhardt, Warner and Lange (2014) and Warner and Richardson (2017) state that these elements appear to be motivating factors in the promotion of students' engagement with texts. Such studies as those by Vanek, King and Bigelow (2018) show us that informal platforms such as digital gaming and social media may help English Language learners become more confident in their command of English; the online space can prove engaging enough for students and provide them with communities supportive enough to facilitate positive peer reinforcement when it comes to English use.

Bogard and McMackin (2012) describe the integration of technology within a literacy education environment as the "practices for making meaning that transcend language and include photography, art, music, video, or audio representations" (p.315). While some researchers see this as an opportunity to help learners develop critical literacy (§1.1.5) and enhance their multimodal competences through the use of specific technological tools and devices, such as filmic media (Goulah, 2007; Kaiser, 2011; Brown, Iwasaki and Lee, 2016), others focus on including student-produced products, such as digital stories (McAdams and Gentry, 2014) and movies (Young and Rasinski, 2013). The fact that every student now owns one or more technological devices makes these products even easier for them to create, and, since personal mobile technologies can prove extremely helpful both inside the language classroom and outside (Ciampa and Gallagher, 2013), the 'bring your own device' (or BYOD) model has been more and more exploited over the years (Johnson et al., 2012; Parsons and Adhikar, 2016). It is also frequent for students to be more at ease with ICTs than their teachers, and to promote their use: according to Wiklund and Andersson (2018), in fact, between teachers and students, it is learners of all levels who are both the ones that resort to technology the most in the classroom, and the ones that initiate its use, if given the chance to.

Nevertheless, the road towards introducing a digital (§1.1.4) and multimodal (§1.1.3) Multiliteracies pedagogy (§1.1.2) in the (language) classroom is a long one: first of all, Brown et. al (2016) points out the fact that, while several studies have been conducted in the case of English and other commonly taught languages, not enough studies have
focussed on less commonly taught ones. A second obstacle to successfully implementing the Multiliteracies pedagogy is that it usually does not feature as a core component of language teacher education, neither pre-service nor in-service (Burke and Hardware, 2015), and even when it is included, it is not usually addressed as a main part of the teacher education curriculum, but rather as an add-on component (Rowsell, Kosnik and Beck, 2008). Also, the fact that one of the first textbooks meant to introduce teachers and language educators to a Multiliteracies pedagogy frame of reference was only published in 2015 (Paesani, Allen, and Dupuy) proves that most of the current available textbooks are still far from meeting the requisites of a Multiliteracies educational context.

Literacy-oriented language education programmes now need to be implemented, but for this to happen existing textbooks need to be supplemented. This can be done by incorporating the teachers' own Multiliteracies-oriented lessons, as suggested by Barrette et al., 2010, and Paesani et al., 2015, but the problem of the national curricular indications remains. In fact, Smythe and Neufeld (2010) argue that the single national curricula frameworks are still far from being able to easily integrate the learning outcomes they prescribe with different multimodal aspects.

A more consistent introduction of multimodal aspects (§1.1.3) in the specific context of language education could also prove extremely useful on multiple fronts, from promoting content learning and academic literacy to supporting the overall development of young learners and of their multimodal communicative competence (Early and Marshall, 2008; Pirbhai-Illich, Turner and Austin, 2009).

Godwin-Jones (2016) also calls attention to the increasing importance that digital literacy (see §1.1.4) holds in learning environments. Findings suggest that technology rich learning environments appear to have positive impacts on the students' performance in all subjects' areas (Lau and Sim, 2008).

Leung et al. (2012) and Lopez-Islas (2013) also claim that better ICT knowledge and access can positively impact academic performance in terms of Internet literacy and digital literacy, respectively.

However, according to Lankshear, Snyder and Green (2000), digital technologies tend to have an add-on nature in the classroom, and the studies that focus on new, digital literacies in the foreign language classroom continue to address the use of specific
digital technologies and devices rather than focus on the way in which several learning and teaching modalities and different forms of literacies interact with one another to shape the learners' communicative repertoire (Lotherington and Jenson, 2011; Ntelioglou, 2012). What teachers and researchers do, most of the time, is fit technology into already existing teaching approaches. Such add-on approaches are defined as "digital makeovers" (Lankshear et al., 2000, p.102). However, having paper-based activities carried out on digital devices or including single digital or multimodal elements into already existing teaching approaches cannot be enough. The language learning pedagogy needs to be reinvented and, in order for it to be effective, technology and multimodality need to be intrinsically integrated into language learning.

Recent developments in the field of Literacy in foreign and second language education, show that new studies have been carried out concerning a pedagogy of multiliteracies (Lee, Lo and Chin, 2021), focussing on the introduction of digital resources and digital learning spaces into language education (Ruschoff, 2022), and investigating both the literacy practices of EFL teaching and learning in higher education from multiliteracies and multimodal perspectives and the need to adopt curriculum innovations within the framework of multiliteracies and multimodality following both the pandemic and rapid technological advances (Nabhan and Hidayat, 2018; Chen, 2022). These elements help us outline a niche in the world of language education research that seems to need further investigation, related to the presence and implementation of plural, multimodal and digital forms of literacy in the language classrooms.

### 2.1.2 Emerging issues

Such a review of recent research studies has brought about a double result: on the one hand, it has provided us with a clearer picture of the different directions that research has been taking, Literacy-wise, especially in terms of agency and in exploring the contributions introduced by the digital world; on the other, it has brought several issues to light.

## a. Sectoral studies

First of all, most language education studies focus on exploring extremely specific aspects, many of which, not falling within the parameters outlined for this research project, were not taken into consideration (or only partially so), but which we mention here for a more exhaustive contextualization of the development of this research area and of the difficulty encountered in selecting relevant research studies. An example concerns the role that Literacy holds when it comes to strengthening the students' individual ethnolinguistic identity (see §1.1) and promoting heritage language maintenance while helping them integrate successfully (Parra, Otero, Flores and Lavallée, 2017; Zapata, 2017); or the idea according to which a potential reorganization of FL curricula (after a careful text selection focussed age-appropriate genre- and discourse-based orientations, Maxim, 2009; Troyan, 2016), would be too specific to allow readers or fellow researchers to get a complete view of the situation, Literacywise, and of the various factors that come into play.

## b. Add-on technology

Also, it appears that recent language education research movements tend to focus on digital and multimodal aspects by assessing the impact that specific devices (such as smartphones in Bromley, 2012, or tablets in Hutchison, Beschorner and SchmidtCrawford, 2012; or Northrop and Killeen, 2013) or applications (twitter, in Morgan, 2014) have on educational outcomes, but most of them fail to explain what it takes to introduce new, contemporary and multifaceted literacies in the classroom without limiting the experiment to the introduction of add-on elements to already existing approaches, as we said before (see §2.1.1). Not only that, such a specific focus contributes to making these studies way too sectoral and quickly obsolete, as technological tools and devices age quite rapidly.

## c. Contradictory findings

Another significant factor concerns the fact that, while there are many studies that confirm the positive impact brought about by the introduction of multimodal and digital literacies (see §1.1.3 and §1.1.4) in most learning environments, there have been
unclear, contradictory findings nonetheless, especially concerning the relationship between technology and learners. For example, and perhaps surprisingly, surveys submitted to over a thousand foreign language students concerning the use of digital devices reveal that they do not necessarily consider themselves digital natives (Williams, Abraham and Bostelmann, 2014).

## d. The learners' literacy practices

A number of factors can influence the students' digital literacy practices (§1.1.4), from smartphone ownership to Internet access and platforms. As for digital skills, Gui and Argentin (2011) and Gobel and Kano (2014) tested their students' theoretical knowledge, operational skills and assessment skills and found that, while their results are better in operational skills, they are usually limited when it comes to the use of certain types of technologies. A recent European Commission report ${ }^{8}$, exploring the digital competence levels of European children and adolescents has shown that they are still inadequate. It also seems that young learners are not aware of the substantial gap that exists between the self-assessment of their abilities and their actual computer skills ${ }^{9}$ : the participants of a study conducted by Son, Park and Park (2017), for example, who were ranked at 5.4 out of 10 in the general digital literacy test they took, provided an extremely positive self-assessment of their abilities. Most students, for example, do not question information accuracy, and associate quantity of information with quality of information (Walraven, Brand-Gruwel and Boshuizen, 2009; Goldman et al., 2012; Barzilai and Zohar, 2012; Zhang, 2013; Coiro, Coscarelli, Maykel, Forzani, 2015). Purcell et al. (2012) found that the idea according to which today's technologies make it harder for students to find credible sources online is also supported by the majority of teachers.

According to a survey involving Italian university students, most of them were found to have low digital security skills when it comes to connection, authorizations, installations and access protections ${ }^{10}$. They also seem to prefer to restrict the use of

[^6]technology to personal and social functions, and rarely use tools and devices for academic purposes (Ophus and Abbitt, 2009; Ng, 2012; Ivala and Gachago, 2012; Mok, 2012).

In the specific context of language education, it seems that some students still prefer paper-based materials as they consider them to be more helpful when it comes to the general order in which topics and information are presented, contents are organised and greater ease in taking notes and carrying out exercises (Fratter, Altinier, 2017; Fratter, 2018 and 2019); students generally tend to resort to using multimedia materials (linked, for instance, to the use of e-books) for further in-depth analysis after reading a paper text.

### 2.2 Classroom literacies

In order to keep up with the demographic and technological changes of the new digital and multicultural societies, language education needs to adopt a much broader definition of literacy than the limited, paper-based one which is generally used. The broader definition must refer to the necessary skills and strategies needed to adapt to said changes and take them into account enough to be able to re-examine the more traditional ways in which language learning, learners and texts have been perceived so far. Research suggests that the new literacies required for the $21^{\text {st }}$ century (see §1.1.5) are those that evolve with changes in society and provide individuals with the tools to successfully adapt to these changes; this means that learning contexts need to be able to adjust accordingly (Leu, Kinzer, Coiro and Cammack, 2004), "educating and encouraging learners to deploy their literacy in the everyday functions of society, including solving problems, providing and receiving service, accessing and disseminating information" (Anani et al, 2021). Classroom literacies, however, are still far from being in step with the changes that are affecting society, so much so that Lotherington describes them as flat, two-dimensional literacies and as "the static, linear, paper-based reading and writing agendas of school language and literacy curricula and assessment" (Lotherington, 2010). It might sometimes appear that classroom literacies are not as flat as Lotherington describes them because most studies addressing new literacies in language classrooms tend to focus on the use of digital technologies but less so on whether they are well integrated with traditional, paper-based teaching modalities or not and on the diverse forms of literacy that may or may not be part of the learners'
communicative repertoire (Lotherington and Jenson, 2011; Ntelioglou, 2012). Digital technologies are often added to the language classroom to retrofit already existing teaching approaches: simply interacting with these tools does not constitute an effective pedagogy (Khaddage, Norris, Soloway and Davidson, 2021). We mentioned how Lankshear et al. (2000) refer to this add-on approach as a "digital makeover" (p. 102), and Bailey (2009) states that:
> "too many secondary teachers resist seeing literacy as dynamic, and therefore they do not make the changes in their instruction and curricula that are necessary to make literacy instruction for today's adolescents more relevant to young lives and challenging in ways that will truly engage modern youth" (Bailey, 2009, p. 210).

Rather than fitting technology and multimodality into traditional lessons, language teaching pedagogy needs to reinvent itself by taking into account the unique affordances of technology and multimodality. One of the main aspects to consider is the teachers' ability to interact in a competent way with a wide variety of tools and devices in order to deal with those that, for most learners, are now the preferred means for their learning process.

In this regard, when exploring the relationship that language learners establish with technology in their learning environment, Oz, Demirezen and Pourfeiz (2015) and Öz (2015) found a positive connection between the learners' attitudes and the use of technology: nine out of ten declared that they own a mobile phone and a laptop, and that they are their favourite tools for language learning. Restricting the use of digital technologies nowadays means undermining the authenticity of the learning experience on the one hand and ignoring the students' motivation and their different learning styles on the other, which is the reason why students benefit greatly from digitally fluent teachers: in fact, Keengwe and Onchwari (2009) found that the learners achieve better communicative results under the guide of a digitally fluent teacher, their conceptual skills improve, and their problem-solving abilities grow. When students interface with teachers who are unable to properly acknowledge the new, multifaceted classroom literacies or to engage when it comes to exploiting the full potential of ICTs because of their age (Raman and Yamat, 2014) or lack of training, these dimensions of literacy become the most difficult ones to exploit and reinforce within the class.

The proper exploitation of technological tools and devices, Literacy-wise, is therefore often limited by multiple factors. The study conducted by Rajeswaran (2019) internalising previous research (Simjanoska, 2017; Palalas, 2011; Gaudreau, et al., 2013; and Kurniawati, et al., 2018), in order to understand whether and to what extent English teachers are competent and comfortable handling digital devices in an academic setting, actually revealed that many need training to deal with digital technologies and face possible challenges.

Regardless of the teachers' digital abilities, however, most schools still appear unable to include technology sufficiently enough to make it an integral part of the learning and teaching processes, even where technological tools and devices are available. Kress (2003) argues that approaching literacy as a static set of linguistic conventions and restricting education mostly to traditional, paper-based supports, thus underutilizing or ignoring altogether the potential of the multiple learning modalities and communication platforms that today's globalised and technological society offers, no longer suffices.

While this is true for schools, nonetheless, there are issues worth mentioning when it comes to the world of research as well.

Since many research studies choose to focus on the introduction in the (language) classroom of a specific tool or of a specific approach for a limited period of time, it is sometimes hard for research (and researchers) to grasp the fact that most of the time the most common and widespread example of multimodal literacies in the language classroom still consists of the dual modalities of text and image, sometimes with audio resources. Valdés states that:
"the view that there are multiple literacies rather than a single literacy, and that these literacies depend on the context of the situation, the activity itself, the interactions between participants, and the knowledge and experiences that these various participants bring to these interactions, is distant from the view held by most L2 educators who still embrace a technocratic notion of literacy and emphasize the development of decontextualized skills" (Valdés, 2004).

The everyday reality that schools face has certainly changed, but not as much as research would like, and, at the end of each isolated research study, teaching methods and approaches bounce right back to where they were before it took place. Restricting
the focus to print- and language-based notions of literacy (Gee, 2004; Lam, 2006; Leander, 2007; Sefton-Green, 2006) is one of the main reasons for criticism: the presence of multiple literacies questions the relevance of dominant models of literacy and challenges the current organization of traditional schooling.

This brings us back to the open question that we observed at the beginning of this first chapter: school literacy practices are not up to date with the world of research, nor with the changes that have been affecting society and language education.
Based on this consideration, the present research project aims to verify:

- whether the concept of Literacy is taken into consideration by the documents that regulate language education and whether specific objectives in this sense have been formulated;
- whether and to what extent language teachers are familiar with the normative references and with the world of research (Literacy-wise) and aware of the relationship between the two;
- whether or not it is possible to devise specific approaches aimed at reducing a gap that is hypothesised to exist.

Specific research questions and hypotheses follow in Chapter 3.

## PART TWO

The primary objective of the research reported in this thesis is twofold: first, to collect original data on a specific topic (i.e. the awareness and application of the concept of Literacy on the part of foreign and second language teachers, and different aspects related to it); second, to analyse the collected data in order to be able to answer a series of specific research questions.

## CHAPTER 3. THE STUDY

Chapter 3 is dedicated to the explanation of part of our doctoral research. This is a mixed-methods research, called QUAN-qual (Dörnyei, 2007), where the main quantitative component - i.e. investigation by means of questionnaire with predominantly closed questions - is supplemented by a secondary component of a qualitative type - i.e. open questions within said questionnaire, individual interviews, focus groups and a documentary analysis. The choice of collecting data from many subjects at a single point in time (unlike longitudinal studies, which repeatedly collect data from the same subjects over time) makes it a cross-sectional study.

In the following sections, we will describe the context in which this research is conducted (see §3.1), we will illustrate the questions and hypotheses that guide this research (see §3.2), we will describe the samples of the subjects who participated in the data collection (see §3.4), we will comment on the tools that have been developed in order to collect both quantitative and qualitative data (see §3.5), we will describe the administration of the instruments themselves (see §3.6) and finally we will briefly report the analysis process of the aforementioned instruments (see §3.7).

### 3.1 The context

The theoretical framework presented in the previous chapters, reporting both the reference literature and the results and findings of several research studies, as well as the objectives stated in the introduction to this chapter, led to our interest in understanding the development of plural, digital and multimodal literacies in foreign and second language learning in formal educational contexts. Two areas of language
education were taken into consideration in this research: foreign and second language education. Given that this research is part of an international project (see §1), which sees the collaboration of Italian and Slovenian Universities (Ca’ Foscari of Venice and Primorska of Koper, respectively) and that the context concerns formal language learning, English was chosen as regards foreign language education and Italian as regards second language education. In Italy, English holds the role of first foreign language taught in schools at all levels, and the huge amount of EFL studies available makes it a perfect candidate for us to have a considerable amount of material available for consultation and for comparison. Italian, on the other hand, is a second language in some bilingual areas of Slovenia and is regulated by a specific set of norms and regulations aimed at its conservation; this allows us to explore the relationship between the two realities in terms of both similarities and differences.

An extensive overview of the normative references regulating the teaching and learning of English as a Foreign Language in Italy and of Italian as a Second Language in Slovenia is provided in APPENDIX 16, and more will be said concerning the documentary analysis phase (§3.3).

### 3.2 Research Questions and Hypotheses

In light of these premises, the three research questions that we will try to answer through the data analysis presented in the next chapters are the following:

1. Does the school system establish specific learning objectives vis-à-vis literacy for foreign and second language learning? If so, what are they? Is there a gap between them and the conclusions drawn from the most recent language education studies in the field, especially when it comes to the development of multiple, digital and multimodal literacies?

The purpose of our first question is to investigate the relationship between school and research. After a wide-ranging inspection of the existing literature (see Chapters 1 and 2 ), it is hypothesised that the gap between the two is actually wide enough to constitute a problem, at least as long as what is theorised by research has little to do with the day-to-day reality of the school environment.
2. What level of awareness vis-à-vis literacy is there within the school system regarding:
a. The specific learning objectives vis-à-vis literacy established for foreign and second language education in upper secondary schools;
b. The evolution of recent studies within the language education field, with particular attention paid to literacy, in its multiple definitions;
c. The gap between a) and b).
d. The use of technological tools in language learning in general, and, specifically, in developing digital and multimodal literacies.

The four sub-questions that make up our second research question therefore aim to investigate: a. the teachers' familiarity with the normative references that regulate language education; b. the relationship that teachers have with research; $c$. the teachers' perception of the relationship between the two worlds mentioned above; d. the teachers' familiarity with technology, per se and in language education.

Teachers' awareness is hypothesised to be partially limited, if not regarding the specific learning objectives for language education, at least as regards their knowledge of the most recent research movements and developments in this field. Hypothesising a lack of knowledge of the world of research implies assuming that their awareness of a possible gap between that world and the reality of the school system has to be smoky as well. At the same time, extremely diversified levels of awareness and competence are also hypothesised, especially concerning the technological tools required by the new literacies practices, according to the age of the respondents and the length of their professional experience.
3. What approach can be introduced in the language classroom in order to:
a. Help students develop multiple, digital and multimodal literacies;
b. Address the most prominent issues; and, hopefully,
c. Reduce the gap between the specific objectives set for foreign/second language learning and the results achieved by studies conducted in this field.

Our third research question aims to investigate, also based on what emerges from the previous questions, what the main problems to be addressed are and what approaches
can be proposed in order to promote an efficient introduction of the multiple forms of literacy in language classrooms.

It is hypothesised that teachers of both nationalities may highlight the issues that they consider most relevant and problematic in the daily management of their subject, proposing solutions that will not necessarily be easy to put into practice. It is also hypothesised that there may be differences between the issues highlighted in the Slovenian environment and those highlighted in the Italian one due to the different status held by the two languages analysed, both within the school system and without.

### 3.3 Documentary analysis

To answer the first research question, a documentary analysis was considered necessary in order to compare the results produced by the studies conducted in the field of language education with the normative references that regulate language learning (of Italian as a second language in Slovenia and English as a foreign language in Italy) in the specific context of upper secondary schools.

A documentary analysis can be defined as an activity planned and carried out in a systematic manner which has the main purpose of certifying the state of conformity or updating of a given document with respect to an established regulation, reference or rule. According to Scott (1990), researchers need to consider "four criteria for validity and reliability in using documents: authenticity; credibility (including accuracy, legitimacy and sincerity); representativeness (including availability and which documents have survived the passage of time); and meaning (actual and interpreted)" (Cohen, 2007, p. 203).

## a. Research studies

First, we proceeded by making a selection of the reference literature according to some of the following criteria, namely that:
a. the concept of Literacy was the focus of reflection and discussion;
b. the studies concerned the teaching or learning of a foreign or second language;
c. the learning environment was formal and, possibly, face-to-face, given that online learning environments greatly change the learning conditions;
d. the studies concerned upper secondary school pupils or teachers.

On the other hand, no limits were placed when it came to considering other elements, such as the country in which the studies were conducted (as it would have been way too restrictive to focus on Italy and Slovenia only), the tools used and the specific focus of each research. The objective of this phase was twofold: first, to obtain an overview of the direction in which research is moving, not in the field of Literacy in general, but within specific parameters such as those mentioned above; and second, to understand how said studies were approached, in terms of tools used, activities proposed, results.

## b. Regulatory documents ${ }^{11}$

The following normative documents which regulate the specific learning objectives established for Licei and technical and professional institutes, respectively, in the Italian context (see $\S 2.2$ ) were consulted:

- the MIUR-MEF Interministerial Decree number 211 of 7 October 2010;
- the Ministerial Directive 4 of 12 January 2012

Two more texts, which add to Ministerial Directive 4, were later included in the analysis:

- Legislative Decree number 61 of 13 April 2017; and
- Decree number 92 of 24 May 2018.

As regards the Slovenian environment, we proceeded in the same way, thus taking as regulatory documents the texts that regulate the teaching of Italian as a second language in gimnazija and technical institutes (see §2.5). These are, respectively:

[^7]- Učni načrt za italijanščino kot tuji in kot drugi jezik: gimnazija (Šečerov and Zorman, 2008) ${ }^{12}$;
- Italijanščina kot drugi jezik: izpitni katalog za poklicno maturo (Šečerov et al., 2010) ${ }^{13}$.

We then proceeded by analysing the documents in question in order to understand:

- their structure, that is, how each document is organised and what information it provides to the reader;
- how the expected learning outcomes for each discipline are addressed (in the case of the Italian context, where the documents are inclusive of all disciplines); - what the specific learning objectives established for English as a foreign language in Italy and Italian as a second language in Slovenia, respectively, are;
- whether or not any of the aforementioned documents makes any reference to the concept of Literacy or to one of its many facets (see Chapter 1) when addressing the specific learning objectives established for the target language, or at any other point.

This analysis process was useful in order for us to:
a. have a general overview of the normative references vis-à-vis Literacy that regulate foreign and second language teaching in both contexts;
b. be able to answer the first research question concerning the presence or absence of the concept of Literacy in the specific learning objectives established for both languages;
c. be able to compare the normative references of the school system of both countries with what emerged from the results of the research studies carried out by research in the field of language education;
d. know how to interpret the perceptions of the teachers of both contexts (which emerged both from the questionnaires and from interviews and focus groups) regarding their awareness of the normative references on the one hand and of the

[^8]issues that they encounter in everyday teaching in language classrooms on the other.

Given that reporting the regulatory references in full would not be feasible, a detailed description of the school system of both countries on the one hand (with particular focus on the upper secondary schools that this research project takes into consideration), and of the salient aspects of the documents analysed on the other (including a list of the expected learning outcomes and the specific learning objectives established for the target language), can be consulted in APPENDIX 16. The results of the documentary analysis comparing normative references and research studies will instead be reported more extensively in Chapters 4 and 5.

### 3.4 Participants

Participants in the research were teachers of English as a Foreign Language (EFL) in Italy and teachers of Italian as a Second Language in Slovenia (ISL), who, in both cases, teach in upper secondary schools. In the following paragraphs we will describe in more detail the two samples that took part in the research: the group of EFL teachers and the group of ISL teachers.

Samples are subsets of the population, in our case, upper secondary school teachers of English as a Foreign Language in Italy and of Italian as a Second Language in Slovenia. Representativeness is a crucial issue, because its accuracy influences the strength of the conclusions that can be drawn (Milroy and Gordon, 2008), which is why, in order to be representative of the whole target population, good samples are very similar to the whole population in its most important general characteristics, such as age, gender, ethnicity, educational background, academic capability (Cohen, 2007).

### 3.4.1 EFL Teachers (Italy)

440 EFL teachers in Italy participated in the research study by completing the questionnaire described below. The sampling procedure adopted falls into the group of "probability sampling" (a number of scientifically sound procedures), and is called 'random sampling': selecting members of the population on a completely random basis
starts from the assumption that random samples, based entirely on probability and chance, are more representative than non-random ones (Cohen, 2007).

Information regarding gender or geographical origin was not collected by the questionnaire, because they were considered as personal data, and not necessarily relevant. However, since the link to the online questionnaire was sent to every public and charter school in Italy, region by region, we assume that the provenance of the answers that we collected is, therefore, extremely varied. A more detailed account of the EFL participants' teaching experience, school provenance, age range and so forth will be discussed in Chapter 4, and a descriptive report of the data collected is available in full in APPENDIX 5.

Six (6) EFL teachers were interviewed: they come from different Italian regions, and their mother tongue is Italian. Once again, the procedure adopted to select the interviewees was 'random sampling'. Five of them took part in the EFL Focus Group, all women, of different ages and with different backgrounds. A sixth teacher, also a woman, unable to participate in the focus group was then interviewed individually at a later time. Since the EFL Questionnaire does not collect the type of personal data that would make identification possible, we asked the interviewees if they had completed said Questionnaire at the time of its administration, in order to understand whether there was an overlap between the two samples of participants or not. We were told that this was not the case.

The full transcripts of the focus group and of the interview are available in APPENDICES 13 and 14, while the analyses carried out are reported in Chapter 4.

### 3.4.2 ISL Teachers (Slovenia)

Ten (10) respondents completed the ISL Questionnaire. Because of the low number of ISL teachers present in that specific Slovenian-Italian bilingual area, a 'convenience' or 'opportunity sampling' procedure was adopted, which is a form of "non-probability sampling". In quantitative research "non-probability samples" are considered nonrepresentative compromises. The convenience of the researcher is an important criterion of sample selection, where members of the target population are selected in order to
meet certain practical criteria (such as geographical proximity, availability and easy accessibility, or the willingness to volunteer); these samples, however, are not just convenience-based. They are usually focussed on making sure that participants possess specific characteristics related to the investigation purposes, thus reducing not only the number of possible volunteers, but the target population as well, and this is our case (Cohen, 2007).

Information regarding gender or geographical origin was not collected by the questionnaire, because they were considered as personal data, and not necessarily relevant. However, since we are talking about a limited area, we know for sure that the respondents all live in the bilingual area on the Slovenian-Italian border. A more detailed account of their teaching experience, school provenance, age range and so forth will be discussed in Chapter 5, and a descriptive report of the data collected is available in full in APPENDIX 8.

Five (5) teachers of Italian as a second language in that same area, whose mother tongue is Slovenian, took part in the ISL Focus Group, all women, of different ages and with different backgrounds. The sampling procedure adopted was, once again, one of convenience. Since the ISL Questionnaire does not collect the type of personal data that would make identification possible, we asked the interviewees if they had completed said Questionnaire at the time of its administration, in order to understand whether there was an overlap between the two samples of participants or not. We were told that this was not the case. The full transcript of the focus group is available in APPENDIX 15, while the analyses carried out are reported in Chapter 5.

### 3.5 The data collection instruments

As already mentioned in the introduction to this chapter, this research is mainly quantitative. The main tools used to collect our data are two online questionnaires, practically identical: one designed for teachers of English as a foreign language in Italy, and the second one for teachers of Italian as a second language in Slovenia. There is, however, apart from the reference documents consulted, a fair amount of qualitative data deriving from the transcription of individual interviews and focus groups, as well as from the open questions within the two questionnaires. The sources of data and the
data collection instruments will be addressed in the following paragraphs as well as in the following chapters, alongside the analyses of the data.

### 3.5.1 Questionnaires

The two questionnaires that were used for the more substantial data collection were developed at the end of a pilot study aimed at validating the questionnaires themselves. Both were devised and proposed in electronic format, using one of the free applications provided by the Gmail email account, or Google Forms ${ }^{14}$.

## - EFL Questionnaire (Italy)

The EFL Teacher Questionnaire (available in full in APPENDIX 2) is drafted in English and consists of an initial introduction, containing a brief presentation of the research project as well as some indications for the completion of the questionnaire itself, followed by three sections of closed questions, mostly multi-item Likert scales ${ }^{15}$. In addition, there are two open questions and three closed questions aimed at anonymously collecting some personal data from the respondents. All in all there was a total of 24 questions.

## a. The First Section

The First Section of the questionnaire includes:

- the three aforementioned closed questions (1-3)

Question 1. "Type of upper secondary school I teach in";
Question 2. "I have been teaching English as a Foreign Language for"; and
Question 3. "My age range is".
Each has different answer options (i.e., the nine types of upper secondary school existing in Italy, different ranges considering years of teaching experience and age groups to choose from, respectively).

[^9]- seven questions (4-10), that aim to explore different aspects related to the EFL teachers' knowledge of the specific learning objectives vis-à-vis literacy established for language learning for the type of upper secondary school they teach in, as well as their awareness of the developments brought about by the most recent studies in the field of language education.

Question 4 ("When it comes to specific learning objectives for English as a foreign language established for the type of upper secondary school I teach in (Decreto Interministeriale MIUR-MEF 211, 07/10/2010; Direttiva Ministeriale 4, 16/01/2012)") consists of only 2 items, with three response options (Yes, No, and I don't know enough about it). This scale investigates whether the respondents have actually read the national guidelines or not.

Question 5 ("When it comes to the specific learning objectives for foreign language learning for the type of upper secondary school I teach in") is made up of 5 items, with six response options, from Very often to Never. In agreement with Dörnyei (2010: p. 28), it was decided to insert an even number of answer options in most of the questions in the questionnaire to prevent undecided respondents from going for the middle option, which means not really deciding. Said question measures the level of participation of each teacher in those decisions concerning the achievement of the pre-established learning objectives.

Question 6 ("I believe that the specific learning objectives established for foreign language learning (Decreto Interministeriale MIUR-MEF 211, 07/10/2010; Direttiva Ministeriale $4,16 / 01 / 2012$ )") consists of 8 items that explore the suitability of the specific learning objectives established for EFL teaching for specific learning environments. Each item has seven response options, from Strongly Agree to Strongly Disagree, the seventh being I don't know enough about it.

Question 7 ("Familiarity with research in language education"), despite being a scale, actually aims at collecting information about the respondents: it is made up of 3 dichotomous Yes or No items, exploring the relationship the respondents have with research, asking whether they read it, do it, or write it themselves.

Question 8 ("Knowledge of the recently published studies in the field of language education") consists of 5 items, with six response options, from Very often to Never. When it comes to the recently published studies in the field of language education, this scale investigates the respondents' degree of knowledge on the matter, as well as the concrete participation of the schools in supporting their teachers' training in this field.

Question 9 ("Relationship between the results obtained by language education studies and the approaches proposed by the school system") explores how much, according to EFL teachers, specific learning objectives and the approaches proposed by the school system are in step with the most recent studies in the field of language education. It is made up of 5 items, with six response options, from Strongly Agree to Strongly Disagree.

Question 10 ("My school") is made up of 6 items with Yes or No answer options that investigate whether schools hold an active role in promoting research and training, as well as a diversified learning environment.

## b. The Second Section

The Second Section of the Questionnaire consists of 5 questions (11-15) and revolves around the concept of Literacy.

Question 11 ("I come in contact with these terms") is a multiple selection list, which allows respondents to check all the options that apply: it consists of 10 items with 4 answer options (When reading research studies, In class, During teacher training and Never), aimed at investigating the respondents' familiarity with specific concepts and terminology.

Question 12 is an open question that asks the respondents to provide their definition of Literacy.

Question 13 of the EFL Questionnaire ("The following areas were covered during my undergraduate/postgraduate education and/or professional training...") is made up of 14 items that explore the preparation that teachers believe they have received in specific
areas during their education and/or professional training: each item has 6 possible response options, from Fully covered to Not covered at all.

Question 14 ("The concept of Literacy") consists of 11 items, with 6 answer options for each (from Strongly Agree to Strongly Disagree).

Question 15 ("When in class, to convey meaning I resort to") is made up of 12 items and investigates how often teachers recur to each of them to convey meaning during a language lesson. There are 6 possible answer options, from Very often to Never.

## c. The Third Section

The Third and final Section of the Questionnaire is made up of 9 questions (16-24) and deals with Digital Literacies.

Question 16 mirrors Question 12 by collecting the respondents' definition of Digital Literacy.

Question 17 ("My degree of competence in using the following tools is"), Question 18 ("Degree of usefulness of the following tools in foreign language teaching and learning") and Question 19 ("I resort to these tools in class") list the same 18 items, dealing with different digital tools and applications. They all have 6 different answer options, and they investigate three different dimensions: how competent teachers feel when it comes to using each digital tool (evaluating such competence with options from Excellent to Scarce), how useful they consider them when it comes to language education (from Very useful to Not useful at all), and how often they actually use them in class (from Very often to Never), respectively.

Question 20 ("I believe that the use of technology facilitates foreign language learning at the level of students'"') contains 10 items that ask respondents to express their level of agreement (with 6 options, from Strongly Agree to Strongly Disagree) with the idea that students are believed to benefit from technology when it comes to different aspects of language education.

Question 21 ("Technology") is made up of 7 items and once again presents 6 agreement options (from Strongly Agree to Strongly Disagree) to explore the role of technology in language education.

Question 22 use 8 items and the same answer options presented above in order to investigate the "Reasons that might have hindered the use of technology so far" in the language classrooms.

Question 23 ("In light of the health emergency developed in 2020, which forced upper secondary schools to hold most of their lessons through different distance learning modalities") contains 5 dichotomous items that analyse the transition between onsite lessons and distance learning through Yes or No answer options.

Question 24 ("Distance learning") focusses on distance learning through 4 items with 6 agreement options (from Strongly Agree to Strongly Disagree).

The last two questions ( 23 and 24), added shortly before the administration of the pilot questionnaire (in the first two months of 2021, see $\S 3.6 .1$ ), were inserted in the light of the COVID-19 health emergency which began to spread in Italy in March 2020. This has affected the data collection phase of the present study (both the quantitative and the qualitative one), given that it prevented an on-site administration and face-to-face meetings from taking place and required using different means (§3.6.2 to §3.6.5).

This topic, although marginal with respect to our research questions, is relevant for two reasons: first of all, for the entire duration of the quantitative data collection phase the teachers of both contexts involved in the project could not carry out their usual, face-toface teaching activities, and had to alternate between different types of distance learning; in the final phase of interviews and focus groups, our interviewees were teaching both face-to-face and according to the principles of either DaD or DDI when necessary ${ }^{16}$. This may have influenced their attitude during the completion of the questionnaire as well as when discussing their own experience during our meetings. Not only that, some teachers have highlighted the fact that the pandemic has inevitably led

[^10]to a greater (and perhaps even different) use of technology in the educational context (which was one of the aspects that we were most interested in considering) even after returning to class ${ }^{17}$. More about this will be said in paragraph $\S 6.4$.

## - ILS Questionnaire (Slovenia)

The Questionnaire for teachers of Italian as a Second Language submitted to teachers in the Slovenian-Italian bilingual area of Slovenia is articulated in a similar manner, with the same sections, the same questions and the same answer options. The English version was, however, translated into Italian, and the normative references reported in Scales 4 and 6 were changed: instead of quoting "Decreto Interministeriale MIUR-MEF 211, 07/10/2010"; and "Direttiva Ministeriale 4, 16/01/2012", "Učni načrt za italijanščino kot tuji in kot drugi jezik: gimnazija (Šečerov e Zorman, 2008)"; and "Italijanščina kot drugi jezik: izpitni katalog za poklicno maturo (Šečerov et al., 2010)" were inserted.

### 3.5.2 Focus Groups and interview

In order to answer the third research question ("What approach can be introduced in the language classroom in order to help students develop multiple, digital and multimodal literacies; address the most prominent issues; and reduce the gap between the specific objectives set for foreign/second language learning and the results achieved by studies conducted in this field"), we decided focus groups would be the best option. Focus group interviews are different from one-to-one interviews both in terms of format and

[^11]concerning the role that the researcher holds, which is no longer that of an interviewer, but that of a moderator. Despite still asking questions, they need to act as a facilitator of the discussion, which is conducted by following a semi-structured, pre-prepared guide, usually containing a majority of broad, open-ended questions accompanied by a few closed-ended ones (Dörnyei, 2007).

This method allows researchers to gather a relatively large amount of qualitative data in one single session. This is done by recording the responses of a small group (usually 6 to I2 members), as the participants think and brainstorm together, thus adding a layer of within-group interaction to the discussion environment. One-to-one interviews would require a much longer process to obtain the same amount of data, and it would mean renouncing the "groupthink" aspect of the collective experience (Dörnyei and Murphey, 2003).

### 3.6 Data collection

In this section, we will address the following: first of all, the pilot study of the two questionnaires, in view of their validation; secondly, the procedures adopted to administer the final questionnaires to both EFL and ISL teachers; finally, the procedures adopted to conduct focus groups with both EFL and ISL teachers.

### 3.6.1 The pilot study

The two online questionnaires - described in §3.5.1 - used for the data collection of the main study are original tools, created by the writer for the specific needs of this research. In consideration of the fact that the questionnaires had not been previously validated, it was decided to proceed with a preliminary pilot study, in order to test them (Dörnyei, 2007, 2010). The pilot questionnaire, available in APPENDIX 1, was completed by 20 teachers from both environments, in the period between 10 January and 15 February 2021. The structure and nature of the two pilot questionnaires is the same as the final questionnaires (see §3.5.1): both are strictly anonymous; they mainly contain closed questions, in particular Likert scales and differential scales (henceforth, scales) with variable number of items; both include two open questions; anonymous personal data is collected at the beginning of the questionnaire.

The main reasons for deciding to submit the two questionnaires for the pilot study are to:
a. receive information regarding the characteristics of the items that make up the various scales, so as to identify any ambiguous and/or unclear items, items to be formulated differently, redundant items, misleading items, items to be added;
b. receive information regarding the clarity of the instructions provided for the compilation;
c. receive information regarding the time required for compilation;
d. understand any difficulties relating to the administration of the questionnaire;
e. conduct the reliability analysis of the individual scales to identify any items that need to be rephrased or eliminated.

A much rougher first version of the questionnaire, never submitted and modified by the researcher after a first exchange of views with some colleagues, entailed the need for substantial changes, such as the insertion of a more detailed description, splitting a question into two, moving some questions into different sections and a better definition of the scales to be used in order to make them more suitable for evaluating the items in question. The second version, the one actually subjected to piloting, is quite similar to the final version of the instrument.

To obtain the necessary information to address points $a, b, c$ and $d$, we proceeded by collecting the post-compilation opinions of 5 teachers out of 20 , who were willing to discuss both the strengths and weaknesses of the pilot questionnaire. With regard to point e, the statistical analysis of the items (namely, the analysis of reliability of the scales) that make up the various scales was carried out using Microsoft Excel and IBM SPSS software (Statistical Package for the Social Sciences, produced by SPSS, Inc). As the number of participants in the pilot study was too low, more complex forms of analysis, that would have allowed us to highlight the main components present within the scales, check their reliability and so forth, were not carried out.

However, at the end of said study, after identifying the strengths and weaknesses of the questionnaire, we proceeded with a general revision of the tool in both languages: some questions were reformulated; the response options of some scales were modified or made more detailed to be more relevant to the items in question; the indications for
completing each question were made more homogeneous; some items were reformulated, repositioned or eliminated. As a result of this careful and rigorous revision work, the final version of the two questionnaires (EFL and ISL), previously described (see §3.5.1), were realised.

### 3.6.2 Administering the EFL Questionnaire

The final version of the EFL Questionnaire for teachers (see §3.5.1, first section) was administered between 20 February and 1 April 2021.

To contact the teachers we initially proceeded through the ANILS association (Associazione Nazionale Insegnanti Lingue Straniere) and some Facebook groups dedicated to teachers of English as a Foreign Language. The number of responses obtained was low, and therefore, given the intention to reach as high a number of responses as possible, we proceeded to contact the administrative office or the presidency of all public and charter schools via email, requesting that information about the questionnaire be disseminated to all their EFL teachers. The first part of the dissemination process involved the provincial capital of each Region, but then, in order to obtain more responses, it was decided to extend the process to every province of every Region. The standard message for dissemination included the link to the Google Forms page of the questionnaire, and a short privacy policy. Since neither questionnaire was collecting sensitive data, which would have made the respondents identifiable, it was not necessary to request a signed consent. However, as it was decided to specify the use that we would have made of the data, a specific policy regarding this was attached (even in the first dissemination attempts made via the social media).

### 3.6.3 Administering the ISL Questionnaire

The final version of the ISL Questionnaire for teachers (see §3.5.1, second section) was administered between 1 March and 1 July 2021.

There are not many teachers of Italian as a Second Language in the bilingual area of Slovenia, and therefore a limited number of answers was expected, which is why it was decided to keep the data collection open longer, in the hope of reaching at least 10
responses through subsequent solicitations. The sample of ISL teachers was not contacted directly by the writer but directly by a Professor at the University of Primorska, who already knew some local teachers and institutions. The Koper Professor used an existing contact network to reach the teachers by e-mail, inviting them to participate in the research and providing them with the link to the online questionnaire and all the necessary information. The standard message included the link to the Google Forms page of the questionnaire, and the privacy policy mentioned above. Since neither questionnaire was collecting sensitive data, which would have made the respondents identifiable, it was not necessary to request a signed consent. However, as it was decided to specify the use that we would have made of the data, a specific policy regarding this was attached.

### 3.6.4 Conducting the focus groups

Two focus groups were organised: initially, a first one was held with the participation of teachers of Italian as a Second Language in the Slovenian bilingual area in the Primorska region, while a second one saw the participation of teachers of English as a Foreign Language in Italy. As the limit in data collection lies in saturation, i.e. in seeing when certain data, arguments, opinions and so on start to repeat themselves, we thought that carrying out a third one might prove necessary in order to be able to answer the question more thoroughly. However, once the first two focus groups were conducted, an interview was added to the EFL environment due to the inability of one volunteer to take part in the meeting on the appointed day. On all three occasions, albeit with differences linked to the different situation of the two different languages under analysis and of the two different school systems, the same issues emerged recurrently and the same problems were highlighted. For this reason, we believe that saturation was reached and therefore it was not considered necessary to organise further meetings. More on this will be said in the analysis phase in Chapter 5.

## a. Conducting the focus groups with EFL teachers

The focus group conducted with teachers of English as a foreign language in Italy was organised in different steps. A first attempt to search for volunteers involved social media, especially Facebook, through groups dedicated to English teachers, including the

ANILS group, mentioned above, which is made up of teachers of various foreign languages, and so on. The response, however, was essentially nil. At this point we resorted to the solution used to obtain answers to the questionnaire, that is, by sending a request via e-mail to all the administrative offices and presidencies of all the public and charter schools of the provincial capital of each Region. Given the low number of participants, it was decided to proceed by sending the same e-mail to the second province (per number of schools) in each region, where possible. The text of the e-mail included the link to a Google form created for the occasion: the description concisely explained the function of the meeting; respondents were then asked to indicate their name, surname, e-mail address and region of origin. This was followed by a control grid with possible dates and times for the meeting, a comments/questions section, and finally a few lines aimed at providing basic information relating to data processing.

Through two Google forms (one for each round of e-mails), nineteen teachers expressed their interest in participating. Initially it was therefore thought that we would be able to organise two focus groups. However, due to difficulties related to work commitments and personal issues, even with different dates to choose from, only five out of nineteen people managed to actually join the project. It was then scheduled for the group to meet on Google Meet on 3 November 2021.

A sixth person, was strongly motivated to attend but unable to take part in the meeting on the established date, asked if it would be possible to fix a separate meeting. The organisation was not straightforward, time-wise, but the interview eventually took place on 23 December 2021.

In both cases, after welcoming the participants, we proceeded by recording the on-line meeting, and then by briefly contextualising the fields that would be discussed. The meetings lasted a little more than two hours in the first case and an hour and a half in the second. The recorded video files, which were automatically saved on Google Drive, were converted into audio tracks, which were then transcribed with the help of the Transcribe by Wreally software. Names and references were anonymised. The results of the analyses carried out through NVivo are reported in Chapter 4.

Each participant was asked in advance to sign a release (APPENDIX 12) for the collection of personal data deriving from the audio-video recording of the meeting, and at the same time received a short PowerPoint file aimed at illustrating the key points that were to be dealt with: the concept of Literacy, that of Multiliteracies, of multimodality and Digital Literacies, each with a couple of definitions. The decision to provide the PowerPoint was considered for a while before proceeding, because initially it was feared that providing this type of information would alter the data collection, that is, it would prevent us from being able to investigate the teachers' actual knowledge of the topics in question. On the other hand, the data analysis of both questionnaires was showing up a fairly strong gap between the world of research and the opinions and knowledge teachers had when it came to the daily life of the school system. There was therefore the concrete risk that the participants would participate in the meeting without sufficient knowledge of the subject for the meeting to be fruitful, which is why it was ultimately decided to provide them with some basic material.

The focus-group meetings were approached in a semi-structured way: before they took place, a list of questions was drawn up with the intention of asking them, if required, during the sessions. However, the order was never followed, because an attempt was made to mediate between the participants while leaving them free to move from one topic to another, only intervening to conclude a topic that had reached saturation, to prevent the participants from losing focus, or to try and deepen an unclear or, on the contrary, a particularly interesting concept. The questions thus served as a path to follow in trying to reach the aim of the meetings. Some questions did not need to be asked, because they were brought up by the participants themselves in the course of the discussion depending on the direction the conversation seemed to take.

## b. Conducting focus groups with ISL teachers

The focus group conducted with teachers of Italian as a second language in Slovenia was organised via e-mail. As already mentioned, the number of ISL teachers in the Slovenian bilingual area is very low, and we therefore proceeded to contact them directly and organise an online meeting based on their availability.

We got five teachers to participate, and a Google Meet appointment for the group was fixed for 22 September 2021. Each participant was asked in advance to sign a release (APPENDIX 12) for the collection of personal data deriving from the audio-video recording of the meeting, and at the same time received a short PowerPoint file illustrating the key points that would be dealt with (see above).

After welcoming the participants, we proceeded to record the on-line meeting, and then briefly contextualised the fields that would be discussed. The meeting lasted a few minutes less than two hours. The recorded file, which was automatically saved on Google Drive, was converted into an audio track, which was then transcribed with the help of the Transcribe by Wreally software. Names and references were anonymised. The results of the analyses carried out through NVivo are reported in the Chapter 5.

### 3.7 Instrument analysis

As mentioned before (§3), this research project collects both quantitative and qualitative data, and different methods of analysis for the two types of data were adopted. The analysis of the quantitative data collected through the questionnaires described in the previous paragraphs was carried out using the following two software:

- Microsoft Excel, version 2007 for Windows;
- IBM SPSS, version 20 for Windows.

The Google Forms application - through which the two questionnaires were created allowed for all the answers obtained to be automatically transferred to an Excelcompatible worksheet, thus avoiding having to enter the individual questionnaire responses onto an Excel page manually. The two Excel worksheets thus created (i.e. by collecting the answers provided by Slovenian teachers of Italian as a Second Language and by Italian teachers of English as a Foreign Language, respectively) were uploaded into SPSS. Starting from the EFL questionnaire, two different work files were created for the analysis which will be described in the following paragraphs.

As for the qualitative data collected through focus groups and interviews, the analysis was carried out using the following three softwares:

- Microsoft Word, version 2007 for Windows;
- Transcribe by Wreally software, online version ${ }^{18}$;
- NVivo, latest version (unnumbered) for Windows.

Google Meet, the platform where the meetings were held, allows for audio-video recordings to be carried out. The recording is then automatically saved on a new Google Drive folder called Meet recordings, ready to be downloaded in mp4 format. In preparation for the analysis, different transcriptions were prepared as Microsoft Word files and uploaded into NVivo for analysis. A more detailed description will be provided at the end of the chapter.

### 3.7.1 The analysis of the EFL Questionnaire

As mentioned above, the questionnaire used to collect data provided by Italian EFL teachers (§3.6.1) is an original tool, created by the writer for the purposes of this research. Following the suggestions in the literature consulted (Dörnyei, 2007; Lowie and Seton, 2013; Pallant, 2013), we proceeded with a preliminary analysis of the individual scales and questions composing the questionnaire before actually carrying out the inferential statistical analyses necessary to answer our research questions. There are four aims underpinning the preliminary analysis: first, to identify the main dimensions underlying each scale of the questionnaire; secondly, to calculate the reliability (Cronbach's alpha coefficient) of the scales; third, to explore the distribution of the data collected by the individual scales in order to verify that the conditions for adopting the parametric statistical techniques exist; finally, identify the variables measured by the individual scales. The main conditions to be respected are the following: measurement level (i.e., only continuous variables), normality of the distribution (i.e. the data distributed in the histogram form a Gauss curve), homoskedasticity (i.e. homogeneous variance) (Lowie and Seton, 2013).

The reason why it is preferable to use parametric statistical techniques over nonparametric ones is, according to Dörnyei:

[^12]"The reason is that we want to use the most powerful procedure that we can find to test our hypotheses. [..] parametric tests utilize the most information, so they are more powerful than their non-parametric counterparts" (Dörnyei, 2007: p.227-228).

Before moving on to present the procedure adopted for the preliminary analysis of each question or scale, it may be useful to make a clarification: many data analysis methods depend on the assumption that data samples are normally distributed. There are several methods in order to see whether or not continuous data ${ }^{19}$ follows a normal distribution, through graphical (histograms, Q-Q Plots and Boxplots) and test methods. The normality tests that the SPSS program runs are Kolmogorov-Smirnov and ShapiroWilk. The null hypothesis for these tests is that the variable follows a normal distribution, with small p values providing evidence against normality. Formal normality tests are highly sensitive to sample size, which is why Sainani (2012) regards them as optional, and valid only when accompanied by graphical techniques. While the Shapiro-Wilk test is more powerful than the Kolmogorov-Smirnov test, it is best used with medium-sized samples of up to 300 participants. With samples larger than this, both are unreliable as they may pick up unimportant deviations - which, on the other hand, may be disregarded in small samples (Sainani, 2012). This is our case: the number of observations (440) exceeds the threshold beyond which the tests cannot be considered completely reliable. It is therefore extremely probable that both tests will consider the distribution of most of the data obtained to be non-normal. In circumstances such as these, relying on the graphical methods of analysis to establish the normality of the distribution of each question or scale is a relatively mainstream practice; however, in those cases in which the visual interpretation of graphs and tables proved inconclusive, the abnormality of the distribution highlighted by the Kolmogorov-Smirnov test weighed on the decision to opt for a non-parametric evaluation of the scale in question.

So, in synthesis, the following procedure was adopted.

In the case of closed questions and scales, we must distinguish between those that were treated as continuous variables, as they provide quantitative data (questions 5, 6, 8, 9 ,

[^13]$13,14,15,17,18,19,20,21,22,23$ and 24 ) and those that were treated as nominal or ordinal categorical variables, which provide qualitative data ${ }^{20}$ (questions $1,2,3,4,7$, $10,11,12$ and 16).
In the first case, the suitability of the data collected was checked through correlation matrices, the value of the sample adequacy indicator (Kaiser-Meyer-Olkin or KMO), as well as Bartlett's sphericity test, which, in reaching statistical significance, supported carrying out the principal components analysis to understand the main dimensions underlying the data collected with each scale.

Once the new variables were extracted, their reliability (Cronbach's alpha coefficient) and the normality of the data distribution were checked, both through graphs (histograms, boxplots and Q-Q plots) and tests (Kolmogorov-Smirnov test of normality), so as to then be able to establish whether it was possible to use parametric tests for further statistical analyses or whether it was necessary to resort to the adoption of non-parametric techniques.

In the second case, given that the aforementioned procedures are only valid for continuous variables, a frequency distribution analysis was adopted. The adoption of non-parametric tests (Dörnyei, 2007) was used for further statistical analyses in the case of categorical data.

As for the open questions, they are short-answer questions, which, according to Dörnyei means that they "involve a real exploratory enquiry about an issue, that is, they require a more free-ranging and unpredictable response" (2010). A first step was to proceed with as systematic a content analysis as possible by looking for head-nouns and then code the answers. Once the data was codified and the new categorical variables were created, a frequency distribution analysis was opted for, thus setting the conditions for the use of non-parametric tests for any further statistical analyses.

A detailed description of the procedures followed and the analyses carried out for each single question and scale can be found in full in APPENDIX 4, while tables and figures relating to this preliminary analysis are available in APPENDIX 6.

[^14]
### 3.7.2 The analysis of the ISL Questionnaire

As mentioned above, the questionnaire used to collect data relating to Slovenian ISL teachers (§3.6.1) is an original tool, created by the writer for the purposes of this research. Following the suggestions in the literature consulted (Dörnyei, 2007; Lowie and Seton, 2013; Pallant, 2013), we proceeded with a preliminary analysis of the individual scales and questions composing the questionnaire before actually carrying out the statistical analyses necessary to answer our research questions (see §3.7.1).

As we mentioned in the previous paragraph, a clarification is needed. Normality of distribution was assessed through graphical (histograms, Q-Q Plots and Boxplots) and test methods, specifically the Kolmogorov-Smirnov and Shapiro-Wilk tests. The null hypothesis for these tests is that the variable follows a normal distribution, with small pvalues providing evidence against normality. Formal normality tests are highly sensitive to sample size, which is why Sainani regards them as optional, and only valid when accompanied by graphical techniques (Sainani, 2012). We contemplated using the Shapiro-Wilk test, which turns out to be more powerful (reducing the type I error of rejecting normality when there actually is normality) especially with medium-sized samples. However, when it comes to small samples (Razali and Wah, 2011), there is no substantial difference between different normality tests. This is our case: the small number of observations in the ISL teacher group (10) entails that neither test is completely reliable. It is therefore very probable that both tests will assess the distribution of most of the data as non-normal. Thus, the best option is to rely on graphical methods of analysis to ascertain the normality of the distribution of each question or scale. For these reasons, and in order for the analyses of the two questionnaires to be consistent, it was decided to opt for the same procedure adopted for the EFL questionnaire, where the Kolmogorov-Smirnov test was used.

A premise is important: in the course of the preliminary analyses of the ISL questionnaires we found ourselves several times in the position of not being able to run some of the tests. This resulted in less linear decisions than when carrying out the preliminary analyses of the EFL questionnaires. At the end of this process, we wondered whether a homogeneous analysis choice for all scales could prove a more consistent and coherent option. Given that it was not possible to carry out some of the
tests (impossibility detected by the program), given the low number of observations, and given also some of the values obtained did not justify carrying out further analyses, the only possible option to homogenising the approach to the questions would have been that of treating them all as count ${ }^{21}$ variables, thus proceeding by adding up the values of the individual items. This, however, would have prevented us from highlighting the underlying dimensions of each scale of the questionnaire (in those cases in which the programme managed to carry out the tests), as well as from comparing some of the results with those of the EFL Questionnaire, because such different approaches in the techniques adopted to reduce the size of the scales would have made any such comparisons inconclusive. Given these difficulties, it was decided to adopt diverse statistical approaches within the ISL Questionnaire, in order to keep open the possibility of comparisons with the EFL Questionnaire where the analysis of the scales allows it.

In synthesis, the following procedures of analysis were adopted:
a. Closed questions

1. Continuous variables: correlation matrices; parametric tests (Kaiser-MeyerOlkin; Bartlett's sphericity test; Cronbach's alpha coefficient; KolmogorovSmirnov test of normality); histograms, boxplots and Q-Q plots.
2. Ordinal and nominal variables ${ }^{22}$ : non-parametric tests (the Kruskal-Wallis test; the Mann-Whitney U test; Spearman's rank correlation coefficient; Chisquare test), frequency distribution analysis.
b. Open questions ${ }^{23}$
3. Coding, frequency distribution analysis, non-parametric tests for further statistical analyses.

A detailed description of the procedures followed and the analyses carried out for each single question and scale can be found in full in APPENDIX 4, while tables and figures relating to this preliminary analysis are available in APPENDIX 9.

[^15]
### 3.7.3 The analysis of the Focus Groups and interview

As mentioned before (§3.7), the analysis of the qualitative data collected through the focus groups and interviews was carried out through the 2007 version of Microsoft Word for Windows, the Transcribe by Wreally transcription software, and the latest version for Windows of NVivo. When working with qualitative data, the main methodology tends to be content analysis in its four phases: $a$. transcribing the data; $b$. pre-coding and coding; c. developing ideas and providing forms of data display; d. interpreting said data and drawing conclusions. This analytical process is based on the principle that qualitative categories are not predetermined but rather derived inductively from the data analysed (Dörnyei, 2007). While point a) and $b$ ) will be dealt with in more detail in the following paragraphs, data display and consequent conclusions will be reported in the following chapters.

Transcribing to transform the data into easily analysable texts is the first step for recorded data. Miller and Crabtree (I999, p.I04) describe the transcriptions as "frozen interpretive constructs", with several possible areas of data loss, especially involving the nonverbal aspect of the interaction, like body language (i.e. facial expressions, gestures, eye-movement), and suprasegmentals (i.e., intonation, stress, paralinguistic elements). The transcription process allows researchers to get to know their data thoroughly; however, issues like the representation of imperfect speech (with false starts, interruptions, stammering, word repetition and so on) may be difficult to deal with. Different transcribing choices can produce very different outcomes and very different effects on the reader. There is no automatic-right or wrong transcription convention, and, according to Roberts, none is ever neutral, as "transcribers bring their own language ideology to the task" (Roberts, 1997, p.I68). For this reason, at least it needs to be consistent: Roberts recommends trying to evoke the naturalness of the discourse, perhaps through a layered approach that provides ways of contextualising the speakers' voices and representing the features of their speech. While this was attempted, the transcription of the prosodic aspects was not carried out, in consideration of the fact that the purpose of these recordings was to focus on the contents expressed by the teachers interviewed.

As for coding, most qualitative techniques are designed to reduce the data collected and to make the data easily accessible (e.g., by highlighting specific segments or by linking speakers and concepts). Several phases of coding should result in the transcribed data being labelled in such a way that they are easily identifiable, retrievable, or groupable (Dörnyei, 2007).

## a. The analysis of the EFL Focus Group and of the interview

The two meetings for the EFL teachers took place on Google Meet and were held in Italian. The platform itself allows for audio-video recording and automatically sends the recorded file to a new Google Drive folder, called Meet recordings. Once downloaded, each file was converted from mp4 to mp 3 , in order to only keep the audio track, which is not as heavy to upload into a different software. Then we proceeded with a first computer-assisted transcription draft by uploading the files to the Transcribe by Wreally transcription software, an online website that provides, for a fee, the automatic transcription of audio and video files. The first drafts provided by the website, although generally quite correct, required a certain amount of editing in order to rectify the occasional errors and inaccuracies, and above all to obtain a transcription that was less grammatically correct, therefore less focussed on a correct and fluid exposition of the concepts discussed, and more faithful to the actual unfolding of the interaction.

The Transcribe by Wreally website allows users to upload the reference audio track on the same page as the transcription, so that they can listen to it during the editing phase without being forced to operate on several programs and windows at the same time. Once the entire file was accurately transcribed, names and references to specific places and institutes were removed, thus making sure that the text was anonymous and that it was impossible to identify the speakers and their schools. At the end of this process, a Microsoft Word file was obtained, the contents of which are available in full in APPENDICES 13 and 14.

A new project was then created in the NVivo software, where the files was subsequently uploaded. At first, they were uploaded and analysed separately, to prevent codings from mixing, and only afterwards was it decided to merge the coded excerpts selected from the two different files in order to have a complete overview of what was emerging from
the data. The files relating to the codes and cases of each of the two meetings were first downloaded separately in Microsoft Word and PDF format. Subsequently, new files which included both were downloaded.

Initially we asked the program to try and auto-code the transcripts: the only coding that emerged identified feelings that appeared to transpire from some excerpts of the transcript (namely "positive", "neutral", "negative", "very negative"). Once we checked the highlighted sections, though, we did not agree with the choices of the programme altogether, which is why this codification was ultimately disregarded. We also tried to ask NVivo to create concept maps that highlighted the most used words, but it turned out that they are mainly function words, despite adding filters that would not allow NVivo to choose short words (shorter than five letters) so as to exclude very common options like "e", "cioè", "anche", and so forth. We therefore decided to opt for a different procedure, that is, to code the text ourselves: we created cases (which is the name NVivo uses to identify different speakers), one per participant, and codes (one for each theme considered relevant). Some codes were created at the very beginning, knowing in general which topics had been dealt with during the meeting, and others were instead added during the coding phase, whenever we were faced with an interesting passage which, however, did not seem to fit into any of the already existing categories. We also realised that some codes were on the same level, while others were instead part of a macro-category, which is why it was decided to organise the codes in a semi-hierarchical way. This part of the process is often called second-level coding (Dörnyei, 2007). The codes and sub-codes that emerged at the end of this process are the following:

| Focus Group Codes and sub-codes |  |
| :---: | :---: |
| Literacy in the classroom | Issues |
| Learning Objectives | Classroom management |
| Research and School | Lack of time |
| Teachers and Research | Students' lack of competence |
| Pandemic | Training |
| Introduction of | Other |
| Digital Literacy | Ideas |
| Multimodality | What works |
| New Literacies | What does not work |

Table 3.1, Focus Group codes and sub-codes

The entire text was then screened and the sections deemed important were classified according to codes and cases. Several re-readings were necessary to make sure everything had been coded correctly and that no important pieces of information had been left out. NVivo automatically creates different pages within the project to collect the sections pertaining to a specific code or case, so, once the coding was completed, it was possible to download them all (in a Microsoft Word and PDF format). This allowed us to read the excerpts belonging to each code or to each speaker together, to identify possible overlappings (whenever one sentence was selected by more than one code) and to see how much each code or case covered, in terms of percentage, out of the entire text. The distribution of the highlighted passages in terms of both codes and speakers (or cases) will be examined in detail in Chapters 4, 5 and 6, while more extensive considerations will be drawn in Chapter 7.

## b. The analysis of the ISL Focus Group

As with the EFL meetings, the ISL Focus Group took place via Google Meet (where it was recorded) and was held in Italian, given the fact that the researcher does not have sufficient knowledge of Slovenian, and that most of the teachers preferred Italian, which for all of them is a second language, over English. The exact same procedure as the one described above was followed in order to obtain an accurate transcription in a Microsoft Word format, which is available in full in APPENDIX 15. Once a new project was created on NVivo, it was possible to use the same semi-hierarchical structure of codes created for the analysis of the EFL Focus Group, which facilitated us in analysing and comparing the data obtained and in drawing conclusions relevant for both environments (see Chapters 4 and 5). The only difference is that, in order not to risk confusing the files in the analysis phase, the Slovenian participants were classified with letters (from A to E) while the Italian ones with numbers (from 2 to 7 , where number 7 indicates that one teacher interviewed individually and number 1 indicates the interviewer). The distribution of the highlighted passages in terms of both codes and speakers (or cases) will be examined in detail in Chapters 4,5 and 6 , while more extensive considerations will be drawn in Chapter 7.

## PART THREE

The third part of the present work addresses our research questions and related subquestions (§3.2) and attempts to provide as detailed a presentation as possible of such data.

It is organised into four different chapters. Chapter 4 presents the results associated to the Italian context, while Chapter 5 reports the ISL findings for the Slovene context. Chapter 6 compares the two contexts, in order to highlight differences and similarities, while Chapter 7 discusses our results and provides ideas for future research.

## CHAPTER 4. EFL RESULTS

The present chapter reports the results of the statistical analyses carried out for each sub-question on the variables obtained after validating the EFL questionnaire, presents the most relevant excerpts extrapolated from the transcriptions of the EFL focus group and interview and reflects on the key points of the EFL normative references.

### 4.1 Data analysis related to research question number 1

The first research question asks:

Does the school system establish specific learning objectives vis-à-vis literacy for foreign and second language learning? If so, what are they? Is there a gap between them and the conclusions drawn from the most recent language education studies in the field, especially when it comes to the development of multiple, digital and multimodal literacies?

Before proceeding with the analysis, it was hypothesised (paragraph §3.2) that a gap between the objectives vis-à-vis literacy for foreign and second language learning and conclusions drawn from the most recent language education studies in the field existed and was actually wide enough to constitute a problem, at least concerning the relationship between what is theorised by research and research studies and the day-today reality of the school environment.

As mentioned in Chapter 3 (§3.3), the main documents that regulate the teaching of English as a foreign language in Italian upper secondary schools are:

- the MIUR-MEF Interministerial Decree number 211 of 7 October 2010;
- the Ministerial Directive 4 of 16 January 2012.

Two more texts, which add to Ministerial Directive 4, were later included in the analysis:

- Legislative Decree number 61 of 13 April 2017; and
- Decree number 92 of 24 May 2018.

When inspecting the aforementioned documents (an analysis of the normative references that regulate the teaching of English as a foreign language in Italian upper secondary schools can be consulted in APPENDIX 16) and the specific learning objectives established for EFL, we first proceeded by searching for specific references (both at a terminological and conceptual level) regarding:

- Literacy (as we understand it from several definitions provided by research ${ }^{24}$ : any references limited to the idea of alphabetization were disregarded entirely. See §1.1.1);
- Multimodality (and, more generally, references to different teaching and learning modalities, as well as teaching and learning styles. See §1.1.3);
- Digital Literacy (and consequent use of ICTs. See $\S 1.1 .4)^{25}$
- New Literacies (in the broad sense of critical thinking, analytical skills, source evaluation, and so forth ${ }^{26}$. See §1.1.5).

[^16]In light of the review of the existing literature presented in Chapters 1 and 2, we can reasonably say that the gap between school and research indeed exists. In recent years, researchers, policymakers and other educational stakeholders have been discussing the need for students to develop a broad repertoire of literacy practices that are not confined to traditional views of literacy and traditional approaches of literacy instruction (Rajendram, 2015), and this still seems not to be reflected in Italian formal educational environments.

In particular, in the specific learning objectives indicated by the Italian Ministry of Education and Research (Interministerial Decree number 211 of 7 October 2010) as regards foreign language teaching and learning in Licei, no reference is made to the concept of Literacy, nor to the many possible different teaching methods and approaches related to it, thus proving that not much has changed in the last decades. Technology is also not taken into much consideration: it is only highlighted how, during their two final school years, EFL students will be asked to use the new information and communication technologies to do research, study linguistic and non-linguistic topics in depth, express themselves creatively and communicate with foreign interlocutors. In the whole document, no mention is made of multimodality, of different teaching and learning modalities, nor of different learning styles. Learning strategies are mentioned, however, as a means to promote the students' learning autonomy.

As for the remaining documentation, relating to technical and professional institutes, the situation is similar, although, perhaps, slightly better. While there is no specific reference to the concept of Literacy or digital literacy, technologies appear to be taken more into account than in the aforementioned Interministerial Decree concerning the Licei. Still, they are mostly mentioned in the paragraphs concerning the subjects that they are an integral part of ${ }^{27}$, and their guidelines, as well as those regulating other disciplines, also mention the need for the students to know how to master their specific vocabulary in English. No explicit references are made regarding the concept of multimodality either, or different learning modalities in general; however, the need for attempts to favour the students' different learning styles is highlighted. As for the new

[^17]forms of Literacy, some aspects are brought to light (although they are never defined as such), which deal with the development of a rational, critical and responsible attitude towards reality, and the ability to participate in the social and cultural life of the country, which can easily be considered as integral aspects of the concept of New Literacies. The only specific reference to critical thinking is included in a paragraph relating to Italian language teaching.

Despite the presence of some sporadic insights, therefore, there are no specific learning objectives for English as a foreign language in upper secondary schools in Italy that take into consideration the concept of Literacy as we analysed it in Chapter 1, that is, as
"the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve his or her goals, develop his or her knowledge and potential, and participate fully in community and wider society" (UNESCO, 2004, 2011).

Compared with the world of research, therefore, where the term Literacy and its several different facets have been around for a few decades (as we saw in Chapter 1), it can be said that there is indeed a gap with respect to the regulations in force, and it appears to be quite wide, since most of the elements we were looking for, Literacy-wise, appear to be missing altogether. There are, however, multiple considerations worth drawing, and they will be discussed further in Chapters 6 and 7 ( $\S 6.1$ and $\S 7.2$ ).

### 4.2 Data analysis and results related to research question number 2

The second research question asks:

What level of awareness vis-à-vis literacy is there within the school system regarding:
a. The specific learning objectives established for foreign and second language education in upper secondary schools;
b. The evolution of recent studies within the language education field, with particular attention paid to literacy, in its multiple definitions;
c. The gap between a) and b).
d. The use of technological tools in language learning in general, and, specifically, in developing digital and multimodal literacies.

Before reporting our data, which come from the two questionnaires mentioned in paragraph $\S 3.5,1$, a couple of clarifications are in order: first of all, in both contexts (EFL and ISL) the variables were treated either as dependent or independent. Independent variables are, according to Jaeger:
"antecedent conditions that are presumed to affect a dependent variable. They are either manipulated by the researcher or are observed by the researcher so that their values can be related to that of the dependent variable." (Jaeger, 1990, p.373)

Jaeger explains that:
"In a research study, the independent variable defines a principal focus of research interest. It is the consequent variable that is presumably affected by one or more independent variables that are either manipulated by the researcher or observed by the researcher and regarded as antecedent conditions that determine the value of the dependent variable." (Jaeger, 1990, p.370)

In a research study, categorical (also called qualitative) variables (see §3.7.1) classify data by categories, and are treated as independent variables: they do not express differences in amount, just differences, and this allows researchers to organise their data into groups and compare them. Dependent variables are the outcome: in a comparison of groups, they show what they differ on.

Since we are dealing with a significant amount of analyses, the following paragraphs will mainly report those that have found a statistically significant difference between two variables under analysis. All the other findings (available in full in APPENDIX 7), unless stated otherwise, are not reported because the null hypothesis was confirmed, which means that the analysis did not reach statistical significance.

As this is a rather articulated question, we will proceed by reporting the data based on the four points provided by the question itself, namely, how aware respondents are of a. the specific learning objectives established for foreign and second language education in upper secondary schools; b. the evolution of recent studies, literacy-wise, within the language education field; c. the hypothesised gap between school and research; and d. the use of technological tools in language learning in order to develop digital and multimodal literacies.

As we have seen, the data in question are mainly quantitative and come from the administration of two questionnaires, identical in structure but targeting different respondents (paragraphs $\S 3.4 .1$ and $\S 3.4 .2$ ). The items that make up the questionnaires were subjected to preliminary analyses to understand whether parametric or nonparametric techniques should be adopted, and to reduce the size of the scales (see Chapter 3). At the end of the preliminary analyses, a total of 37 variables emerged from the EFL Questionnaire, 10 of which are qualitative (sometimes ordinal but mostly nominal) and 27 quantitative (namely, variables that consist of a count or numerical measurement). As already anticipated, qualitative variables are considered nonparametric data: nominal and ordinal data thus require the adoption of non-parametric techniques by default, while interval and ratio data (quantitative) are considered to be parametric data (Cohen, 2007). However, the vast majority of our quantitative variables were not normally distributed according to the Kolmogorov-Smirnov test of normality, which was confirmed by graphs and charts in the absolute majority of the cases. For this reason, it was decided to use non-parametric techniques by default, since any comparison or correlation between two or more variables would necessarily require the use of non-parametric techniques even if only one variable required it, which is always our case. Non-parametric statistical tests do not require any specific form for the sampling distribution, do not make normality assumption and there is often no sample size requirement.

The non-parametric techniques used for the inferential statistical analyses are the following:

- Chi-squared distribution for the comparisons between two qualitative variables;
- Mann-Whitney $U$ (MWU) or Mann-Whitney-Wilcoxon (MWW) test for comparisons that include a dichotomous qualitative variable (which therefore implies comparing two independent samples);
- the Kruskal-Wallis test by ranks, or one way analysis of variance (ANOVA) on ranks, for comparisons that include a qualitative variable with several groups (which therefore implies comparing two or more independent samples of equal or different sample sizes, thus extending the Mann-Whitney $U$ test); and
- Spearman's rank correlation coefficient, or Spearman's $\rho$ (rho) for comparisons between two quantitative variables, measuring the statistical dependence between the ratings of two variables and assessing how well their relationship can be described using a monotonic function.

The analyses were conducted with a confidence interval of $95 \%$, and therefore the statistical significance (two-tailed) requires a p-value equal to or less than $0.05(0.05$ being five-hundredth). This means that chance only accounts for 5 per cent of the difference, thus allowing us to highlight a high degree of association between two variables (Cohen, 2007). If the p -value is higher, we can deduce that the difference observed in the sample between the two categories ${ }^{28}$ could be due only to chance and not to a real difference in the two populations, therefore it is not possible to generalise and state that there is a difference between the categories in question, although the graphs of the relative distributions may not be perfectly superimposable. Statistical significance depends on both sample size and the correlation coefficient. As for the Chisquare test, a low $p$ value indicates a statistically significant association between the two variables, which means that as the categories of the independent variable vary, the percentage of respondents who do or do not have a certain characteristic also varies (Judge, 2022).

Since we are dealing with a large number of variables, not all of them were individually compared with each of the others: we proceeded by grouping them, trying to answer the points that make up the second research question with the variables considered most

[^18]pertinent, and within those groups we proceeded by conducting further inferential statistical analyses. Other results and considerations emerging from less analysed variables will be observed more in depth through descriptive statistics (namely, statistics that describe features of a data set) in the chapter dedicated to discussing the data and to drawing conclusions (Chapter 5). The results obtained, in terms of numbers and percentages, are however available in full in APPENDIX 7.

### 4.2.1 EFL Questionnaire analysis: respondent information

Before proceeding with each sub-question of research question 2, it is useful for the analysis that follows to report some descriptive data about our respondents. Specifically, the tables below will focus on eight of our qualitative variables (i.e., 1, 2, 3, 4.1, 4.2, 7.1, 7.2 and 7.3 , respectively: see tables $4 \mathrm{a} .1 ; 4 \mathrm{~b} .1 ; 4 \mathrm{c} .1$ and 4 d .1 ), which, in many of the subsequent analyses, are treated as independent variables. These variables concern: the type of upper secondary school our respondents teach in (variable 1); their teaching experience (variable 2); their age range (variable 3); their knowledge of the specific learning objectives established for EFL (variables 4.1 and 4.2); their relationship with research (variables 7.1, 7.2 and 7.3). This allows readers to have a clearer picture of the general characteristics of our EFL respondents, to understand whether or not they are aware of the normative references that regulate EFL teaching and if they have a relationship with the world of research, and, if so, in what capacity. The other two qualitative variables which deal with the respondents' definition of the concepts of Literacy and Digital Literacy (12 and 16) are examined more thoroughly in paragraph §4.2.3.

| Type of upper secondary school |  |  |
| :--- | :---: | :---: |
|  | Respondents | Percentage |
| Liceo Classico | 39 | $8,9 \%$ |
| Liceo Scientifico | 134 | $30,45 \%$ |
| Liceo Linguistico | 68 | $15,45 \%$ |
| Liceo delle Scienze Umane | 37 | $8,4 \%$ |
| Liceo Artistico | 11 | $2,5 \%$ |
| Liceo Musicale e Coreutico | 5 | $1,1 \%$ |
|  | Subtotal | 294 |
| $66,8 \%$ |  |  |
| Istituto Tecnico Economico | 57 | $13 \%$ |
| Istituto Tecnico Tecnologico | 45 | $10,2 \%$ |


| Istituto Professionale |  | 44 | $10 \%$ |
| ---: | ---: | :---: | :---: |
|  | Subtotal | 146 | $33,2 \%$ |
|  | Total | 440 | $100 \%$ |

Table 4.1. EFL Questionnaire, question 1

The table above shows that about two thirds of the respondents teach in a Liceo, the remaining third in technical and professional schools. The largest group belongs to "Liceo Scientifico", the smallest one to "Liceo Artistico".

| Teaching experience |  |  |
| :--- | :---: | :---: |
|  | Respondents | Percentage |
| Less than 1 year | 10 | $2,3 \%$ |
| 1-5 years | 39 | $8,9 \%$ |
| 6-10 years | 53 | $12 \%$ |
| $11-20$ years | 115 | $26,1 \%$ |
| $21-30$ years | 132 | $30 \%$ |
| $30+$ years | 91 | $20,7 \%$ |
| Total | 440 | $100 \%$ |

Table 4.2. EFL Questionnaire, question 2

| Age Range |  |  |
| :--- | :---: | :---: |
|  | Respondents | Percentage |
| Less than 25 | 12 | $2,7 \%$ |
| $26-30$ | 13 | $3 \%$ |
| $31-40$ | 51 | $11,6 \%$ |
| $41-50$ | 90 | $20,5 \%$ |
| $51-60$ | 210 | $47,7 \%$ |
| $60+$ | 59 | $13,4 \%$ |
| Prefer not say | 5 | $1,1 \%$ |
| Total | 440 | $100 \%$ |

Table 4.3. EFL Questionnaire, question 3

From the teaching experience and the age of the respondents it is clear that the vast majority of respondents are aged between 41 and 60 and have been teaching for a period of time ranging from 11 to 30 years. An issue concerning Question 3 ("My age range is...") involves several entries which are not consistent with the answer provided by the respondents for Question 2 ("I have been teaching English as a second language for..."). A more detailed description of how the problem was dealt with and what it entails can be found in APPENDIX 4 and in paragraph §7.4.

| I have read the national guidelines |  |  |
| :--- | :---: | :---: |
|  | Respondents | Percentage |
| Yes | 394 | $89,6 \%$ |
| No | 12 | $2,7 \%$ |
| I don't know | 34 | $7,7 \%$ |
| enough about it | 440 | $100 \%$ |
| Total |  |  |

Table 4.4. EFL Questionnaire, question 4.1

| I am aware of the specific learning <br> objectives |  |
| :---: | :---: |
| Respondents | Percentage |
| 421 | $95,7 \%$ |
| 2 | $0,4 \%$ |
| 17 | $3,9 \%$ |
| 440 | $100 \%$ |

Table 4.5. EFL Questionnaire, question 4.2

As for knowledge of the normative documents, the absolute majority of the respondents declares to have read the national guidelines and to be aware of the specific learning objectives established for EFL. The percentage of those who have not is almost nil, and in any case lower than the already very small percentage representing those who declare that they do not know enough to answer.

| I am a subscriber (...) |  |  |
| :--- | :---: | :---: |
|  | Respondents | Percentage |
| Yes | 114 | $25,9 \%$ |
| No | 326 | $74,1 \%$ |
| Total | 440 | $100 \%$ |


| I am a researcher |  |
| :---: | :---: |
| Respondents | Percentage |
| 78 | $17,7 \%$ |
| 362 | $82,3 \%$ |
| 440 | $100 \%$ |


| I am an author |  |
| :---: | :---: |
| Respondents | Percentage |
| 33 | $7,5 \%$ |
| 407 | $92,5 \%$ |
| 440 | $100 \%$ |

Table 4.6. EFL Questionnaire, question 7.1, 7.2, 7.3

Finally, we see how one teacher out of four ( $25.9 \%$ ) states that they are subscribed to research journals, while the majority of respondents do not appear to be further involved with research, almost $18 \%$ of our respondents state that they are researchers themselves, and $7.5 \%$ are authors.

### 4.2.2 Question 2a: results of the EFL analysis

Question 2a asks "What level of awareness vis-à-vis literacy is there within the school system regarding the specific learning objectives established for foreign and second language education in upper secondary schools".
Before the data collection phase, teacher awareness was hypothesised to be partially limited in some respects (§3.2), but probably not so much concerning the specific learning objectives for language education.
Several variables were considered in the statistical analyses conducted in order to answer this specific sub-question. They were obtained from the preliminary analysis of the answers to the following dimensions:

|  | Type | Variable | Dimension |
| :---: | :---: | :---: | :---: |
|  | Qualitative, independent | 1 | type of upper secondary school |
|  | Qualitative, independent | 2 | the respondents' teaching experience |
|  | Qualitative, independent | 3 | the respondents' age range |
|  | Qualitative, | 4.1 | whether respondents have read the national guidelines |


| independent <br> Qualitative, <br> independent <br> Qualitative, <br> independent <br> Qualitative, <br> independent <br> Qualitative, | 7.2 | for the specific EFL learning objectives or not <br> whether respondents are aware of the specific EFL <br> learning objectives or not |
| :---: | :---: | :--- |
| independent | 7.2 | the respondents' status as subscribed (on not) to <br> research journals <br> the respondents' status as researchers (or not) |
| Quantitative, <br> dependent <br> Quantitative, <br> dependent <br> Quantitative, <br> dependent <br> Quantitative, <br> dependent | 5.1 | the respondents' participation in decisions concerning status as authors (or not) <br> the achievement of said specific learning objectives <br> the suitability of said specific learning objectives for a <br> multifaceted EFL learning environment <br> the need for said specific learning objectives to be <br> updated and implemented in the EFL classrooms |
| the concept of Literacy being taken into consideration |  |  |$|$

Table 4a.1, Research question 2a, EFL variables analysed

As mentioned in the previous paragraph, variables 1,2 and 3 are considered as independent in each sub-question and subdivide the total of respondents into independent samples: for example, variable 1, which concerns the types of upper secondary school in which respondents teach, divides teachers into as many samples as there are types of schools, based on the response they provided. In this sub-question, variables 4.1 and 4.2 , as well as $7.1,7.2$ and 7.3 , are added as independent variables. Depending on whether the independent variables divide the sample of respondents into two (e.g., researchers and non-researchers, variable 7.2) or more independent samples (e.g., the different types of upper secondary school, variable 1), it is necessary to resort to two different procedures. Since variables 1, 2, 3, 4.1 and 4.2 divide the respondents into more than two samples (i.e., the type of upper secondary school they teach in; their different lengths of teaching experience; their different age ranges; their levels of knowledge and awareness of national guidelines and specific learning objectives), the non-parametric Kruskal-Wallis test was performed. As for the relationship between the dependent variables and the dichotomous variables 7.1, 7.2 and 7.3, which only allow "Yes"-"No" answers and therefore divide the sample of respondents into two samples, the adoption of the non-parametric Mann-Whitney $U$ test was required. Finally, the correlation between the dependent quantitative variables was checked through the nonparametric Spearman's rank correlation coefficient.

When comparing our dependent variables with variable 1, namely the different types of upper secondary school, the null hypothesis assumes a relatively equal distribution of each dependent variable (i.e., $5,6.1,6.2,14.3$ ) on its different categories. The null hypothesis is maintained for variables $5,6.1$ and 6.2 , while comparing variable 1 with variable 14.3 reveals a statistically significant difference ( .049 , table A7a. $1^{29}$ ). This means that the null hypothesis needs to be rejected, although just barely, and that respondents belonging to different types of upper secondary school have different opinions regarding the concept of Literacy being taken into consideration by specific EFL learning objectives (table A7a. 1 and figure A7a.1.4).

| Type of upper secondary school | Sig. |
| :---: | :---: |
| Liceo Classico -Liceo delle Scienze  <br> Umane    <br> Liceo Classico -Liceo Scientifico    <br> Liceo Classico -Istituto Professionale    <br> Liceo Classico -Liceo Artistico    <br> Liceo Classico- Istituto Tecnico  <br> Liceo Classico -Istituto Tecnico <br> Economico    <br> Liceo $\quad$ Classico-Liceo Musicale e  <br> Coreutico    | .315 <br> .378 <br> .017 <br> .017 <br> .018 |

Table 4a.2, EFL pairwise comparisons; variables 1/14.3

| Categories | Average <br> ranks |
| :---: | :---: |
| Liceo Classico | $\underline{258,6}$ |
| Liceo Scientifico | 239,3 |
| Liceo Linguistico | 213,6 |
| Liceo delle Scienze | 230,8 |
| Umane | 160,4 |
| Liceo Artistico | 177,6 |
| Liceo Musicale e | 205,7 |
| coreutico | 196,4 |
| Istituto tecnico |  |
| economico |  |
| Istituto tecnico |  |
| tecnologico |  |
| Istituto Professionale | 195,3 |

Table 4a.3, EFL average ranks; vv 1/14.3

Specifically, according to the p -value ${ }^{30}$ of the analysis comparing the different samples, where each row tests for the null hypothesis that the sample 1 and sample $2^{31}$

[^19]distributions are identical, the lowest significance values (reported in table 4a.2) emerge from the analyses involving the sample of respondents belonging to the "Liceo Classico". By checking the average ranks (table 4a.3), we can confirm this analysis and state that these teachers show a higher average rank for variable 14.3 than the other categories, in some cases only slightly, while in others the difference is quite substantial. This appears to indicate a more positive opinion when it comes to the concept of Literacy being taken into consideration by specific EFL learning objectives on the part of Liceo Classico teachers.

When comparing our dependent variables with variable 2 , namely the different lengths of teaching experience, the null hypothesis assumes a relatively equal distribution of each dependent variable (i.e., $5,6.1,6.2,14.3$ ) on its different categories. The null hypothesis is maintained for variables 5, 6.2 and 14.3 (table A7a.2), whilst the comparison of variable 2 with variable 6.1 reveals a statistically significant difference (.042). This means that the null hypothesis needs to be rejected, and that respondents with different lengths of teaching experience have different opinions regarding the suitability of the specific learning objectives for a multifaceted EFL learning environment (table A7a. 2 and figure A7a.2.2).

| 00000000000000 | Teaching experience | Sig. |
| :---: | :---: | :---: |
|  | 6-10 years - Less than one year | . 104 |
|  | 6-10 years - 1-5 years | . 053 |
|  | 6-10 years - 11-20 years | . 897 |
|  | 6-10 years - 21-30 years | . 037 |
|  | 6-10 years - $30+$ years | . 399 |
|  | 11-20 years - Less than one year | . 102 |
|  | 11-20 years - 1-5 years | . 037 |
|  | 11-20 years - 21-30 years | . 013 |
|  | 11-20 years - $30+$ years | . 376 |


| Categories | Average <br> ranks |
| :--- | :---: |
| Less than one year | 268 |
| $1-5$ years | 248,5 |
| 6-10 years | $\underline{196,9}$ |
| $11-20$ years | $\underline{199,6}$ |
| $21-30$ years | 239,8 |
| $30+$ years | 215,4 |

Table 4a.5, EFL average ranks, variable 2/6.2

Table 4a.4, EFL pairwise comparisons; variables 2/6.2

Specifically, according to the p -value of the analysis comparing the different samples, where each row tests for the null hypothesis that the sample 1 and sample $2^{32}$ distributions are identical, the lowest significance values (reported in table 4a.4) emerge

[^20]from the analyses involving the sample of respondents belonging to the " $6-10$ years" and "11-20 years" categories. By checking their average ranks (table 4a.5), we can confirm this analysis and state that those teachers show a considerably lower average rank for variable 6.1 than the other categories. Their answers appear to indicate a lesser agreement on the suitability of the specific learning objectives for a multifaceted EFL learning environment (table 4a.5).

When comparing our dependent variables with variable 3, namely the different age ranges of the respondents, the null hypothesis assumes a relatively equal distribution of each dependent variable (i.e., $5,6.1,6.2,14.3$ ) on its different categories. The null hypothesis is maintained for all four variables (table A7a.3).

When comparing our dependent variables with variables 4.1 and 4.2, which explore the respondents' having read the national guidelines and their awareness (or lack thereof) when it comes to the specific EFL learning objectives, respectively, the null hypothesis assumes a relatively equal distribution of each dependent variable (i.e., 5, 6.1, 6.2, 14.3) on the different categories presented, namely "Yes", "No", and "I don't know enough about it". In the first case, the null hypothesis is maintained for variables 6.1, 6.2 and 14.3 (table A7a.4), while comparing variable 4.1 with variable 5 reveals a statistically significant difference (.044). This means that the null hypothesis needs to be rejected, and that depending on whether respondents have read the national guidelines or not they appear to have a statistically significant different perception on how much they participate in decisions concerning the achievement of the pre-established specific learning objectives for EFL (table A7a. 4 and figure A7a.4.1). Specifically, by looking at the p-value of the analysis comparing the different samples, we see that the lowest significance values emerge from the analyses involving the sample of respondents who answered "Yes" (Yes-No: sig. .088; Yes- I don't know enough about it: sig. .057).

In the second analysis, focussed on variable 4.2, the null hypothesis is maintained for variables 6.1 and 6.2 (table A7a.4), while comparing variable 4.2 with variables 5 and 14.3 reveals a statistically significant difference (. 022 and .030 , respectively). This means that the null hypothesis needs to be rejected, and that, in the first case (variables 4.2 and 5), depending on whether respondents are aware of the specific learning objectives established for EFL or not, they appear to have a statistically significant different perception on how much they participate in decisions concerning the
achievement of said specific learning objectives (table A7a. 4 and figure A7a.4.5). Specifically, by looking at the p -value of the analysis comparing the different samples, the lowest significance values emerge from the analyses involving the sample of respondents who answered "I don't know enough about it" (No- I don't know enough about it: sig. .177; Yes- I don't know enough about it: sig. .007).

Finally, when comparing variables 4.2 and 14.3, depending on whether respondents are aware of the specific learning objectives established for EFL or not, they appear to have statistically significant different opinions on the concept of Literacy being taken into consideration by specific EFL learning objectives (table A7a. 4 and figure A7a.4.8). Specifically, by looking at the p -value of the analysis comparing the different samples, we see that the lowest significance values emerge from the analyses involving the sample of respondents who answered "No". (No- I don't know enough about it: sig. .087; No-Yes-: sig. .022).

| Average ranks |  |  |  |
| :--- | :---: | :---: | :---: |
| Variables | Yes | No | Don't know enough |
| $4.1 / 5$ | $\underline{225,6}$ | 162,2 | 182,4 |
| $4.2 / 5$ | 223,6 | 266,8 | $\underline{138,7}$ |
| $4.2 / 14.3$ | 223 | $\underline{27,8}$ | 181,6 |

Table 4a.6, EFL average ranks; variables 4.1, 4.2/5, 14.3

By checking their average ranks (table 4a.6), we can confirm this analysis and state that respondents who declared that they have read the national guidelines concerning the specific learning objectives established for EFL (i.e., variable 4.1) show an average rank for variable 5 very much higher than the other two categories. Their answers appear to indicate a more active perceived participation in decisions concerning the achievement of the aforementioned specific learning objectives.
We can also state that respondents who declared that they do not know enough when it comes to the specific learning objectives established for EFL (i.e., variable 4.2) show an average rank (table 4a.6) for variable 5 very much lower than the other two categories. Their answers appear to indicate a less active perceived participation in decisions concerning the achievement of said specific learning objectives.
Finally, by checking their average ranks (table 4a.6) we can state that respondents who are not aware of said specific learning objectives (i.e., variable 4.2) show an average rank for variable 14.3 very much lower than the other two categories. Their answers
appear to indicate a more negative opinion on whether the concept of Literacy is taken into consideration by specific EFL learning objectives or not.

When comparing our dependent variables with variables 7.1, 7.2 and 7.3, where each subdivides the respondents into two categories according to whether they are subscribed to research journals or not, whether they are researchers or not, and whether they are authors or not, respectively, the null hypothesis assumes a relatively equal distribution of each dependent variable (i.e., $5,6.1,6.2,14.3$ ) on the different categories presented. In case of variable 7.3, the null hypothesis is maintained for all four variables (table A7a.5).
In the first analysis, however, the null hypothesis is maintained for variables 6.1, 6.2 and 14.3 (table A7a.5), whilst the comparison of variable 7.1 with variable 5 shows a statistically significant difference $(\mathrm{U}=15640.500 ; \mathrm{z}=-2.52 ; \mathrm{p}=.012 ; \mathrm{r}=.12)$ between teachers who are subscribed to research journals $(\mathrm{Ar}=246.3 ; \mathrm{N}=114)$ and those who are not $(\mathrm{Ar}=211.5 ; \mathrm{N}=326)$. This means that the null hypothesis needs to be rejected, and that depending on whether respondents are subscribed to research journals or not they appear to have a statistically significant different perception on their participation in decisions concerning the achievement of the specific learning objectives established for EFL (table A7a. 5 and figure A7a.5.1).
In the second analysis, the null hypothesis is maintained for variables 6.1 and 14.3 (table A7a.5), whilst the comparison of variable 7.2 with variables 5 and 6.2 reveals a statistically significant difference (. 007 and .042 , respectively). This means that the null hypothesis needs to be rejected, and that in the first case (variables 7.2 and 5), depending on whether respondents are themselves researchers ( $\mathrm{Ar}=255.9 ; \mathrm{N}=78$ ) or not $(\mathrm{Ar}=212.9 ; \mathrm{N}=362)$, they appear to have a statistically significant $(\mathrm{U}=$ 11355.500; $\mathrm{z}=-2.72 ; \mathrm{p}=.007 ; \mathrm{r}=.12952$ ) different perception on how much they participate in decisions concerning the achievement of the specific learning objectives established for EFL (table A7a. 5 and figure A7a.5.5).
In the second case (variables 7.2 and 6.2, table A7a.5 and figure A7a.5.7), the analysis once again shows a statistically significant difference $(U=12074.500 ; z=-2.03 ; p=$ .04; $\mathrm{r}=.09666$ ) between teachers who are themselves researchers $(\mathrm{Ar}=246.7 ; \mathrm{N}=78)$ and those who are $\operatorname{not}(\mathrm{Ar}=214.9 ; \mathrm{N}=362)$.

| Average ranks |  |  |
| :--- | :---: | :---: |
| Variables | Yes | No |
| $7.1 / 5$ | $\underline{246,3}$ | 211,5 |
| $7.2 / 5$ | $\underline{255,9}$ | 212,9 |
| $7.2 / 6.2$ | $\underline{246,7}$ | 214,9 |

Table 4a.7, EFL average ranks; variables 7.1, 7.2/5, 6.2

Specifically, by looking at their average ranks (table 4a.7), we can confirm this analysis and state that respondents who are subscribed to research journals (i.e., variable 7.1) show a higher average rank for variable 5 than the other category. Their answers appear to indicate a more active perceived participation in decisions concerning the achievement of said specific learning objectives.
We can also affirm that respondents who are themselves researchers (i.e., variable 7.2) show a higher average rank for variable 5 than the other category. Their answers once again appear to indicate a more active perceived participation in decisions concerning the achievement of said specific learning objectives (table 4a.7). That same group of respondents also shows a higher average rank for variable 6.2 than the other category. Their answers appear to indicate a stronger opinion on the need for the specific learning objectives to be updated and implemented in the EFL classrooms (table 4a.7).
As for the relationship between the dependent variables considered, Spearman's correlation coefficient appears to indicate that all the correlations between these four dependent variables are positive and statistically significant (most with a significance level of 0.01 , and one of 0.05 ). This means that there is a statistically significant correlation between all the dependent variables taken into account for this specific subquestion. However, these correlations are all small ${ }^{33}$ (lower than .3, table A7a.6).

To conclude, the following findings can be considered significant when it comes to research question 2 a :

- respondents belonging to different types of upper secondary school appear to have different opinions on whether or not the concept of Literacy is taken into consideration by specific EFL learning objectives, with Liceo Classico teachers expressing a more positive opinion than the other categories;

[^21]- respondents with different lengths of teaching experience appear to have different opinions on whether or not the specific learning objectives are suitable for a multifaceted EFL learning environment, and teachers with 6 to 20 years of experience are those whose opinion is more negative;
- depending on whether respondents have read the national guidelines or not they appear to perceive their level of active participation in decisions concerning the achievement of the pre-established specific learning objectives for EFL quite differently;
- when it comes to the specific learning objectives established for EFL, respondents who state that they do not know enough claim a less active perceived participation in decisions concerning the achievement of said specific learning objectives, while those who are not aware of them have a more negative opinion on the concept of Literacy being taken into consideration by specific EFL learning objectives;
- respondents who are subscribed to research journals seem to perceive their participation in decisions concerning the achievement of said specific learning objectives as more active than those who are not;
- the same can be said for respondents who are themselves researchers, as they also appear to have a stronger opinion on the need for the specific learning objectives to be updated and implemented in the EFL classrooms.


### 4.2.3 Question 2b: results of the EFL analysis

Question 2 b asks "What level of awareness vis-à-vis literacy is there within the school system regarding the evolution of recent studies within the language education field, with particular attention paid to literacy, in its multiple definitions".

Teachers' awareness and knowledge regarding the most recent research movements in this field of language education was hypothesised to be partially limited (§3.2), and this was also expected to be reflected in the definitions of Literacy and Digital Literacy that they were asked to provide in response to questions 12 and 16 of the questionnaire, respectively.

Several variables were considered in the statistical analyses conducted in order to answer this specific sub-question. They were obtained from the preliminary analysis of the answers to the following dimensions:

|  | Type | Variable |
| :---: | :---: | :--- |
| Qualitative, <br> independent <br> Qualitative, <br> independent <br> Qualitative, <br> independent | 1 | type of upper secondary school |
|  | 2 | the respondents' teaching experience |

Table 4b.1, Research question 2b, EFL variables analysed

Before proceeding with the analysis of the listed variables, however, a brief comment is necessary regarding variables number 12 and 16 , the only qualitative ones that derive from open-ended questions requiring respondents to provide their definition of Literacy and Digital Literacy, respectively. They are short-answer questions, and, as mentioned in the previous chapter (§3.7.1), the answers provided by the respondents were analysed through head nouns and grouped into different categories, which were then assigned a
numerical score. While a complete report is available in APPENDIX 4, the thirteen categories emerging from variable 12 are described in the following table:

| Categories | $\mathbf{N}^{\circ}$ | Notes |
| :---: | :---: | :---: |
| Empty set | 8 | either left blank or stating the respondent's lack of knowledge |
| One word | 24 | a translation or a more or less precise synonym |
| Comprehension | 20 | considering Literacy as the sole ability to understand, mainly written texts |
| Ability to read and write | 99 | formulated more or less literally |
| Competence in a specific area | 61 | considering Literacy as a specific competence |
| Ability plus competence | 20 | combining the two previous categories |
| Four skills | 22 | considering Literacy as the four basic skills of reading, writing, listening and speaking |
| Language skills | 46 | listing more or less extensive skills in mastering languages |
| Communication and interaction | 37 | communication and interaction skills in different contexts |
| (Language) education | 43 | Literacy linked to FLL and education in general |
| Social skills | 16 | the social skills needed in the 21 st century |
| Personal growth and lifelong learning | 22 | Literacy as a personal development process |
| Complex analysis | 22 | very broad and difficult to categorise, as they include multiple other categories. Six answers come from a UNESCO definition (UNESCO, 2004; 2017) |

Table 4b.2, analysis of the answers to question 12 of the EFL questionnaire

Almost half of the answers were quite basic, expressed in the form of a literal translation of the term, that is "alfabetizzazione", through a synonym, or understood as the "Ability to read and write", which is the code that contains the highest number of answers. Also interesting is the fact that 22 answers reported quite literally a definition provided by UNESCO, which likely means that the term was Google searched, and the definition found was copied and pasted.

As for the twelve categories emerging from variable 16, they are reported below:

| Categories | $\mathbf{N}^{\circ}$ | Notes |
| :--- | :---: | :--- |
| Empty set | 15 | either left blank or stating the respondent's lack of |
|  |  | knowledge |
| One word | 15 | a translation or a more or less precise synonym |
| Familiarity with digital devices | 118 | formulated more or less literally |


| Media competence | 20 | formulated more or less literally |
| :---: | :---: | :---: |
| ICT competence | 33 | formulated more or less literally |
| Retrieving information | 23 | focussing on the ability to search the Internet |
| Sharing information and communicating | 38 | focussing on a more (inter)active use of digital tools |
| Retrieving and sharing information | 38 | combining the two previous categories |
| Ability to decipher digital texts | 28 | formulated more or less literally |
| Digital skills for education | 47 | Digital Literacy linked to FLL and education in general |
| Personal growth, goalorientedness | 26 | Digital Literacy as a way of improving one's skills and working to achieve one's goals |
| Complex analysis | 39 | very broad and difficult to categorise, as they include multiple other categories and focus on $21^{\text {st }}$ century skills. Thirteen answers are taken more of less literally from the Western Sydney University website on the page "What is digital literacy?" 34. |

Table 4b.3, analysis of the answers to question 16 of the EFL questionnaire

The distribution of answers is similar to the previous one: some definitions are actually synonymous, using words like "competence" or "skill". The largest group concerns "Familiarity with digital devices", and others refer to other forms of competence (at the level of media or ICTs).

The fact that they are nominal variables makes it necessary to analyse their relationship with our independent ones through the Chi square test. As mentioned in paragraph §4.2, variables 1,2 and 3 are considered as independent in each sub-question and subdivide the total of respondents into independent samples. In this case, 7.1, 7.2 and 7.3 are added as independent, dichotomous variables. Depending on whether the independent variables divide the sample of respondents into two (e.g., researchers and non-researchers, variable 7.2) or more independent samples (e.g., the different types of upper secondary school, variable 1), it is necessary to resort to different procedures ${ }^{35}$ (see §4.2.2).

[^22]```
Qualitative variables - research question 2b
    8.1 respondents independently consult research-related resources
    8.2 schools support their teachers in consulting research-related resources
    11 in how many different environments do respondents come in contact
        with different terms related to Literacy in a wide sense
    12 respondents' definition of Literacy
14.1 idea that Literacy has changed over the years, especially in terms of
        agency
14.2 view of Literacy as a multifaceted concept, pivotal within an EFL
        environment
    16 respondents' definition of Digital Literacy
```

Table 4b.4, Research question 2b, EFL variables analysed

When comparing our dependent variables with variable 1, namely the different types of upper secondary school, the null hypothesis assuming a relatively equal distribution of each dependent variable (i.e., 8.1, 8.2, 11, 14.1, 14.2, see above) on its different categories is maintained for all variables (table A7b.1). Furthermore, comparing variable 1 with variables 12 and 16 through a Chi-square test, which hypothesises a non-existing association between the variables compared, also confirmed the null hypothesis. There is, therefore, no statistically significant association between the type of upper secondary school our respondents belong to and the definition they provided of Literacy and Digital Literacy (table A7b.5).

When comparing our dependent variables with variable 2 , namely the different lengths of teaching experience, the null hypothesis assumes a relatively equal distribution of each dependent variable (i.e., 8.1, 8.2, 11, 14.1, 14.2) on its different categories. The null hypothesis is maintained for variables $8.1,11,14.1$ and 14.2 (table 47b.2), whilst the comparison of variable 2 with variable 8.2 reveals a statistically significant difference (.007). This means that the null hypothesis needs to be rejected, and that respondents with different ranges of teaching experience have different opinions regarding whether or not schools support their teachers in consulting research-related resources (table A7b. 2 and figure A7b.2.2).

[^23]| $\ldots$ | Teaching experience | Sig. |
| :---: | :---: | :---: |
| 光 | 6-10 years - 1-5 years | . 330 |
| 을 | 6-10 years - 21-30 years | . 008 |
| 8 | 6-10 years - 11-20 years | . 007 |
| $\frac{0}{3}$ | 6-10 years - $30+$ years | <. 001 |
| $\stackrel{\cdot}{E}$ | 6-10 years - Less than one year | . 009 |

Table 4b.5, EFL pairwise comparisons; variables 2/8.2

| Categories | Average <br> ranks |
| :--- | :---: |
| Less than one year | 283,7 |
| $1-5$ years | 195,1 |
| 6-10 years | $\underline{169,2}$ |
| $11-20$ years | 226,1 |
| $21-30$ years | 223.3 |
| $30+$ years | 243,2 |

Table 4b.6, EFL average ranks; variables 2/8.2

Specifically, according to the p-value of the analysis between the different samples, where each row tests for the null hypothesis that the sample 1 and sample 2 distributions are identical ${ }^{36}$, the lowest significance values (reported in table 4 b .4 ) emerge from the analyses involving the sample of respondents belonging to the " $6-10$ years" category (table 4 b .4 ). By checking their average ranks (table 4 b .5 ), we can confirm this analysis and state that those teachers show a considerably lower average rank for variable 8.2 than the other categories. Their answers appear to indicate a lesser agreement on the assumption that schools support their teachers in consulting research-related resources. Furthermore, the comparison with variables 12 and 16 performed through a Chi-square test, which hypothesises a non-existing association between the variables compared, confirmed the null hypothesis. There is, therefore, no statistically significant association between the teaching experience our respondents have and the definition they provided of Literacy and Digital Literacy (table A7b.6).

When comparing our dependent variables with variable 3, namely the different age ranges of the respondents, the null hypothesis assumes a relatively equal distribution of each dependent variable (i.e., 8.1, 8.2, 11, 14.1, 14.2) on its different categories. The null hypothesis is maintained for variables $8.2,11,14.1$ and 14.2 (table A7b.3), whilst the comparison of variable 3 with variable 8.1 reveals a statistically significant difference (.002). This means that the null hypothesis needs to be rejected, and that respondents belonging to different age ranges differ in how much they independently consult research-related resources (table A7b. 3 and figure A7b.3.1).

[^24]| n0000000000000 | Teaching experience | Sig. |
| :---: | :---: | :---: |
|  | 31-40 years-61+ years | . 055 |
|  | 31-40 years-51-60 years | . 002 |
|  | 31-40 years-Less than 25 years | . 031 |
|  | 41-50 years-61+ years | . 036 |
|  | 41-50 years-51-60 years | <. 001 |
|  | 41-50 years-Less than 25 years | . 028 |

Table 4b.7, EFL pairwise comparisons; variables 3/8.1

| Categories | Average ranks |
| :--- | :---: |
| Less than 25 | 268,9 |
| $26-30$ years | 187,2 |
| $31-40$ years | $\underline{181,6}$ |
| $41-50$ years | $\underline{183,3}$ |
| $51-60$ years | 242,1 |
| $61+$ years | 227,9 |
| Prefer not say | 246,6 |

Table 4b.8, EFL average ranks; variables 3/8.1

Specifically, according to the p -value of the comparisons between the different samples, where each row tests for the null hypothesis that the sample 1 and sample $2^{37}$ distributions are identical, the lowest significance values (reported in table 4b.6) emerge from the analyses involving the sample of respondents belonging to the "31-40 years" and "41-50 years" categories. By checking their average ranks (table 4b.7), we can confirm this analysis and state that those teachers show a lower average rank for variable 8.1 than the other categories: the table below reports the most statistically significant options from both categories. Their answers appear to indicate a lesser involvement in consulting research-related resources.

Furthermore, the comparison with variables 12 and 16 performed through a Chi-square test, which hypothesises a non-existing association between the variables compared, confirmed the null hypothesis for variable 12 . This means that there is no statistically significant association between the age range of our respondents and the definition they provided of Literacy (table A7b.7). There appears to be, however, a mild association between variable 3 and variable 16 (Chi: 111.502; df: 84; sig.: .026; Spearman's rho: .391), according to the Spearman correlation coefficient (table A7b.7). This means that there exists a statistically significant association between the age range of our respondents and the definition they provided of Digital Literacy (figure A7b.7.2).

When comparing our dependent variables with variables 7.1, 7.2 and 7.3 , where each subdivides the respondents into two categories according to whether they are subscribed to research journals or not, whether they are researchers or not, and whether they are authors or not, respectively, the null hypothesis assumes a relatively equal distribution of each dependent variable (i.e., 8.1, 8.2, 11, 14.1, 14.2) on the different categories

[^25]presented. In the first analysis (dependent variable 7.1), the null hypothesis is only maintained for variables 8.2 and 14.1, whilst the comparison of variable 7.1 with variable 8.1 shows a statistically significant difference $(U=10031.500 ; z=-7.35 ; p=$ $<.001 ; \mathrm{r}=.35)$ between teachers who are subscribed to research journals $(\mathrm{Ar}=295.5 ; \mathrm{N}$ $=114)$ and those who are $\operatorname{not}(\mathrm{Ar}=194.3 ; \mathrm{N}=326)$. This means that the null hypothesis needs to be rejected, and that depending on whether respondents are subscribed to research journals or not they appear to have a statistically significant degree of involvement in consulting research-related resources (table A7b. 4 and figure A7b.4.1). The same can be said for variable 11 (table A7b. 4 and figure A7b.4.3), where respondents who are subscribed to research journals $(\mathrm{Ar}=269.5 ; \mathrm{N}=114)$ appear to have come in contact with different terms related to Literacy in a wide sense in many more different environments and occasions than respondents who are not ( $\mathrm{Ar}=203.4$; $\mathrm{N}=326$ ). This is supported by the level of statistical significance ( $\mathrm{U}=12997.000 ; \mathrm{z}=-$ 4.86; $\mathrm{p}=<.001 ; \mathrm{r}=.23$ ), which varies slightly when it comes to variable 14.1 , where the Mann-Whitney $U$ Test shows a statistically significant difference $(\mathrm{U}=16168.000$; z $=-2.09 ; \mathrm{p}=.037 ; \mathrm{r}=.10)$ between teachers who are subscribed to research journals $(\mathrm{Ar}$ $=241.7 ; \mathrm{N}=114)$ and those who are not $(\mathrm{Ar}=213.1 ; \mathrm{N}=326)$. This means that, depending on whether respondents are subscribed to research journals or not, they appear to have a statistically significant different opinion on the idea that Literacy has changed over the years, especially in terms of agency (table A7b. 4 and figure A7b.4.4).

| Average ranks |  |  |
| :--- | :---: | :---: |
| Variables | Yes | No |
| $7.1 / 8.1$ | $\underline{269.5}$ | 194.3 |
| $7.1 / 11$ | $\underline{269.5}$ | 203.4 |
| $7.1 / 14.1$ | $\underline{246.2}$ | 213.1 |

Table 4b.9, EFL average ranks; variables 7.1/8.1, 11, 14.1

Specifically, by looking at their average ranks (table 4b.8), we can confirm this analysis and state that respondents who are subscribed to research journal show a higher average rank for variables 8.1, 11 and 14 than those who are not.

In the second analysis (dependent variable 7.2), the null hypothesis is only maintained for variables 14.2 , although barely ( $\mathrm{p}=.066$ ), whilst the comparison of variable 7.2 with variables 8.1, 8.2, 11 and 14.1 reveals a statistically significant difference between the
two categories (table A7b.4). This means that the null hypothesis needs to be rejected, and that depending on whether respondents are themselves researchers or not, their answers appear to vary, always suggesting a higher level of involvement and participation on the part of researchers, as demonstrated by the following table.

| Average ranks and significance values |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Variables | MW U Test | Yes - 78 | No - 362 |  |
| $7.2 / 8.1$ | a | $\mathrm{U}=9748.500 ; \mathrm{z}=-4.31 ; \mathrm{p}=<.001 ; \mathrm{r}=.21$ | $\underline{276.5}$ | 208.4 |
| $7.2 / 8.2$ | b | $\mathrm{U}=11742.500 ; \mathrm{z}=-2.35 ; \mathrm{p}=.019 ; \mathrm{r}=.11$ | $\underline{251}$ | 213,9 |
| $7.2 / 11$ | c | $\mathrm{U}=11318.500 ; \mathrm{z}=-2.79 ; \mathrm{p}=.005 ; \mathrm{r}=.13$ | $\underline{256,4}$ | 212.8 |
| $7.2 / 14.2$ | d | $\mathrm{U}=11772.500 ; \mathrm{z}=-2.33 ; \mathrm{p}=.020 ; \mathrm{r}=.11$ | $\underline{250.6}$ | 214 |

Table 4b.10, EFL average ranks; variables 7.2/8.1, 8.2, 11, 14.1

This appears to indicate that: a) respondents who are also researchers independently consult research-related resources more (figure A7b.4.6); b) when it comes to the idea that schools support their teachers in consulting research-related resources, their level of agreement is higher (figure A7b.4.7); c) they report having come in contact with different terms related to Literacy in a wide sense in more occasions and environments (figure A7b.4.8); d) when it comes to the idea that the concept of Literacy has changed over the years, especially in terms of agency, their level of agreement is higher (figure A7b.4.10).

Finally, in the last analysis (dependent variable 7.3), the null hypothesis is maintained for variables $8.1,11,14.1$ and 14.2 , whilst the comparison of variable 7.3 with variable 8.2 shows a statistically significant difference $(\mathrm{U}=4919.500 ; \mathrm{z}=-2.57 ; \mathrm{p}=.010 ; \mathrm{r}=$ .13) between the two groups of teachers. This means that the null hypothesis needs to be rejected, and that depending on whether respondents are authors ( $\mathrm{Ar}=274.9 ; \mathrm{N}=33$ ) or not $(\mathrm{Ar}=216.9 ; \mathrm{N}=407)$ they appear to have different opinions regarding whether or not schools support their teachers in consulting research-related resources (table A7b. 4 and figure A7b.4.12). Specifically, by looking at their average ranks, we can confirm this analysis and state that respondents who are also authors show a higher average rank for variable 8.2 than those who are not.

As for the comparison between variable 7.1, 7.2 and 7.3 and variable 12 and 16 , the Chi-square Test was carried out, and it suggests the null hypothesis, which assumes a non-existing association between the variables compared, be maintained in all cases but
for the comparison between variable 7.2 and variable 16. There appears to be a statistically significant association ( $\mathrm{Chi}=32,051 ; \mathrm{p}=.001$ ) between whether our respondents are researchers or not and the definition they provided of Digital Literacy (table A7b. 8 and figure A7b.8.4). With dichotomous variables, there are post-hoc tests that can be carried out in order to go deeper into the analysis of our data after rejecting the null hypothesis. In the case of the Chi-square for a sample, post-hoc tests allow us to know which categories of the variable are responsible for the result being significant. In this case, pairwise comparisons of column proportions with Bonferroni's correction are used, which highlight a difference in distribution between the categories. Specifically, for both researchers and non-researchers, the differences involve responses categorised as 1 , or "Familiarity with digital devices", 3.5, or "Sharing information and communicating" and 8, or "Complex analysis" (table A7b.8).

Finally, as for the relationship between the dependent variables considered, Spearman's correlation coefficient appears to indicate that all the correlations between these four dependent variables are positive and statistically significant (most with a significance level of 0.01 , and one of 005 ). However, they are all small (lower than .3) except for two, which classify as moderate (over .4, although barely), between 8.1 and variables 8.2 and 11 (. 431 and .420 respectively, table A7b.9) (Cohen, 1988). This appears to indicate a moderate, but statistically significant correlation between respondents who independently consult research-related resources, and, in the first case, those who agree on the fact that schools support their teachers in consulting research-related resources. In the second case, the coefficient shows a moderate correlation between that same group of respondents and the number of different environments where they report coming into contact with different terms related to Literacy in a broad sense.

To conclude, the following findings can be considered significant when it comes to research question 2 b :

- respondents with different lengths of teaching experience have different opinions regarding whether or not schools support their teachers in consulting research-related resources;
- there exists a statistically significant association between the age range of our respondents and the definition they provided of Digital Literacy on the one hand,
and how much they independently consult research-related resources on the other;
- respondents who are subscribed to research journals a) appear to be more involved in consulting research-related resources; b) to have come in contact with different terms related to Literacy in a wide sense in many more different environments and occasions than respondents who are not; c) to have a more positive opinion on the idea that Literacy has changed over the years, especially in terms of agency;
- respondents who are also researchers a) independently consult research-related resources more than those who are not; b) when it comes to the idea that schools support their teachers in consulting research-related resources, their level of agreement is higher; c) they report having come in contact with different terms related to Literacy in a wide sense in more occasions and environments; d) as for the concept of Literacy having changed over the years, especially in terms of agency, their level of agreement is higher;
- there also appears to be a statistically significant association between the status of our respondents as researchers or not and the definition they provided of Digital Literacy;
- respondents who are also authors appear to have a more positive opinion on whether schools support their teachers in consulting research-related resources.


### 4.2.4 Question 2c: results of the EFL analysis

Question 2c asks "What level of awareness vis-à-vis literacy is there within the school system regarding the gap between $2 a$ and $2 b$, namely between the specific learning objectives established for foreign and second language education and evolution of recent studies within the language education field".

Having hypothesised a lack of knowledge of the world of research, the teachers' awareness of a possible gap between that field and the reality of the school system was presumed to be smoky as well (§3.2).

Several variables were considered in the statistical analyses conducted in order to answer this specific sub-question. They were obtained from the preliminary analysis of the answers to the following dimensions:

| Type | Variable | Dimension |
| :---: | :---: | :--- |
| Qualitative, <br> independent <br> Qualitative, <br> independent <br> Qualitative, <br> independent <br> Qualitative, | 1 | type of upper secondary school |
| independent |  |  |

Table 4c.1, Research question 2c, EFL variables analysed

As mentioned in paragraph $\S 4.2$, variables 1,2 and 3 are considered as independent in each sub-question and subdivide the total of respondents into independent samples. In this case, 4.1 and 4.2, as well as 7.1, 7.2 and 7.3, are added as independent variables. Depending on whether the independent variables divide the sample of respondents into two (e.g., researchers and non-researchers, variable 7.2) or more independent samples
(e.g., the different types of upper secondary school, variable 1), it is necessary to resort to different procedures ${ }^{38}$ (see §4.2.2).

When comparing our dependent variables (i.e., $9.1,9.2,10,13,15.1,15.2,15.3,21.1)$ with variable 1 , namely the different types of upper secondary school, the null hypothesis assuming a relatively equal distribution of each dependent variable on its different categories is maintained for all variables (tables A7c. 1 and A7c.6).

When comparing our dependent variables (i.e., $9.1,9.2,10,13,15.1,15.2,15.3,21.1)$ with variable 2 , namely the different lengths of teaching experience, the null hypothesis assuming a relatively equal distribution of each dependent variable on its different categories is, once again, maintained for all variables (tables A7c. 2 and A7c.7).
The same can be said when comparing our dependent variables with variable 3, namely the different age ranges of the respondents, where the null hypothesis assuming a relatively equal distribution of each dependent variable on its different categories is maintained for all variables (tables A7c. 3 and A7c.8).

When comparing the above dependent variables with variables 4.1 and 4.2 , which explore the respondents' having read the national guidelines and their awareness (or lack thereof) when it comes to the specific EFL learning objectives, respectively, the null hypothesis assumes a relatively equal distribution of each dependent variable on the different categories presented, namely "Yes", "No", and "I don’t know enough about it".

In the first case (independent variable 4.1), the null hypothesis is maintained for variables 9.1, $9.2,15.2$ and 15.3 (tables A7c. 4 and A7c.9), whilst the comparison of variable 4.1 with variables $10,13,15.1$ and 21.1 reveals a statistically significant difference ( $.013, .012, .039$ and .042 , respectively). This means that the null hypothesis needs to be rejected; in the first analysis (variables 4.1 with 10 ) this implies that, depending on whether respondents have read the national guidelines or not, they appear

[^26]to have a statistically significant different perception on their school's ability to integrate digital, multimodal and multicultural approaches and to promote research (table A7c. 4 and figure A7c.4.3).
The same can be said for variable 13, where respondents evaluate their education and training: we see that respondents who declared that they do not know enough about the national guidelines concerning the specific learning objectives established for EFL show an average rank for variable 13 very much lower than the other two categories, thus indicating a more negative perception of their education and training (table A7c. 4 and figure A7c.4.4).
As for the analysis concerning variable 15.1, that explores how much respondents resort to diverse, multimodal tools in order to convey meaning in class, the strongest disparity can be found between the respondents who answered "Yes" and those who answered "No" (sign. .024). Respondents who declared that they had not read the national guidelines concerning the specific learning objectives established for EFL appear to resort to diverse, multimodal tools less than the other teachers (table A7c. 9 and figure A7c.9.1)
Finally, comparing variable 4.1 with variable 21.1 shows lower $p$-values when the " $I$ don't know enough about it" category is involved (I don't know enough about it-No: sig. . 059; I don't know enough about it-Yes: sig. .017). By checking their average ranks, we see that respondents who declared that they do not know enough about the national guidelines concerning the specific learning objectives established for EFL appear to have a less positive perception on how useful and well integrated ICTs are in an EFL learning environment (table A7c. 9 and figure A7c.9.4).

In the second case (independent variable 4.2), the null hypothesis is maintained for all variables (i.e., 9.1, 9.2, 10, 15.1, 15.2, 15.3 and 21.1, tables A7c. 4 and A7c.9), except when comparing variable 4.2 with variable 13. A statistically significant difference (.010) is revealed, which means that the null hypothesis needs to be rejected, and that depending on whether respondents are aware of the specific learning objectives established for EFL or not, they appear to have a statistically significant different perception of their education and training (table A7c. 4 and figure A7c.4.8).

| Average ranks |  |  |  |
| :--- | :---: | :---: | :---: |
| Variables | Yes | No | Don't know enough |
| $4.1 / 10$ | 224,2 | 247,5 | $\underline{160,4}$ |
| $4.1 / 13$ | 226,4 | 199,6 | $\underline{160}$ |
| $4.1 / 15.1$ | 225,1 | $\underline{141,2}$ | 195,7 |
| $4.1 / 21.1$ | 223,9 | 250 | $\underline{170,5}$ |
| $4.2 / 13$ | $\underline{224,4}$ | 96,5 | 139,3 |

Table 4c.2, EFL average ranks; variables 4.1, 4.2/10, 13, 15.1, 21.1
Specifically, according to the p -value of the comparisons between the different samples, where each row tests for the null hypothesis that the sample 1 and sample $2^{39}$ distributions are identical, we can see (table 4c.2) that:
a. with variables 4.1 and 10 , the lowest significance values emerge from the analyses involving the sample of respondents who answered "I don't know enough about it" (I don't know enough about it-No: sig. .037; Yes- I don't know enough about it: sig. .005). By checking their average ranks, we can confirm this analysis and state that respondents who declared that they do not know enough about the national guidelines concerning the specific learning objectives established for EFL show an average rank for variable 10 very much lower than the other two categories;
b. with variables 4.1 and 13 , respondents who declared that they do not know enough about the national guidelines concerning the specific learning objectives established for EFL show an average rank for variable 13 very much lower than the other two categories (Yes- I don't know enough about it: sig. .004);
c. with variables 4.1 and 15.1 , respondents who declared that they had not read the national guidelines concerning the specific learning objectives established for EFL show an average rank for variable 15.1 very much lower than the other two categories (table number);
d. with variables 4.1 and 21.1, respondents who declared that they do not know enough about the national guidelines concerning the specific learning objectives established for EFL show an average rank for variable 21.1 very much lower than the other two categories;
e. with variables 4.2 and 13 , the sample of respondents who answered "Yes" produces the lowest significance values (Yes- I don't know enough about it: sig. .007). By checking their average ranks, we can confirm this analysis and state

[^27]that respondents who declared that they are not aware of the specific learning objectives established for EFL show an average rank for variable 13 very much higher than the other two categories.

In comparison with variables 7.1, 7.2 and 7.3, where each subdivides the respondents into two categories according to whether they are subscribed to research journals or not, whether they are researchers or not, and whether they are authors or not, respectively, the null hypothesis assumes a relatively equal distribution of each dependent variable (i.e., $9.1,9.2,10,13,15.1,15.2,15.3,21.1$ ) on the different categories presented (tables A7c. 5 and A7c.10).
In the first analysis, the null hypothesis is maintained for variables $9.2,10,13,15.3$ and 21.1, whilst the comparison of variable 7.1 with variables $9.1,15.1$ and 15.2 shows a statistically significant difference. In the case of variable 9.1, the test values $(\mathrm{U}=$ 21350.500; $\mathrm{z}=2.38 ; \mathrm{p}=.017 ; \mathrm{r}=.11$ ) show a statistically significant difference between teachers who are subscribed to research journals ( $\mathrm{Ar}=196,2 ; \mathrm{N}=114$ ) and those who are not $(\mathrm{Ar}=229 ; \mathrm{N}=326)$. This means that the null hypothesis needs to be rejected, and that depending on whether respondents are subscribed to research journals or not they appear to have a different perception when it comes to the relationship between the approaches proposed by the school system and the established learning objectives on the one hand, and the most recent studies in the field of language education on the other (table A7c. 5 and figure A7c.5.1).

As for variable 15.1 (table A7c. 10 and figure A7c.10.1), respondents who are subscribed to research journals ( $\mathrm{Ar}=267.3 ; \mathrm{N}=114$ ) show a higher average rank than respondents who are not $(\mathrm{Ar}=204,1 ; \mathrm{N}=326)$. This is supported by the level of statistical significance ( $\mathrm{U}=13249,000 ; \mathrm{z}=-4.58 ; \mathrm{p}=<.001 ; \mathrm{r}=.21$ ), which varies slightly when it comes to variable 15.2 (figure A7c.10.2), where the Mann-Whitney $U$ Test shows a statistically significant difference $(\mathrm{U}=15383,500 ; \mathrm{z}=-2.77 ; \mathrm{p}=.006 ; \mathrm{r}=$ .13) between teachers who are subscribed to research journals $(\mathrm{Ar}=248.5 ; \mathrm{N}=114)$ and those who are not $(\mathrm{Ar}=210.7 ; \mathrm{N}=326)$. By looking at their p value and at their ranks, we can then confirm that the null hypothesis needs to be rejected for both variables.

| Average ranks |  |  |
| :--- | :---: | :---: |
| Variables | Yes | No |
| $7.1 / 9.1$ | 196.2 | $\underline{229}$ |
| $7.1 / 15.1$ | $\underline{267.3}$ | 204.1 |
| $7.1 / 15.2$ | $\underline{248.5}$ | 210.7 |

Table 4c.3, EFL average ranks; variables 7.1/9.1, 15.1, 15.2

Specifically, by looking at their average ranks (table 4c.3), we can confirm this analysis and state that respondents who are subscribed to research journals:
a. show a lower average rank for variable 9.1 (relationship between the approaches proposed by the school system and the established learning objectives, and the most recent studies in the field of language education) than the other category, which means that they are less convinced than those who are not familiar with research that the two worlds are in step;
b. appear to resort to diverse, multimodal tools in order to convey meaning more than respondents who are not;
c. appear to resort to paralanguage way more than respondents who are not in order to convey meaning in class.

In the second analysis (variable 7.2), the null hypothesis is maintained for almost all dependent variables (i.e., $9.1,9.2,10,13,15.3,21.1$ ), although in some cases only barely ( $\mathrm{p}=.057$ for variable $13, \mathrm{p}=.088$ for variables 15.3 and 21.1), with the exception of variables 15.1 and 15.2. The fact that the program highlights a statistically significant difference means that the null hypothesis needs to be rejected (tables A7c. 5 and A7c.10).

| Average ranks and significance values |  |  |  |
| :--- | :--- | :---: | :---: |
| Variables | MW U Test | Yes $\mathbf{- 7 8}$ | No - 362 |
| $7.2 / 15.1$ | $\mathrm{U}=11110.500 ; \mathrm{z}=-2.96 ; \mathrm{p}=.003 ; \mathrm{r}=.14$ | $\underline{\mathbf{2 5 9 . 1}}$ | 212.2 |
| $7.2 / 15.2$ | $\mathrm{U}=11635.500 ; \mathrm{z}=-2.47 ; \mathrm{p}=.014 ; \mathrm{r}=.12$ | $\underline{\mathbf{2 5 2}} .3$ | 213.6 |

Table 4c.4, EFL average ranks and MW U Test results; variables 7.2/15.1, 15.2

Comparing variable 7.2 with variable 15.1 (figure A7c.10.5) shows that respondents who are themselves researchers appear to resort to diverse, multimodal tools in order to convey meaning in class more than respondents who are not, and the same can be said when it comes to the use of paralanguage, as can be inferred by comparing variable 7.2 with variable 15.2 (figure A7c.10.6). The table above depicts the Mann Whitney U Test
results for said variables, as well as the average ranks obtained, in order to support our claim.

Finally, in the last analysis (variable 7.3, tables A7c. 5 and A7c.10), the null hypothesis is maintained for almost all dependent variables (i.e., 9.1, 9.2, 13, 15.1, 15.3, 21.1), although in some cases only barely ( $\mathrm{p}=.057$ for variable 15.1), with the exception of variables 10 and 15.2. The fact that the program highlights a statistically significant difference means that the null hypothesis needs to be rejected.

| Average ranks and significance values |  |  |  |
| :--- | :--- | :---: | :---: |
| Variables | MW U Test | Yes - 78 | No - 362 |
| $7.3 / 10$ | $\mathrm{U}=5333.000 ; \mathrm{z}=-2 ; \mathrm{p}=.046 ; \mathrm{r}=.12$ | 216.7 | $\underline{261.4}$ |
| $7.3 / 15.2$ | $\mathrm{U}=5017.500 ; \mathrm{z}=-2.45 ; \mathrm{p}=.014 ; \mathrm{r}=.10$ | $\underline{272}$ | 213.3 |

Table 4c.5, EFL average ranks and MW U Test results; variables 7.3/10, 15.2

Comparing variable 7.3 with variable 10 (figure A7c.5.11) shows that respondents who are also authors appear to appreciate their school's ability to integrate digital, multimodal and multicultural approaches and to promote research far less than respondents who are not, and the opposite can be said when it comes to resorting to paralanguage to convey meaning, as can be inferred by comparing variable 7.3 with variable 15.2 (figure A7c.10.10). The table above depicts the Mann Whitney U Test results for said variables, as well as the average ranks obtained, in order to support our claim.

Finally, Spearman's correlation coefficient appears to indicate that most correlations between the variables are statistically significant and positive; the vast majority of those shows a significance value of 0.01 , and two have a significance value of 0.05 . They are, however, all small, except for three moderate ones (higher than .3, table A7c.11) (Cohen, 1988).

To conclude, regarding research question 2 c , the following findings can be considered significant:

- respondents who had not read the national guidelines concerning the specific learning objectives established for EFL appear to: a) have more positive perception of their school's ability to integrate digital, multimodal and
multicultural approaches and to promote research; b) resort to diverse, multimodal tools way less than the other teachers;
- respondents who do not know enough about the national guidelines appear to: a) have a more negative perception of their education and training; b) have a less positive perception on how useful and well integrated ICTs are in an EFL learning environment;
- respondents who are not aware of the specific learning objectives established for EFL appear to have a way more negative perception of their education and training;
- respondents who are subscribed to research journals: a) are less convinced than those who are not familiar with research that the two worlds are in step; b) appear to resort to diverse, multimodal tools in order to convey meaning more than respondents who are not; c) appear to resort to paralanguage way more than respondents who are not in order to convey meaning in class;
- respondents who are themselves researchers appear to resort to diverse, multimodal tools in order to convey meaning in class more than respondents who are not, and the same can be said when it comes to the use of paralanguage;
- respondents who are also authors: a) appear to value their school's ability to promote research and to integrate digital, multimodal and multicultural approaches less than respondents who are not; b) resort to paralanguage to convey meaning in class way more that respondents who are not.


### 4.2.5 Question 2d: results of the EFL analysis

Question 2d asks "What level of awareness vis-à-vis literacy is there within the school system regarding the use of technological tools in language learning in general, and, specifically, in developing digital and multimodal literacies".

Extremely diversified levels of awareness and competence are hypothesised concerning the technological tools and devices required by the new literacies practices, according to the age of the respondents and the length of their professional experience.

Several variables were considered in the statistical analyses conducted in order to answer this specific sub-question. They were obtained from the preliminary analysis of the answers to the following dimensions:

| Type | Variable | Dimension |
| :---: | :---: | :--- |
|  | Qualitative, <br> independent <br> Qualitative, <br> independent <br> Qualitative, <br> independent <br> Qualitative, | 2 |

Table 4d.1, Research question 2d, EFL variables analysed

As mentioned in paragraph $\S 4.2$, variables 1,2 and 3 are considered as independent in each sub-question and subdivide the total of respondents into independent samples. In this case, 7.1, 7.2 and 7.3 are added as independent, dichotomous variables. Depending on whether the independent variables divide the sample of respondents into two (e.g., researchers and non-researchers, variable 7.2) or more independent samples (e.g., the
different types of upper secondary school, variable 1), it is necessary to resort to different procedures ${ }^{40}$ (see §4.2.2).

When comparing our dependent variables (i.e., 15.1, 15.3, 17, 18, 19, 20, 21.1, 21.2, 22.1, 22.2 and 22.3 ) with variable 1 , namely the different types of upper secondary school, the null hypothesis that assumes a relatively equal distribution of each dependent variable on its different categories is maintained for variables 15.1, 15.3, 17, 18, 19, 20, 21.1 and 22.3 (tables A7d.1, A7d. 5 and A7d.9). A comparison of variable 1 with variable 21.2, 22.1 and 22.2 reveals statistically significant differences ( $.019, .010$ and .001 , respectively). This means that the null hypothesis needs to be rejected, and that respondents belonging to different types of upper secondary school have different opinions regarding whether students are able to approach ICTs better than their teachers or not, and on the fact that the use of technology has been hindered within language classrooms, by the lack of the appropriate tools on the part of their school or by other factors such as lack of time or digital skills (table A7d. 9 and figures A7d.9.1, A7d.9.3 and A7d.9.4). Specifically, according to the p-value of the comparisons between the different samples, where each row tests for the null hypothesis that the sample 1 and sample $2^{41}$ distributions are identical, we were able to identify the categories that differentiate themselves in terms of values.

|  | Type of upper secondary school | Sig. | Categories | Average ranks |
| :---: | :---: | :---: | :---: | :---: |
|  | Liceo Artistico-Istituto Tecnico Economico | ,132 | Liceo Classico | 267,4 |
|  | Liceo Artistico-Liceo Scientifico | ,031 | Liceo Scientifico | 216,5 |
|  | Liceo Artistico-Istituto Professionale | ,033 | Liceo Linguistico | 232,1 |
|  | Liceo Artistico-Istituto Tecnico | ,030 | Liceo delle Scienze | 238,5 |
|  | Tecnologico |  | Umane |  |
|  | Liceo Artistico-Liceo Linguistico | ,013 | Liceo Artistico | 134,1 |
|  | Liceo Artistico-Liceo delle Scienze | ,012 | Liceo Musicale e | 131,1 |

[^28]| Umane |  |
| :--- | :---: |
| Liceo Artistico-Liceo Classico | , 001 |
| Liceo Artistico-Liceo Musicale e <br> Coreutico <br> Liceo Musicale e Coreutico-Istituto <br> Tecnico Economico | , 263 |
| Liceo Musicale e Coreutico-Liceo <br> Scientifico <br> Liceo Musicale e Coreutico-Istituto <br> Professionale | , 123 |
| Liceo Musicale e Coreutico-Istituto <br> Tecnico Tecnologico | , 116 |
| Liceo Musicale e Coreutico-Liceo <br> Linguistico <br> Liceo Musicale e Coreutico-Liceo <br> delle Scienze Umane | , 073 |
| Liceo Musicale e Coreutico-Liceo <br> Classico | , 018 |

Table 4d.2, EFL pairwise comparisons; variables 1/21.2

| coreutico |  |
| :---: | :---: |
| Istituto tecnico | 196,5 |
| economico |  |
| Istituto tecnico | 222,6 |
| tecnologico |  |
| Istituto Professionale | 221,4 |

Table 4d.3, EFL average ranks; variables 1/21.2

For variable 21.2, the lowest significance values emerge from the analyses involving the sample of respondents belonging to "Liceo Artistico" and "Liceo Musicale e Coreutico" (table 4d.2). By checking their average ranks, we can confirm this analysis and state that those teachers show a lower average rank for variable 21.2 than the other categories. Their answers appear to indicate a higher level of disagreement on the idea according to which students are able to approach ICTs better than their teachers (table 4d.3).

| Type of upper secondary school | Sig. | Categories | Average ranks |
| :---: | :---: | :---: | :---: |
| Liceo Artistico -Istituto Tecnico Economico | ,006 | Liceo Classico | 228,5 |
| に. Liceo Artistico -Liceo Scientifico | $\leq, 001$ | Liceo Scientifico | 192 |
| Liceo Artistico -Istituto Professionale | ,041 | Liceo Linguistico | 225,6 |
| U Liceo Artistico -Istituto Tecnico <br> - Tecnologico | ,036 | Liceo delle Scienze Umane | 234,3 |
| Liceo Artistico -Liceo Linguistico | ,010 | Liceo Artistico | 331,5 |
| Liceo Artistico -Liceo delle Scienze Umane | ,026 | Liceo Musicale e coreutico | 153,3 |
| Liceo Artistico -Liceo Classico | ,017 | Istituto tecnico economico | 216 |
| Liceo Artistico -Liceo Musicale e | ,009 | Istituto tecnico tecnologico | 242,3 |
| Coreutico |  | Istituto Professionale | 244,1 |

Table 4d.4, EFL pairwise comparisons; variables 1/22.1 Table 4d.5, EFL average ranks; variables 1/22.1

For variable 22.1, we can see that the lowest significance values emerge from the analyses involving the sample of respondents belonging to "Liceo Artistico" (table 4d.4). By checking their average ranks, we can confirm this analysis and state that those teachers show a far higher average rank for variable 22.1 than the other categories, in some cases only slightly, while in others the difference is quite important. The table below reports the comparisons that appear to be more relevant. Their answers appear to indicate a higher degree of agreement on the fact that schools lack the appropriate tools to promote the use of technology within language classrooms, so much so that it is considered a hindering factor (table 4d.5).

|  | Type of upper secondary school | Sig. |
| :---: | :---: | :---: |
|  | Liceo Scientifico -Istituto Tecnico | ,014 |
|  | Econom |  |
|  | Liceo Scientifico -Liceo Artistico | ,122 |
|  | Liceo Scientifico -Istituto | $\leq, 00$ |
|  | Professionale | 1 |
|  | Liceo Scientifico -Istituto Tecnico | , 019 |
|  | Tecnlogico |  |
|  | Liceo Scientifico -Liceo Linguistico | ,006 |
|  | Liceo Scientifico -Liceo delle | , 002 |
|  | Scienze Umane |  |
|  | Liceo Scientifico -Liceo Classico | . 105 |
|  | Liceo Scientifico -Liceo Musicale e Coreutico | , 009 |
|  | Liceo Musicale e Coreutico-Liceo Linguistico | ,294 |
|  | Liceo Musicale e Coreutico-Liceo Classico | ,431 |
|  | Liceo Musicale e Coreutico- Istituto | ,316 |
|  | Tecnico Economico |  |
|  | Liceo Musicale e Coreutico- Istituto | ,306 |
|  | Tecnico Tecnlogico |  |
|  | Liceo Musicale e Coreutico-Liceo delle Scienze Umane | ,176 |
|  | Liceo Musicale e Coreutico-Liceo | 297 |
|  | Artistico |  |
|  | Liceo Musicale e Coreutico-Istituto Professionale | ,090 |

Table 4d.6, EFL pairwise comparisons; variables 1/22.2

| Categories | Average ranks |
| :---: | :---: |
| Liceo Classico | 218,4 |
| Liceo Scientifico | 181 |
| Liceo Linguistico | 232,7 |
| Liceo delle Scienze | 252,7 |
| Umane |  |
| Liceo Artistico | 242,4 |
| Liceo Musicale e coreutico | $\underline{171}$ |
| Istituto tecnico economico | 230,3 |
| Istituto tecnico tecnologico | 232,3 |
| Istituto Professionale | 272,4 |

Table 4d.7, EFL average ranks;
variables 1/22.2

Finally, for variable 22.2, we can see that the lowest significance values emerge from the analyses involving the sample of respondents belonging to "Liceo Scientifico" and to "Liceo Musicale e Coreutico" (table 4d.6). By checking their average ranks, we can confirm this analysis and state that those teachers show a lower average rank for variable 22.2 than the other categories. The table above (table 4d.7) reports the comparisons that appear to be more important. Their answers appear to indicate a lower degree of agreement on the fact that factors like lack of time or lack of digital skills might have hindered the use of technology within language classrooms (table 4d.7).

When comparing our dependent variables (i.e., 15.1, 15.3, 17, 18, 19, 20, 21.1, 21.2, 22.1, 22.2 and 22.3) with variable 2 , namely different lengths of teaching experience, the null hypothesis assumes a relatively equal distribution of each dependent variable on its different categories. The null hypothesis is maintained for variables $15.1,15.3,18$, 19, 20, 21.1, 22.1, 22.2 and 22.3 (tables A7d.2, A7d. 6 and A7d.10), whilst the comparison of variable 2 with variables 17 and 21.2 reveals a statistically significant difference (. 047 and .043 , respectively). This means that the null hypothesis needs to be rejected, and that respondents belonging to different ranges of teaching experience have different opinions regarding their competence in ICTs and the idea according to which students are able to approach ICTs better than their teachers, respectively (table A7d. 6 and A7d.10; figures A7d.6.1 and A7d.10.2). Specifically, according to the p-value of the comparisons between the different samples, where each row tests for the null hypothesis that the sample 1 and sample $2^{42}$ distributions are identical, we were able to identify the categories that differentiate themselves in terms of values.

|  | Teaching experience | Sig. |
| :---: | :---: | :---: |
|  | Less than one year - 1-5 years | ,012 |
|  | Less than one year - 21-30 years | ,005 |
|  | Less than one year - 11-20 years | ,040 |
|  | Less than one year - 30+ years | ,008 |
|  | Less than one year - 6-10 years | ,021 |

Table 4d.8, EFL pairwise comparisons; variables 2/17

| Categories | Average <br> ranks |
| :--- | :---: |
| Less than one year | $\underline{117,2}$ |
| $1-5$ years | 230,6 |
| 6-10 years | $\underline{218,2}$ |
| $11-20$ years | 203,2 |
| $21-30$ years | 235,2 |
| $30+$ years | 229,4 |

Table 4d.9, EFL average ranks; vv 2/17

[^29]For variable 17, the lowest significance values emerge from the analyses involving the sample of respondents belonging to the "Less than one year" category (table 4d.8). By checking their average ranks, we can confirm this analysis and state that those teachers show a lower average rank for variable 17 than the other categories. Their answers appear to indicate a more negative opinion on their ICT competence (table 4d.9).

| $\ldots$ | Teaching experience | Sig. |
| :---: | :---: | :---: |
| 㫛 | $30+$ years - 1-5 years | ,008 |
| \% | $30+$ years - 21-30 years | ,018 |
| ${ }_{8}^{8}$ | $30+$ years -11-20 years | ,033 |
| . | $30+$ years - Less than one year | ,986 |
| 光 | $30+$ years -6-10 years | ,012 |

Table 4d.10, EFL pairwise comparisons; variables 2/21.2

| Categories | Average ranks |
| :--- | :---: |
| Less than one year | $\underline{252,9}$ |
| 1-5 years | 191,5 |
| 6-10 years | 201,1 |
| $11-20$ years | 217,2 |
| 21-30 years | 214,4 |
| $30+$ years | $\underline{253,6}$ |

Table 4d.11, EFL average ranks; vv. 2/21.2

For variable 21.2, the lowest significance values emerge with the analyses involving the sample of respondents belonging to the "30+ years" category (table 4d.10). By checking their average ranks, we can confirm this analysis, although we need to address the fact that two categories rank at very similar values ("30+ years" and "Less than one year"), indicating that those teachers show a considerably higher average rank for variable 21.2 than the other categories. Their answers appear to indicate a higher level of agreement on the fact that students are able to approach ICTs better than their teachers. The reason why the table above (table 4 d .10 ) only reports data related to the first of the two aforementioned categories is that it is the only one where sample comparison reaches statistical significance (table 4d.11).

When comparing our dependent variables (i.e., 15.1, 15.3, 17, 18, 19, 20, 21.1, 21.2, 22.1, 22.2 and 22.3 ) with variable 3 , namely different age ranges, the null hypothesis assumes a relatively equal distribution of each dependent variable on its different categories. The null hypothesis is maintained for all variables, although sometimes only barely ( $\mathrm{p}=.058$ for variable 22.2) (tables A7d.3, A7d.7, A7d.11).

When comparing the above dependent variables with variables 7.1, 7.2 and 7.3 (tables A7d.4, A7d. 8 and A7d.12), where each subdivides the respondents into two categories according to whether they are subscribed to research journals or not, whether they are researchers or not, and whether they are authors or not, respectively, the null hypothesis
assumes a relatively equal distribution of each dependent variable on the different categories presented. In the first analysis (variable 7.1), the null hypothesis is maintained for all variables (i.e., 15.3, 17, 18, 19, 20, 21.1, 21.2, 22.1, 22.2 and 22.3), except for variable 15.1, where the comparison shows a statistically significant difference ( $\mathrm{U}=13249.000 ; \mathrm{z}=-4.58 ; \mathrm{p}=<.001 ; \mathrm{r}=.22$ ) between teachers who are subscribed to research journals ( $\mathrm{Ar}=267.3 ; \mathrm{N}=114$ ) and those who are not $(\mathrm{Ar}=$ 204.1; $\mathrm{N}=326$ ). This means that the null hypothesis needs to be rejected, and, by looking at their average ranks, it appears that respondents who are subscribed to research journals are asserting that they resort to diverse, multimodal tools to convey meaning in class with a higher level of agreement (table A7d. 4 and figure A7d.4.1).

In the second analysis (variable 7.2), the null hypothesis is maintained for variables $15.3,17,18,19,21.1,21.2,22.2$ and 22.3 , whilst the comparison of variable 7.2 with variables $15.1,20$ and 22.1 reveals a statistically significant difference between the two categories. This means that the null hypothesis needs to be rejected, and that depending on whether respondents are themselves researchers or not, their answers appear to vary, as demonstrated by the following table.

| Average ranks and significance values |  |  |  |
| :--- | :--- | :---: | :---: |
| Variables | MW U Test | Yes $\mathbf{- 7 8}$ | No- 362 |
| $7.2 / 15.1$ | $\mathrm{U}=11110.500 ; \mathrm{z}=-2.96 ; \mathrm{p}=.003 ; \mathrm{r}=.14$ | $\underline{259.1}$ | 212.2 |
| $7.2 / 20$ | $\mathrm{U}=11169.500 ; \mathrm{z}=-2.91 ; \mathrm{p}=.004 ; \mathrm{r}=.14$ | $\underline{\underline{258.4}}$ | 212.3 |
| $7.2 / 22.1$ | $\mathrm{U}=11710.500 ; \mathrm{z}=-2.37 ; \mathrm{p}=.018 ; \mathrm{r}=.11$ | $\underline{\mathbf{2 5 1 . 4}}$ | 213.9 |

Table 4d.12, EFL average ranks; variable 7.2/15.1/20/22.1

The table shows how respondents who classify as researchers appear to resort to diverse, multimodal tools to convey meaning in class (figure A7d.4.3); consider technology a facilitator for language learning (figure A7d.8.8); and believe that schools lack the appropriate tools to promote the use of technology (figure A7d.12.8), far more than respondents who are not researchers themselves.

In the last analysis concerning variable 7.3, the null hypothesis is maintained for all variables (15.1, 15.3, 17, 18, 19, $2021.1,21.2,22.1,22.2$ and 22.3, tables A7d.4, A7d. 8 and A7d.12). This means that there appears to be no statistically significant difference
between respondents who are also authors and those who are not when it comes to this specific set of variables.

Finally, Spearman's correlation coefficient appears to indicate the presence of some statistically significant (mostly positive) correlations, some moderate (over .4) and others on the threshold of being considered strong (over .5) between the variables (table A7d.13) (Cohen, 1988). The following table reports them with the intention of highlighting the relationship between the variables involved.

| Variables | Corr. | Sign. | Relationship |
| :---: | :---: | :---: | :---: |
| 15.1 | . $453{ }^{* *}$ | <. 001 | There appears to be a statistically significant |
| 20 |  |  | correlation between how much respondents resort to diverse, multimodal tools in order to convey meaning and their belief that technology can be a facilitator when it comes to EFL learning. |
| 17 | . $645^{* *}$ | <. 001 | There appears to be a statistically significant strong correlation |
| 18 |  |  | between the respondents' competence in ICTs and how useful they perceive ICTs to be in EFL classrooms. |
| 17 | . $690{ }^{* *}$ | <. 001 | There appears to be a statistically significant strong correlation |
| 19 |  |  | between the respondents' competence in ICTs and the actual use of ICTs in EFL classrooms. |
| 18 | . $693{ }^{* *}$ | <. 001 | There appears to be a statistically significant strong correlation |
| 19 |  |  | between how useful ICTs are perceived to be in EFL classrooms and their actual use. |
| 20 | . $657^{* *}$ | <. 001 | There appears to be a statistically significant strong correlation |
| 21.1 |  |  | between the idea that technology can be a facilitator when it comes to EFL learning and how useful and well integrated |
|  |  |  | ICTs are perceived to be in an EFL learning environment. |

Table 4d.13, Spearman's rank correlation coefficient, EFL, sub-question 2d
${ }^{* *}$ The correlation has a significance level of 0.01

To conclude, the following findings can be considered significant when it comes to research question 2 d :

- respondents belonging to different types of upper secondary school appear to have different opinions on the idea according to which students are able to approach ICTs better than their teachers. Specifically, "Liceo Artistico" and "Liceo Musicale e Coreutico" are the categories that express a higher level of disagreement;
- respondents belonging to different types of upper secondary school appear to have different opinions on the idea that schools lack the appropriate tools to
promote the use of technology within language classrooms, so much so that it is considered a hindering factor. "Liceo Artistico" appears to be the category that agrees the most;
- respondents belonging to different types of upper secondary school appear to have different opinions on the idea that factors like lack of time or lack of digital skills might have hindered the use of technology within language classrooms. "Liceo Scientifico" and to "Liceo Musicale e Coreutico" appear to be the categories that agree the least;
- respondents with different lengths of teaching experience appear to have different opinions on their ICT competence. Respondents with "Less than one year" experience appear to have a more negative opinion on the matter;
- respondents with different lengths of teaching experience appear to have different opinions on the fact that students are able to approach ICTs better than their teachers. Respondents with "30+ years" experience appear to be the ones expressing the highest level of agreement;
- respondents who classify as researchers appear to resort to diverse, multimodal tools to convey meaning in class; consider technology a facilitator for language learning; and believe that schools lack the appropriate tools to promote the use of technology, far more than respondents who are not researchers themselves


### 4.3 Data analysis and results related to research question number 3

The third research question asks:
What approach can be introduced in the language classroom in order to:
a. Help students develop multiple, digital and multimodal literacies,
b. Address the most prominent issues; and, hopefully,
c. Reduce the gap between the specific objectives set for foreign/second language learning and the results achieved by studies conducted in this field?

As mentioned in Chapter 3 (§3.2), it was hypothesised that teachers of both nationalities would highlight the issues that they consider most relevant and problematic in the daily management of their subject, proposing solutions that would not necessarily be easy to put into practice. Issues highlighted in the Slovenian environment and those highlighted in the Italian one were also hypothesised to present both similarities and differences,
due to the different status held by the languages analysed, both within the school system and without and they will be compared in Chapter 6.

The transcripts of the meetings and the related codes are available for consultation in APPENDICES 13 and 14.

### 4.3.1 EFL Focus Group and Interview

As mentioned in the previous chapter (§3.7.3.a), the transcriptions of the two meetings were analysed first separately and then together. For a more immediate understanding, the data that emerged from the two contexts (EFL and ISL) will be reported separately, but no distinctions will be made between the two meetings that are part of the EFL context in the next few paragraphs.


Figure 4.1, EFL Speakers

The figure above shows how the highlighted themes are distributed between the participants. As the Focus Group and the interview are depicted together, there is a predictable imbalance in favour of Speaker 7, who was interviewed individually (see paragraph §3.6.4), and therefore was inevitably granted more speaking time. This explains why many of the quotations in the following paragraphs can be traced back to this speaker.

### 4.3.2 Question 3a: results of the EFL analysis

As mentioned above (§4.3), question 3a asks "What approach can be introduced in the language classroom in order to help students develop multiple, digital and multimodal literacies". To answer this sub-question, it was decided to resort to excerpts codified according to the following themes: Literacy in the classroom, Learning objectives, Introduction of Digital Literacy, Multimodality and New Literacies, which contain the necessary information collected by the interviewees regarding their familiarity with these topics and their concrete implementation in the language class.

## a. Understanding the concept of 'Literacy'

The first aspect that emerged is the teachers' lack of familiarity with the terminology presented: it is in fact highlighted that "it is a bit of a novelty" for some (Speaker 2), and that they "don't think that most of their colleagues know what Literacy means" (Speaker 7). It is therefore a term that is perceived as relegated to manuals and training courses, and is not yet addressed within EFL classrooms, so much so that the definition proposed in the PowerPoint presentation sent via email to the teachers before the meeting (§3.6.4) was quoted during the conversation so as to try and better contextualise the concept within the field of language education. A perplexity that was raised concerned the direct appropriation of the English term "Literacy" and the lack of an Italian one, which was considered partly to blame for the less immediate comprehensibility of the concept. This topic will be taken up for further consideration in Chapter 7.

## b. The current situation within language classrooms

This widespread lack of familiarity shows how the EFL "programmes need to be updated and linked to contemporaneity, given that the learning objectives are more related to communication, to the ability to communicate" (Speaker 3) than anything else. Speaker 2 adds that "there is the evaluation of sources, the use of the network, there are many things to expand, and perhaps the programmes should be revised in this too, they should be adapted to what students need most".
"A lot is left to the common sense of the coordinator", adds Speaker 7, especially now that there is "the whole great subject of teaching by skills, which is certainly a more
academic concept". She also emphasises that "with fifteen students, one can be more sensitive to individual learning styles, but with twenty-five, one cannot". Learning styles and teaching modalities, and the different ways of approaching and interacting with them, are certainly concepts "that should be explored more, but it is difficult, because then one is taken up by many other issues" (Speaker 4). However, according to the teachers, modalities that differ from the more classic auditory and visual ones are also encouraged, such as "the kinaesthetic one for first-year students, [through] the total physical response, exercises, games, that works" (Speaker 5), maybe by facilitating "a different desk arrangement, giving students the opportunity to move, perhaps with vocabulary games, with collocations, so for example one student has 'have', another has 'breakfast', and they have to move around the class looking for the piece of paper they need" to complete their collocation (Speaker 4).

## c. Plural, digital and multimodal literacies

As for the new forms of Literacy (although they are never addressed as such), for example, the interviewees' knowledge about them appears to be rather smoky: the importance of "netiquette" is underlined, to sensitise students to all the problems inherent in the use of the network, from researching and evaluating sources to using the social networks - students who, according to the teachers interviewed, clearly lack this set of competences. In fact, the teachers mention a large number of technological tools that students are not only able to use, but also use daily, in the EFL context as well, especially as a result of the changes brought about by the recent Covid-19 health emergency. According to the respondents, "there is a greater use of technology than before, teachers have come into contact with so many new possibilities, and therefore have so many more ideas involving those tools as well" (Speaker 4). The fact that teachers are implementing their use of technology in the language classroom is confirmed by several interviewees, although they point out that it is not a homogeneous movement, as there appear to be "various colleagues who are about to retire and who are in great difficulty, because they come from a different generation" (Speaker 7). A problem that is strongly highlighted by several interviewees is their "fear that the digital world does not help to train the [students'] mind" (Speaker 7), and the fact that, despite "the enthusiasm [encountered in them] because they are using the mobile phone or something that comes from their everyday life, it always appears to be on a superficial
level, so that it looks like it is never possible to consolidate anything" (Speaker 3). This impression is also confirmed by other teachers (Speakers 2, 4 and 5), and it is suggested that research should investigate "what remains, in the parts of the brain intended for the in-depth study and consolidation of structures, of something that only passes through a different cognitive system, because digital, for us non-natives, was an incredible implementation, but for them it might not be as important anymore, so they go through it much faster, and speed never leads to in-depth analysis" (Speaker 3). They reiterate, however, that an attempt at introducing multimodal and digital forms of language education is made nonetheless, and that "the experiment", according to Speaker 5, "is carried out with lots of audios, lots of videos, and lots of activities designed to involve the students". Through this lens the notion of multimodality was further investigated, albeit with several critical issues: "'multi' is certainly better than 'mono'", continues Speaker 5, "the difficulty lies in how the class receives [these modalities], because in these great experimentations I find it a lot more difficult to systematically understand what works better than something else".

What is evident, therefore, is that, according to the teachers, attempts to range from more traditional and paper-based forms of language teaching to diversified, technological approaches are put into practice, compatibly with the problems deriving from the daily management of the class, which will be examined in detail in the next paragraph. However, quoting our interviewees, these are but "experiments": talking about the introduction of concrete approaches in the language classroom is difficult for various reasons, first of all, the lack of familiarity that teachers and the school system have with the terminology in question. It is unlikely that they are able to conceive approaches focussed on helping students develop multiple, digital and multimodal literacies when the reference terminology and theories are either not known or unclear (see also paragraphs §5.3.2). The teachers themselves admit that it is difficult to understand "what works better than something else" (Speaker 5), and how to handle aspects, such as technology, where competence appears to be limited on both fronts, that of teachers and that of students. Furthermore, if the guidelines and specific objectives are the first not to introduce concepts and terminology related to literacies (see paragraph §7.2), it is understandable that teachers stick, as far as possible, with what is established by the regulations. From the data we have available, it therefore seems that there is still a long way to go before EFL approaches linked to plural,
multimodal and digital forms of literacy, supported by research and legislation, will be introduced in EFL classrooms on a daily basis.

### 4.3.3 Question 3b: results of the EFL analysis

As mentioned above (§4.3), question 3b asks "What approach can be introduced in the language classroom in order to address the most prominent issues". To answer this sub-question, it was decided to resort to excerpts codified according to the following themes: Issues, and all of its sub-codes (Classroom management, Lack of time, Students' lack of competence, Training and Other, respectively), since, on the one hand, they sum up the main issues that emerged in both contexts, and, on the other, they appear to be elements that hinder the process of revising the approaches proposed in class, Literacy-wise. More will be said about this at the end of the paragraph.

## a. Classroom management

The following table collects the most significant passages taken from both Focus Group and Interview and categorised under "Classroom Management". The key points that emerge, highlighted by the teachers, regarding the daily management of the class, are:
I. number of students per class;
II. relational problems;
III. heterogeneous classes.

| Speaker | Classroom management | Issue |
| :---: | :--- | :--- | :---: |
| 5 | [...] in each class there are three or four students who have a "normal" <br> starting level, so to speak, and they are the ones who then weaken, <br> gradually, thus entering into a condition of discomfort as they are different <br> from the others, who have special educational needs of various kinds $[\ldots]$ | III |
| 5 | [...] relational problems, classroom management in general, especially <br> where there are difficult groups, I would like to say that that is a <br> profession of its own. | II |
| 5 | Yes, this relational part, in my opinion, is lacking in research and is really <br> not foreseen in teacher training. | II |
| 4 | [...] you need classes possibly smaller than 30, let's say, you can do it with <br> 20-21 students [...] | I |
| 7 | I would certainly like for the school of the future to have smaller classes, <br> that is, with 15 people you can work quite well [...] | I |
| 7 | I need things that help me manage the situation better, at the moment, $[\ldots]$ | III |

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    not with motivated students, not in small classes, I have a little bit of a hard time managing the situation.
7 [...] sometimes I would like to lecture on a certain topic, and I come to II class, they've just punched each other, so we have an hour of civics.
```

Table 4.7, EFL "Classroom Management" excerpts

What teachers appear to perceive as a good possible solution, beyond its actual feasibility, is the constitution of smaller classes, with fewer students, in order to be able to deal more effectively with normal, everyday activities (which, of course, the bigger the classes, the more time they take) as well as with the relational problems within the language classroom.

## b. Time

As for the next issue highlighted, namely the lack of time, the teachers emphasised how there are:
I. not enough EFL hours available per week, in the face of
II. too many things to carry out, not necessarily EFL related.

| Speaker | Lack of time | Issue |
| :---: | :--- | :---: | :---: |
| 5 | [...] media Literacy, and then using the network to connect with peers, to <br> connect with projects abroad, we can do everything, but then don't ask me <br> to invent the tests as well $[\ldots]$ I can't be creative about everything and <br> keep my mental health, too. Let us also remember that in schools those <br> who are inclined to innovation and commitment always have a higher | II |
| 3 | workload [...] |  |
| 4 | [...] we have three hours a week, which are actually 40 minutes each [...] it <br> becomes a daily reality of difficulty rather than satisfaction. | I |
| 5 | Basically we would need more hours, I mean, the cuts that have been <br> made the number of hours in some schools do not favour an in-depth <br> study no possibility of doing everything. | II |
| 7 | [...] if I dedicate an hour a week to the Invalsi tests, as the headmaster <br> asked, that's fine, but I'm only doing that then. | II |
| 7 | Having three hours a week is certainly not enough <br> [...] sometimes I would like to lecture on a certain topic, and i come to <br> class, they've just hit each other, and we have an hour of civics | II |

Table 4.8, EFL "Lack of time" excerpts

What transpires from the table above is that, in light of the number of hours currently available for EFL, it could be useful, where it was not possible to increase the teaching hours, to decrease the teachers' workload, not necessarily in terms of objectives to be
achieved, as much as of further activities (such as civics, practicing Invalsi tests and so on).

## c. Teacher training

Another problematic aspect that emerged recurringly throughout the meetings and was approached with particular emphasis concerns teacher training. The following table reports some of the most relevant passages relating to the "Training" code.

## Speaker Training

5 Above all, training and discussion are needed, I don't have the opportunity to do what we're doing now with anyone [...]
5 [...] discussion tables, because that is training too. [...] What are the priorities today that there is so much choice given by so many tools? How do you choose what to prioritise? What is more useful, what less, also depending on the context, you know, otherwise we go like this, a bit randomly, hoping that something will stick, that something will be useful.
3 [...] within the total number of hours, we usually have to do twenty hours per year of refresher courses. The rest depends on how interested each teacher is.
4 [...] the headmaster suggests that we train in the new evaluation methods, especially given our difficult environment, in competence-based learning, and he always insists for this approach to be made current, and we experiment, perhaps sacrificing other things, so yes, training is provided, in terms of both guidelines and courses offered by the school environment.
5 This relational part is lacking in research and is really not foreseen in teacher training [...]
4 [...] we were also told by the trainers: "Look, here you are learning la crème de la crème, all wonderful things, but then your reality will be very different" [...]
4 [...] the sociology teacher was working with some terminology [...] but did not provide us with examples of classroom management, because maybe - because she was a university professor, and instead the other teacher, who taught morphosyntax, I believe, or something like that, was an upper secondary school teacher, and therefore she provided much more practical examples, because she was familiar with research on the one hand, and school reality on the other.
$7 \quad[\ldots]$ the problem of the school system is that it is structurally old and that teacher training is random, so you have a bit of everything, and there is no common vision, the vision is descended from above.
7 [...] in my opinion, an academic who has never taught cannot understand the problems a teacher faces.
7 I don't think anyone would be against being watched in order to be helped, [...] I mean, I go into class, twenty years after my own junior high school, and I get chills, because I see that everything has changed. And we don't really know how to handle these changes, so we need help.
Table 4.9, EFL "Training" excerpts

Although hours of training are provided, and there are, according to the interviewees, multiple additional training opportunities, it appears that what is missing are chances for discussion, reflections aimed at managing relational problems in difficult learning environments, and, sometimes, refresher courses linked less to theoretical frameworks, which are perceived as extremely detached from the everyday school reality, and more to practice. This issue is brought up also, and perhaps more, in the excerpts codified as "Research and school" and will therefore be dealt with in more detail in paragraph §4.3.4.

## d. Students' lack of competence

A fourth issue that is brought to light concerns student competence.

| Speaker | Students' lack of competence |
| :---: | :--- |
| 6 | I think that the generation that is at school now is very good with mobile phones <br> when it comes to social networks and entertainment, but sending an email from the <br> mobile phone or using the Office package - I see that it is very challenging for <br> them. |
| 5 | [...] those abilities that they have when it comes to electronic games, they do not <br> focus on applying them elsewhere, to learn, but even just to organise their material <br> for interrogation, to access the electronic register, therefore, no, I don't think the <br> year of birth makes a difference. |
| 3 | [...] netiquette: it is true that they know how to use social media, $[\ldots]$ but they lack <br> the ability to understand the effects words have on social networks, $[\ldots]$ and the <br> relational ability to use words in a positively contextualized way. <br> The issue is that our students may very well be digital natives, but $[\ldots]$ on a digital <br> level, what we have is a compromise between what is useful and what is scholastic, <br> which is not what the students live, meaning that they live on Twitch, they live on <br> Tik Tok [...] |
| 7 | I believe students should be trained as well [...] |

Table 4.10, EFL "Students' lack of competence" excerpts

The idea that students must also be trained comes up, given that they appear lacking in many aspects, especially so when it comes to some digital competences and to the new literacies field, where a mere critical approach and the new skills, strategies, dispositions and social practices required by the new ICTs come into play.

## e. Other

Finally, the "Other" category collects all those excerpts that highlighted possible issues which, however, did not emerge frequently and extensively enough during the meetings to earn the creation of a specific code.

| Speaker | Other |
| :---: | :--- |
| 2 | $[\ldots$.$] the programmes should be revised a bit as well, [\ldots]$ we cannot do everything <br> ourselves |
| 5 | I tried to turn to groups, even psychology groups $[\ldots]$ it is a big piece that is <br> missing, at ministerial level: they don't consider the fact that the training you do in <br> a public competition is not enough, you know, especially for certain institutes. |
| 7 | $[\ldots]$ I'm a precarious worker, so every year $[\ldots]$ I take my saddlebag and go from <br> one place to the other, I can't even manage to get the textbooks changed $[\ldots]$ |
| 7 | $[\ldots]$ there are schools where you have to work on behaviour before learning, <br> because learning cannot be managed if there is no decent behaviour. |
| 7 | $[\ldots]$ it bothers me, the idea of having to be a mother, a social worker, an educator as <br> well as a teacher, because I realise that my job as a teacher is not that important to <br> them |
| 7 | I would be interested in increasing my students' motivation [...] |
| 7 | $[\ldots]$ parents question what you do, not always, but it happens. Students question <br> what you do; headmasters question what you do. The salary is always the same, the <br> work hours increase. |

Table 4.11, EFL "Other" excerpts

The table above encompasses various aspects, some in part related to what was previously mentioned, such as the students' lack of motivation or the need to review the programmes in light of the fact that it is very difficult for EFL teachers to manage everything on their own. One point that was perceived as particularly interesting, however, concerns precarious working conditions, shared by a good number of teachers, which prevent teaching continuity for both teachers and classes.

These issues, dealt with at different points during the meetings and not necessarily linked to one another, emerged both as issues in their own right, which would benefit from being taken into consideration and addressed as such, and as elements that hinder the possibility of revising the approaches proposed in class, Literacy-wise. One of the first criticisms that teachers move to research is the distance from the everyday school reality, and the total lack of consideration for the relational aspect, especially within the classroom, in the daily management of relationships, time and space, but also outside
the class, in the management of the internal administration of each school and of the tools and devices available. For this reason, the aspects dealt with in this paragraph, although not directly linked to Literacy and its many facets, clarify what the problems are that EFL teachers perceive as most relevant as well as partly responsible for the difficulty encountered in a Literacy-related update of the approaches introduced in the classroom.

### 4.3.4 Question 3c: results of the EFL analysis

As mentioned above (§4.3), question 3c asks "What approach can be introduced in the language classroom in order to reduce the gap between the specific objectives set for foreign/second language learning and the results achieved by studies conducted in this field".

To answer this sub-question, it was decided to resort to excerpts codified according to the following themes: Ideas and Research and school and their sub-codes (What works and What doesn't work; Teachers and research, respectively), as they deal with the interviewees' knowledge of and relationship with research in this field of language education and literacy, and report their views on what appears to work and what does not within EFL classrooms.

## a. Research

The first aspect to consider is the clear impression on the part of the teachers "that research remains a very important stimulus, of course, but is far from our everyday life" (Speaker 5). This is a viewpoint that all the participants appear to agree with, and they actually add how, in their opinion "research is far from the teachers' everyday life [...] because it lacks the relational aspect, which is the focal problem when it comes to teaching" (Speaker 3). "The gap", adds Speaker 7, "is incredible, even the fact that we read [that digital literacy is the] 'ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers ${ }^{43}$, I mean, we don't even have computers at school, that is, we have the IWBs, and there are people

[^30]who do not use them", and specifies that "there is no real dialogue between universities, politics and secondary schools".

Several interviewees recall situations in which the lessons held by university professors or during refresher courses were actually "a thousand miles away from the reality", for example, "of CLIL in the EFL classroom" (Speaker 3). They perceive such lessons differently when they are held by upper secondary school teachers, because "they are much more practical in providing examples, as they consider research on the one hand, the knowledge of everyday school reality on the other" (Speaker 4). Speaker 7 recalls a specific social psychology course, held by a psychologist who was herself a teacher, as being "fantastic, but it is difficult for an academic who has never taught upper secondary school students to understand the problems of a teacher". They also argue that what matters for a teacher is to be prepared enough to be able to understand what works and what does not with their students, what types of students one can have, what problems one can face, and therefore think that it would be nice for academics to cooperate with teachers in order to produce useful teaching tools or aids, because there is a perceived lack of practicality in the academic proposals.

During the meeting, the fact that the participants had had the opportunity to follow courses organised by different universities was brought up on several different occasions, and they roughly agreed in considering such courses generally interesting, but at the same time extremely complicated when it comes to combining the theoretical aspect with the practical one (Speaker 5). They also argue that providing teachers with moments of discussion within their schools, perhaps involving a researcher, would be extremely useful: they assert that there is a lack of occasions for teachers to share experiences, opinions and reflections, both between colleagues and with their students. What could be attempted, Speaker 4 suggests, is reflecting on the use of media and technology according to the topics addressed and the activities proposed in the language classroom, but also exploring teaching and learning strategies further, because it is essential for teachers to continue to form and inform themselves, progress and update their knowledge and competence. In some brainstorming moments, in addition to reiterating the importance of reflecting on the use of the different media, tools and resources available to them, the presence of external observers from time to time is suggested. Working more on self-assessment with students is another useful option in order for them to realise what they can achieve and ask them which approaches and
which learning styles are most interesting for them, and perhaps set up activities accordingly.

## b. What works and what does not

Beyond those that are more difficult to achieve, like smaller classes, other ideas concern language exchanges with other class groups from other countries through platforms such as Zoom; more CLIL; Flipped classrooms, which, according to Speaker 3, are useful not only to save time but also to challenge the students; and anything that can help to establish a connection with the target language, from movies to video games, in order for the students to be able to connect their own passions to the subject, because what teachers are often looking for is not that much accuracy but rather fluency (Speaker 7). Another suggestion regarding larger classes is that it would also be useful to have students work in groups, thus facilitating peer tutoring occasions. In fact, in highlighting what works within a EFL class, this is an option that is repeated several times: other examples provided concern the students working in groups to create brief videos as homework, or having them work in pairs during oral production with the aim of building a dialogue, but trying to bring together more and less advanced students, so as to incentivise a fruitful cooperation between them.

Finally, coded as "What doesn't work" there are many of the aspects treated under the "Issues" code, with all its subcategories, and analysed in more detail in the previous paragraph. However, a couple of other relevant aspects emerged: the first one concerns the mixture of digital and paper material that teachers are required to work with, which, on the one hand, is not uniform in all schools and, on the other, might end up taking up more time than necessary, thus increasing the chances of making mistakes. Speaker 7, for example, explains how "last year in my school there were both a paper and a digital register, which involved remembering to enter the same data twice" for every class, every day. Another problem concerns special educational needs: the use of compensatory instruments and dispensatory measures is often not straightforward, not only because one must know how to use and dose them, but also because the constant presence of a facilitator or teacher would often be beneficial to students with specific learning needs, but is almost never feasible.

So we can see how, according to the teachers interviewed, the gap between research and the school system not only exists, but is also considered very wide. Both theories and training courses held by university teachers are perceived as too far from the daily reality that upper secondary schools have to face, and such a reasoning should make us reflect on the fact that an important step on the part of research would be to take into account the experiences and needs of secondary school teachers and not to expect the opposite, that is, for teachers to take research into account unreservedly. It is therefore a question of focusing on tailor-made training, which first of all involves investigating what the points are on which it is necessary to intervene.

No concrete approach was proposed to reduce this gap, because it is very difficult when the necessary means, training, pre-existing conditions and knowledge are lacking. However, activities and strategies that seem to work more than others were highlighted, and the main hindering problems were reiterated. Some suggestions are less related to classroom management at the teaching level and rather to bureaucratic issues, as the two cannot be considered disconnected: the example of the coexistence of the didactic and paper register explains that even the transition from a paper-based environment to a more digital one must be managed efficiently, at both an educational and administrative level. This can therefore be a starting point for future research to understand what the strengths and weaknesses are to be considered in order to address and potentially reduce this gap.

In conclusion, the analyses carried out led us to the following results:

- the school system does not establish specific learning objectives vis-à-vis literacy for foreign language learning in upper secondary schools, which implies the existence of a gap between school and research when it comes to the development of multiple, digital and multimodal literacies;
- the level of awareness that upper secondary school teachers appear to have regarding the evolution of recent studies within the language education field, with particular attention paid to literacy and its multiple definitions, is extremely limited;
- as a natural consequence, therefore, so is the teachers' perception of the gap found between research and the specific learning objectives established for foreign language education vis-à-vis Literacy in upper secondary schools;
- the teachers' competence in the use of technological tools in language learning per se seems to be adequate, while their awareness when it comes to using such tools in developing digital and multimodal literacies appears to be limited;
- due to the points mentioned above, no proposals have emerged for approaches that can be introduced in the language classroom in order to help students develop multiple, digital and multimodal literacies and reduce the gap between the specific objectives set for foreign language learning and the results achieved by studies conducted in this field;
- several other issues that have to do with everyday teaching were highlighted, and research and the school system may wish to take them into account before proceeding with the introduction of other topics and approaches in the language classes.


## CHAPTER 5. ISL RESULTS

The present chapter deals with the data collected for the ISL (Slovene) group. It reports the results of the statistical analyses carried out for each sub-question on the variables obtained after validating the ISL questionnaire, also presents the most relevant excerpts extrapolated from the transcriptions of the ISL focus group and interview and reflects on the key points of the ISL normative references.

### 5.1. Data analysis related to research question number 1

The first research question asks:

Does the school system establish specific learning objectives vis-à-vis literacy for foreign and second language learning? If so, what are they? Is there a gap between them and the conclusions drawn from the most recent language education studies in the field, especially when it comes to the development of multiple, digital and multimodal literacies?

At first (paragraph §3.2), it was hypothesised that the gap between the two existed and was actually wide enough to constitute a problem, at least concerning the relationship between what is theorised by research and research studies and the day-to-day reality of the school environment.

As mentioned in Chapter 3 (§3.3), the texts that regulate the teaching of Italian as a second language in Slovenian upper secondary schools are:

- Učni načrt za italijanščino kot tuji in kot drugi jezik: gimnazija (Šečerov and Zorman, 2008);
- Italijanščina kot drugi jezik: izpitni katalog za poklicno maturo (Šečerov et al., 2010).

When inspecting the aforementioned documents (an analysis of the normative references that regulate the teaching of Italian as a second language in Slovene upper
secondary schools can be consulted in APPENDIX 16) and the specific learning objectives established for ISL, we first proceeded by searching for specific references (both at a terminological and conceptual level) regarding:

- Literacy (as we understand it from several definitions provided by research ${ }^{44}$ : any references limited to the idea of alphabetization were disregarded entirely. See §1.1.1);
- Multimodality (and, more generally, references to different teaching and learning modalities, as well as teaching and learning styles. See §1.1.3);
- Digital Literacy (and consequent use of ICTs. See §1.1.4) ${ }^{45}$
- New Literacies (in the broad sense of critical thinking, analytical skills, source evaluation, and so forth ${ }^{46}$. See §1.1.5).

In light of Chapter 1, which introduces the theoretical framework of this research, and Chapter 2, which reviews some recent Literacy-based research studies in the field of language education, we can reasonably say that the gap indeed exists, but it appears to be moderate, at least when it comes to the relationship between research and normative references.

In particular, in the first document concerning gimnazija, although no mention is made of the concepts of Literacy or multimodality, digital literacy appears to be taken into account, describing a series of skills that are to be developed under the teacher's guidance and supervision, such as critical evaluation and learning strategies. Mention is also made of how important it is that students learn to learn, recognising their own cognitive styles. A strong emphasis is placed on developing the necessary skills to learn and act in a multilingual and multicultural space, which is reiterated in the second document (Šečerov et al., 2010).

[^31]The digital aspect, as well as the introduction of different learning strategies, are taken into consideration in the normative document for technical and professional schools as well (Šečerov et al., 2010), which provides a detailed explanation of the established objectives, and of the possible approaches to achieve them. Once again, there is a lack of explicit references to the concept of Literacy, to the new forms of literacies, and to multimodality.

All in all, there are no specific learning objectives for Italian as a second language in upper secondary schools in Slovenia that take into consideration the concept of Literacy as we analysed it in Chapter 1, namely as
"the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve his or her goals, develop his or her knowledge and potential, and participate fully in community and wider society" (UNESCO, 2004, 2011).

There are, however, specific references concerning Digital Literacy: in this regard, both the aforementioned documents explain how students will develop the ability to use information and communication technologies, in particular for:

- safe and critical use in learning and communication;
- search for data on web pages and their appropriate use;
- presentation of their own products in different ways (graphic, pictorial, written, audio, multimedia); and
- involvement in international network projects ${ }^{47}$.

Further details are available in APPENDIX 16.

[^32]When comparing said ISL normative references with the world of research, therefore, where the term Literacy and its several different facets have been the object of reflection for several decades (as we saw in Chapter 1), it can be said that there is a gap with respect to the specific learning objectives established for Italian as a second language in Slovenia concerning Literacy, but it appears to be a moderate one, since, although some elements are missing altogether, others are present. There are, however, several considerations worth drawing, and they will be discussed in Chapter 6 and 7 (§6.1, §7.1 and §7.2).

### 5.2 Data analysis and results related to research question number 2

The second research question asks:
What level of awareness vis-à-vis literacy is there within the school system regarding:
a. The specific learning objectives established for foreign and second language education in upper secondary schools;
b. The evolution of recent studies within the language education field, with particular attention paid to literacy, in its multiple definitions;
c. The gap between a) and b).
d. The use of technological tools in language learning in general, and, specifically, in developing digital and multimodal literacies.

At the end of the preliminary analyses, a total of 34 variables emerged from the ISL Questionnaire, 10 of which are qualitative (the same outlined by the EFL Questionnaire, see $\S 3.7 .1$ and $\S 3.7 .2$ ) and are treated as independent, while the 24 quantitative ones are considered dependent variables. Paragraph $\S 4.2$ contextualises the difference between independent and dependent variables, in addition to the procedures carried out to analyse the data, which can be consulted in their entirety in APPENDIX 4.

Before proceeding, however, it is necessary to reflect on the number of responses received, as: generally speaking, especially when dealing with inferential statistics, the larger the sample the better, as a larger sample provides greater reliability and allows for more sophisticated statistics to be used (Cohen, 2007). This is an issue we dealt with in Chapter 3 (§3.7.2) when referring to the validation phase of the questionnaire: it was
found that it was not possible to carry out some tests for the ISL questionnaire that instead were run quite smoothly on the EFL one.

The margin of error in inferential statistics is often dependent on three things: 1) the standard deviation of the sample data; 2) the sample size; and 3) the confidence we desire, which is usually $95 \%$ (Dawson, 2008). Larger sample sizes generally give more accurate results and more data means researchers are better able to estimate true population parameters. A rule of thumb for many researchers is that a sample size of thirty is considered to be the minimum number of cases when some form of statistical analysis is to be performed on their data (Cohen, 2007). However, this is still a very small number: let us provide an example. A straightforward statistic such as the Chisquare test requires there to be five cases or more in 80 per cent of the cells analysed: the test can be run anyway, but its results are not going to be as reliable. In this example, our ISL data does not meet the statistical requirements for reliable data. Indeed Gorard (2003) suggests that, in order to ensure an appropriate sample, one can start from the minimum number of cases required in each cell (a minimum of maybe six-ten cases), multiply this by the number of cells, and then double the total. One possible scenario is being led to accept the null hypothesis when it is in fact false (Type II error): this can happen when the sample size is too small to detect a significant difference, even when one exists (Dawson, 2008, p.92). Most likely, this is exactly what happened, since in no case was the null hypothesis rejected, as the following paragraphs report.

Naturally, in recruiting samples, the population to which they belong must be taken into account (Cohen, 2007): we know that the number of ISL teachers in the bilingual Slovenian area is very low, and therefore a very limited sample was taken into account. The enormous disparity in sample size between the two contexts, EFL and ISL (440 against 10), inevitably makes it difficult to carry out statistically significant comparisons, which is why the two samples were not subjected to any such tests (such as t-tests or ANOVA tests). The only comparisons made between the two are therefore limited to descriptive statistics and are carried out in the next chapter.

### 5.2.1 ISL Questionnaire analysis: respondent information

Before proceeding with each sub-question, we will be reporting some descriptive data about our ISL respondents. Specifically, the tables below will focus on eight of our qualitative variables (i.e., $1,2,3,4.1,4.2,7.1,7.2$ and 7.3 , respectively), some of which, in many of the subsequent analyses, are treated as independent variables. These variables concern: the type of upper secondary school our respondents teach in; their teaching experience; their age range; their knowledge of the specific learning objectives established for ISL; their relationship with research. This allows readers to have a clearer general picture of the distribution of our ISL respondents and to understand whether or not they are aware of the normative references that regulate ISL teaching and whether they have a relationship with the world of research (and, if so, in what capacity). As for variables 12 and 16, the other two qualitative variables, which deal with the respondents' definition of the concepts of Literacy and Digital Literacy, will be examined more thoroughly in paragraph §5.2.3.

| Type of upper secondary school |  |  |
| :--- | :---: | :---: |
|  | Respondents | Percentage |
| Gimnazjia | 1 | $10 \%$ |
| Technical school | 4 | $40 \%$ |
| Both | 5 | $50 \%$ |
| Total | 10 | $100 \%$ |

Table 5.1, ISL Questionnaire, question 1

The table above shows that half of the respondents teach in both gimnazija and technical and professional schools, while the others are distributed between the two options, with only one teacher teaching in gimnazjia only.

| Teaching experience |  |  |
| :--- | :---: | :---: |
|  | Respondents | Percentage |
| Less than 1 year | 0 | $0 \%$ |
| 1-5 years | 1 | $10 \%$ |
| 6-10 years | 0 | $0 \%$ |
| 11-20 years | 3 | $30 \%$ |
| 21-30 years | 6 | $60 \%$ |
| $30+$ years | 0 | $0 \%$ |
| Total | 10 | $100 \%$ |

Table 5.2, ISL Questionnaire, question 2

| Age Range |  |  |
| :--- | :---: | :---: |
|  | Respondents | Percentage |
| Less than 25 | 1 | $10 \%$ |
| $26-30$ | 0 | $0 \%$ |
| $31-40$ | 1 | $10 \%$ |
| $41-50$ | 5 | $50 \%$ |
| $51-60$ | 3 | $30 \%$ |
| $60+$ | 0 | $0 \%$ |
| Prefer not say | 0 | $0 \%$ |
| Total | 10 | $100 \%$ |

Table 5.3, ISL Questionnaire, question 3

From the teaching experience and the age of the teachers it is clear that the majority of respondents have been teaching for over 20 years, and are aged between 41 and 60 . An issue concerning Question 3 ("My age range is...") involves several entries which are not consistent with the answer provided by the respondents for Question 2 ("I have been teaching English as a second language for..."). A more detailed description of how the problem was dealt with and what it entails can be found in APPENDIX 4 and in paragraph §7.4.

| I have read the national guidelines |  |  |
| :--- | :---: | :---: |
|  | Respondents | Percentage |
| Yes | 10 | $100 \%$ |
| No | 0 | $0 \%$ |
| I don't know | 0 | $0 \%$ |
| enough about it <br> Total | 10 | $100 \%$ |

Table 5.4, ISL Questionnaire, question 4.1

| I am aware of the specific learning <br> objectives |  |
| :---: | :---: |
| Respondents | Percentage |
| 10 | $100 \%$ |
| 0 | $0 \%$ |
| 0 | $0 \%$ |
| 10 | $100 \%$ |

Table 5.5, ISL Questionnaire, question 4.2

As we can see from the tables above (5.4 and 5.5), all respondents answered affirmatively, stating that they have read the texts that regulate the learning of Italian as a second language and that they are aware of the learning objectives established for ISL, respectively. The lack of variance prevents us from comparing respondents, since they are all part of the same group. This explains why they cannot be subjected to further analyses.

| I am a subscriber (...) |  |  | I am a researcher |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Respondents | Percentage | Respondents | Percentage |
| Yes | 2 | 20\% | 0 | 0\% |
| No | 8 | 80\% | 10 | 100\% |
| Total | 10 | 100\% | 10 | 100\% |


| I am an author |  |
| :---: | :---: |
| Respondents | Percentage |
| 0 | $0 \%$ |
| 10 | $100 \%$ |
| 10 | $100 \%$ |

Table 5.6, ISL Questionnaire, question 7.1, 7.2, 7.3

The same can be said for two out of three variables relating to the respondents' relationship with research: since all teachers declare that they are neither researchers nor authors, we are left once again with one variable (7.1) and two constants (7.2 and 7.3), respectively.

Variables 1, 2, 3 and 7.1 are therefore considered as independent in each sub-question and subdivide the total of respondents into independent samples: for example, variable 3, which concerns the age range of the respondents, divides teachers into as many samples as their range options, based on the response they have provided. Depending on whether the independent variables divide the sample of respondents into two (e.g., teachers subscribed to research journals and those who are not, variable 7.1) or more independent samples (e.g., the type of upper secondary school they teach, variable 1), it is necessary to resort to two different procedures. As regards variables 1,2 and 3, which divide the respondents into more than two samples (i.e., the different types of upper secondary school; the different lengths of teaching experience; the different age ranges), the non-parametric Kruskal-Wallis test was performed. As for the comparisons with the dichotomous variable 7.1, which only allows "Yes"-"No" answers and therefore divide the sample of respondents in two, the adoption of the non-parametric Mann-Whitney U test was required. The correlation between the dependent quantitative variables was always checked through the non-parametric Spearman's rank correlation coefficient, and the relationship between two qualitative variables, where necessary, was assessed through the non-parametric Chi-square Test.

Tables and figures relating to the inferential statistical analyses carried out starting from the data collected through the ISL Questionnaire are available for consultation in APPENDIX 10.

### 5.2.2 Question 2a: results of the ISL analysis

Question 2a asks "What level of awareness vis-à-vis literacy is there within the school system regarding the specific learning objectives established for foreign and second language education in upper secondary schools".

Teacher awareness was hypothesised to be partially limited in some respects (§3.2), but probably less so concerning the specific learning objectives for language education. Several variables were considered in the statistical analyses conducted in order to answer this specific sub-question. They were obtained from the preliminary analysis of the answers to the following dimensions:

|  | Type | Variable | Dimension |
| :---: | :---: | :---: | :---: |
|  | Qualitative, independent | 1 | type of upper secondary school |
|  | Qualitative, independent | 2 | the respondents' teaching experience |
|  | Qualitative, independent | 3 | the respondents' age range |
|  | Qualitative, independent | 7.1 | the respondents' status as subscribed (on not) to research journals |
| $\begin{gathered} \boxed{0} \\ 1 \\ \text { N } \\ \text { N } \\ \text { E } \end{gathered}$ | Quantitative, dependent | 5 | the respondents' participation in decisions concerning the achievement of said specific learning objectives |
|  | Quantitative, dependent | 6.1 | how suitable the specific learning objectives established for ISL are for a multifaceted ISL learning environment |
| $\begin{aligned} & \dot{む} \\ & \dot{0} \\ & \ddot{0} \end{aligned}$ | Quantitative, dependent | 6.2 | the need for said specific learning objectives to be updated and implemented in the ISL classrooms |

Table 5a.1, Research question 2 a , ISL variables analysed

When comparing our dependent variables (i.e., 5, 6.1 and 6.2 ) with variables 1,2 and 3, the null hypothesis formulated by the Kruskal-Wallis test assumes a relatively equal distribution of each dependent variable on its different categories, namely the different types of upper secondary school our respondents teach in, their teaching experience and their different age ranges, respectively. The null hypothesis is maintained for all three dependent variables, although in one case only barely (variables 1 and 5, sig .068) (tables A10a.1, A10a. 2 and A10a. $3^{48}$ ).

When comparing our dependent variables (i.e., $5,6.1$ and 6.2 ) with variable 7.1 , which subdivides the respondents into two categories according to whether they are subscribed to research journals or not, the null hypothesis formulated by the Mann-Whitney U test assumes a relatively equal distribution of each dependent variable on the two categories presented. The null hypothesis is maintained for all variables which means that there appears to be no statistically significant difference between respondents who are also subscribed to research journals and those who are not when it comes to this specific set of variables (table A10a.4).

[^33]As for the relationship between the dependent variables considered, Spearman's correlation coefficient appears to indicate that all the correlations between these three dependent variables are negative but none is statistically significant (table A10a.5).

To conclude, no element concerning this specific sub-question can be considered significant.

### 5.2.3 Question 2b: results of the ISL analysis

Question 2 b asks "What level of awareness vis- $\grave{a}$-vis literacy is there within the school system regarding the evolution of recent studies within the language education field, with particular attention paid to literacy, in its multiple definitions".
Teachers' awareness and knowledge regarding the most recent research movements in this field of language education was hypothesised to be at least partially limited (§3.2), and this was also expected to be reflected in the definitions of Literacy and Digital Literacy that they were asked to provide in response to questions number12 and 16 of the questionnaire, respectively.
Several variables were considered in the statistical analyses conducted in order to answer this specific sub-question. They were obtained from the preliminary analysis of the answers to the following dimensions:

|  | Type | Variable | Dimension |
| :---: | :---: | :---: | :---: |
|  | Qualitative, independent | 1 | type of upper secondary school |
|  | Qualitative, independent | 2 | the respondents' teaching experience |
|  | Qualitative, independent | 3 | the respondents' age range |
|  | Qualitative, independent | 7.1 | the respondents' status as subscribed (on not) to research journals |
| $\begin{aligned} & \stackrel{\rightharpoonup}{2} \\ & \stackrel{1}{1} \\ & \stackrel{\rightharpoonup}{N} \end{aligned}$ | Quantitative, dependent | 8.1 | respondents independently consult research-related resources |
| $$ | Quantitative, dependent | 8.2 | schools support their teachers in consulting researchrelated resources |
| $\begin{aligned} & \text { Eve } \\ & \text { E } \end{aligned}$ | Quantitative, dependent | 11 | in how many different environments do respondents come in contact with different terms related to Literacy in a wide sense |
| 实 | Qualitative, | 12 | respondents' definition of Literacy |

[. $\left.\begin{array}{c}\text { dependent } \\ \begin{array}{c}\text { Quantitative, } \\ \text { dependent } \\ \text { Qualitative, } \\ \text { dependent }\end{array}\end{array} 14 \quad \begin{array}{l}\text { concept of Literacy as a plural, multimodal and } \\ \text { multifaceted aspect of Second Language Acquisition }\end{array}\right]$

Table 5b.1, Research question 2b, ISL variables analysed

Before proceeding to report the analyses carried out, however, a brief comment is necessary regarding variables number 12 and 16 , the only qualitative ones that derive from open-ended questions requiring respondents to provide their definition of Literacy and Digital Literacy, respectively. They are short-answer questions, and, as mentioned in the previous chapter (§3.7.2), the answers provided by the respondents were analysed through head nouns and grouped into different categories, which were assigned a numerical value. While a complete report is available in APPENDIX 4, the five categories outlined for variable 12 are described in the following table:

| Categories | $\mathbf{N}^{\circ}$ | Notes |
| :--- | :---: | :--- |
| Empty set | 2 | one left blank, while the other was of difficult <br> interpretation |
| One word | 3 | a translation or a more or less precise synonym <br> considering Literacy as the sole ability to <br> Comprehension |
| Ability to read and write <br> Ability to read, write and <br> communicate | 2 | formulated more or less literally <br> formulated more or less literally |

Table 5b.2, analysis of the answers to question 12 of the ISL questionnaire

The definitions are all fairly basic, and fairly evenly distributed among synonyms, "ability to read and write", and to communicate.

| Categories | $\mathbf{N}^{\circ}$ | Notes |
| :--- | :---: | :--- |
| Empty set | 1 | left blank |
| One word | 2 | a translation or a more or less precise synonym |
| ICT skills | 5 | formulated more or less literally |
| Complex analysis | 2 | very broad and difficult to categorise, as they <br> include other categories and focus on $21^{\text {st }}$ century <br> skills |

Table 5b.3, analysis of the answers to question 16 of the ISL questionnaire

As for the four categories outlined for variable 16, the situation is very similar to the previous one; the code that collects the highest number of responses is that relating to "ICT skills".

When comparing our dependent variables (i.e., 8.1, 8.2, 11 and 14) with variables 1,2 and 3, the null hypothesis formulated by the Kruskal-Wallis test assumes a relatively equal distribution of each dependent variable on its different categories, namely the different types of upper secondary school our respondents teach in, the length of their teaching experience and their different age ranges, respectively. The null hypothesis is maintained for all four dependent variables, although in one case only barely (variables 3 and 11, sig .076) (tables A10b.1, A10b. 2 and A10b.3).

When comparing the same dependent variables with variable 7.1, which subdivides the respondents into two categories according to whether they are subscribed to research journals or not, the null hypothesis formulated by the Mann-Whitney U test assumes a relatively equal distribution of each dependent variable (i.e., 8.1, 8.2, 11 and 14 ) on the two different categories presented. The null hypothesis is maintained for all four variables, which means that there appears to be no statistically significant difference between respondents who are also subscribed to research journals and those who are not when it comes to this specific set of variables (table A10b.4).

As for the relationship between the independent variables $1,2,3$ and 7.1 and dependent variables 12 and 16, the Chi-square Test was carried out, and it suggests maintaining the null hypothesis, which assumes a non-existent association between the variables compared. The null hypothesis is thus maintained for both variables (tables A10b.5, A10b.6, A10b. 7 and A10b.8).

Finally, the relationship between the dependent variables is considered and Spearman's correlation coefficient appears to indicate that some correlations between these six dependent variables are positive, others are negative, but only one is statistically significant (table A10b.9).

The only element that can be considered significant thus consists of the correlation between variable 8.1 and variable 14 , which has a significance value of .005 , and, according to Cohen’s classification (§4.2.1), can be considered strong (.723). This
means that there is a strong positive correlation between respondents independently consulting research-related resources and their view of the concept of Literacy as a plural, multimodal and multifaceted aspect of Second Language Acquisition.

### 5.2.4 Question 2c: results of the ISL analysis

Question 2c asks "What level of awareness vis-à-vis literacy is there within the school system regarding the gap between $2 a$ and $2 b$, namely between the specific learning objectives established for foreign and second language education and evolution of recent studies within the language education field".
Having hypothesised a lack of knowledge of the world of research, the teachers' awareness of a possible gap between that field and the reality of the school system was presumed to be smoky as well (§3.2). Several variables were considered in the statistical analyses conducted in order to answer this specific sub-question. They were obtained from the preliminary analysis of the answers to the following dimensions:

|  | Type | Variable | Dimension |
| :---: | :---: | :---: | :--- |
|  | Qualitative, <br> independent <br> Qualitative, <br> independent | 1 | type of upper secondary school |
| Qualitative, | 3 | the respondents' teaching experience |  |


| Quantitative, <br> dependent | 15.3 | to convey meaning, respondents resort to digital and <br> multimodal tools |
| :---: | :---: | :--- |
| Quantitative, <br> dependent | 21.1 | how useful and well integrated ICTs are in an ISL <br> learning environment |

Table 5c.1, Research question 2c, ISL variables analysed

When comparing our 7 dependent variables (i.e., 9.1, 9.2, 10, 13, 15.1, 15.2, 15.3 and 21.1) with variables 1,2 and 3, the null hypothesis formulated by the Kruskal-Wallis test assumes a relatively equal distribution of each dependent variable on its different categories, namely the different types of upper secondary school our respondents teach in, their teaching experience and their different age ranges, respectively. The null hypothesis is maintained for all dependent variables (tables A10c. 1 and A10c.5; A10c. 2 and A10c.6; A10c. 3 and A10c.7).

When comparing the same dependent variables with variable 7.1, which subdivides the respondents into two categories according to whether they are subscribed to research journals or not, the null hypothesis formulated by the Mann-Whitney $U$ test assumes a relatively equal distribution of each dependent variable (i.e., $9.1,9.2,10,13,15.1,15.2$, 15.3 and 21.1) on the two different categories presented. The null hypothesis is maintained for all variables, which means that there appears to be no statistically significant difference between respondents who are also subscribed to research journals and those who are not when it comes to this specific set of variables (tables A10c. 4 and A10c.8).

As for the relationship between the dependent variables considered, Spearman's correlation coefficient appears to indicate that some correlations between these eight dependent variables are positive others are negative, but only three are statistically significant, although two of them only barely so (table A10c.9).

| Variables | Corr. | Sign. | Relationship |
| :---: | :---: | :---: | :--- |
| 9.2 | $.641^{*}$ | .046 | There appears to be a statistically significant strong <br> correlation between whether respondents consider the <br> school's approaches and learning objectives to be in step |
| 15.1 |  | with research or not and their resorting to traditional tools <br> to convey meaning in the language classroom |  |
| 13 | $.636^{*}$ | .048 | There appears to be a statistically significant strong <br> correlation between our respondents' evaluation of their <br> education and training and their resorting to paralanguage |


|  | to convey meaning in the language classroom |  |
| :---: | :--- | :--- |
| 15.2 | $.784^{* *}$ | There appears to be a statistically significant strong <br> correlation between our respondents resorting to <br> paralanguage to convey meaning in the language |
| classroom and how useful and well integrated they |  |  |
| consider ICTs to be in an ISL learning environment |  |  |

Table 5c.2, Spearman's rank correlation coefficient, ISL sub-question 2c
${ }^{* *}$ The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05

The table above highlights the relationship between the variables that appear to have statistical significance, and they are the only elements concerning this sub-question which can be considered significant. That means that, out of all the dependent variables considered for this sub-question, there only exists a relationship between the couples of variables mentioned above (namely, 9.2 and 15.3; 13 and 15.2, 15.2 and 21.3).

### 5.2.5 Question 2d: results of the ISL analysis

As mentioned above (§4.2.5), question 2d asks "What level of awareness vis-à-vis literacy is there within the school system regarding the use of technological tools in language learning in general, and, specifically, in developing digital and multimodal literacies".

Extremely diversified levels of awareness and competence are hypothesised (§3.2) concerning the technological tools and devices required by the new literacies practices, according to the age of the respondents and the length of their professional experience.

Several variables were considered in the statistical analyses of this specific subquestion. They were obtained from the preliminary analysis of the answers to the following dimensions:

|  | Type | Variable | Dimension |
| :---: | :---: | :---: | :--- |
|  | Qualitative, | 1 | type of upper secondary school |
| independent |  |  |  |


| Quantitative, <br> dependent <br> Quantitative, <br> dependent <br> Quantitative, <br> dependent | 15.3 | to convey meaning, respondents resort to digital and <br> multimodal tools <br> Quantitative, <br> dependent |
| :---: | :---: | :--- |
| Quantitative, <br> dependent <br> Quantitative, <br> dependent | 18 | the usefulness of ICTs in ISL classrooms |
| Quantitative, <br> dependent <br> Quantitative, <br> dependent | 20.1 | the actual use of ICTs in ISL classrooms <br> technology is an (active) facilitator when it comes to <br> ISL learning <br> technology is a (passive) facilitator when it comes to <br> Quantitative, |
| ISL learning <br> hop useful and well integrated ICTs are in an ISL <br> learning environment <br> students approach ICTs better than teachers |  |  |

Table 5d.1, Research question 2d, ISL variables analysed

When comparing our 9 dependent variables (i.e., 15.3, 17, 18, 19, 20.1, 20.2, 21.1, 21.2 and 22) with independent variables 1,2 and 3 , the null hypothesis formulated by the Kruskal-Wallis test assumes a relatively equal distribution of each dependent variable on its different categories, namely the different types of upper secondary school our respondents teach in, their teaching experience and their different age ranges, respectively. The null hypothesis is maintained for all nine dependent variables (tables A10d. 1 and A10d.5; A10d. 2 and A10d.6; A10d. 3 and A10d.7).

When comparing the same dependent variables with variable 7.1, which subdivides the respondents into two categories according to whether they are subscribed to research journals or not, the null hypothesis formulated by the Mann-Whitney $U$ test assumes a relatively equal distribution of each dependent variable on the two categories presented. The null hypothesis is maintained for all variables, which means that there appears to be no statistically significant difference between respondents who are also subscribed to research journals and those who are not when it comes to this specific set of variables (tables A10d. 4 and A10d.8).

As for the relationship between these dependent variables, Spearman's correlation coefficient appears to indicate that some correlations between these nine dependent
variables are positive, others are negative, and a few of them are both strong and statistically significant (table A10d.9).

| Variables | Corr. | Sign. | Relationship |
| :---: | :---: | :---: | :--- |
| 15.3 | $.742^{* *}$ | .014 | There appears to be a statistically significant strong <br> correlation between our respondents resorting to digital and <br> multimodal tools to convey meaning in the language <br> classroom and their competence in the use of ICTs |
| 17 | $.765^{* *}$ | .010 | There appears to be a statistically significant strong <br> correlation between our respondents resorting to digital and <br> multimodal tools to convey meaning and how useful they <br> perceive ICTs to be in the language classroom <br> There appears to be a statistically significant strong <br> correlation between our respondents resorting to digital and <br> multimodal tools to convey meaning in the language <br> classroom and the actual use of ICTs in ISL classrooms |
| 18 | $.704^{*}$ | .023 |  |
| 19 | $.94^{* *}$ | $<.001$ | There appears to be a statistically significant very strong <br> correlation between how useful ICTs are perceived to be in <br> ISL classrooms and their actual use |
| 18 | $.066^{*}$ | .036 | There appears to be a statistically significant strong <br> correlation between how useful ICTs are perceived to be in |
| 19 | $.705^{*}$ | ISL classrooms and the role of technology as an active <br> facilitator when it comes to ISL learning <br> There appears to be a statistically significant strong <br> correlation between the idea that technology can be a <br> (passive) facilitator when it comes to ISL learning and how <br> useful and well integrated ICTs are perceived to be in an ISL |  |
| learning environment |  |  |  |

Table 5d.2, Spearman's rank correlation coefficient, sub-question 2d
${ }^{* *}$ The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05

The table above highlights the relationship between the variables that appear to have statistical significance, and they are the only elements concerning this sub-question which can be considered significant. That means that, out of all the dependent variables considered for this sub-question, there only exists a relationship between the couples of variables mentioned above (namely, 15.3 and 17; 15.3 and 18; 15.3 and 19; 18 and 19; 18 and 20.1; 20.2 and 21.1).

### 5.3 Data analysis and results related to research question number 3

The third research question asks:

What approach can be introduced in the language classroom in order to:
a. Help students develop multiple, digital and multimodal literacies;
b. Address the most prominent issues; and, hopefully,
c. Reduce the gap between the specific objectives set for foreign/second language learning and the results achieved by studies conducted in this field.

As mentioned in Chapter 3 (§3.2), it was hypothesised that teachers of both nationalities would highlight the issues that they consider most relevant and problematic in the daily management of their subject, proposing solutions that would not necessarily be easy to put into practice. Issues highlighted in the Slovenian environment and those highlighted in the Italian were also hypothesised to present both similarities and differences, due to the different status held by the languages analysed, both within the school system and without. The transcript of the meeting and the related codes is available for consultation in APPENDIX 15.

### 5.3.1 ISL Focus Group

The transcript of the ISL focus group was analysed individually, but the data that emerged will be compared with the findings from the EFL context in the next chapter.


As done for the EFL meetings ( $\S 4.3 .1$ ), the figure above shows how the encoded excerpts are distributed among the different ISL speakers, and demonstrates how there is a certain imbalance between the different speakers. Indeed, more than half of the
encoded extracts belong to Speaker B, while the other speakers amount to much lower percentages. This explains why many of the quotations in the following paragraphs can be traced back to this speaker.

### 5.3.2 Question 3a: results of the ISL analysis

Question 3a asks "What approach can be introduced in the language classroom in order to help students develop multilayered, digital and multimodal literacies". To answer this sub-question, it was decided to resort to excerpts codified according to the following themes: Literacy in the classroom, Learning objectives, Introduction of Digital Literacy, Multimodality and New Literacies, which contain the necessary information collected by the interviewees regarding their familiarity with these topics and their concrete implementation in the language class.

## a. Understanding the terminology

The first aspect that emerged is the teachers' lack of familiarity with the terminology presented. In a first discussion about the term Literacy itself, Speaker B asks for confirmation that "Literacy is not an Italian expression, an English word is used, right?", and proceeds by proposing the Slovenian version of the term, "funkcionalna pismenost" which, however, actually appears to correspond to the definition of functional literacy. During the meeting, the teachers provide a collective affirmative answer when asked whether the concept of Literacy, linked to plurality, multimodality, and digital competences, is actually difficult to apply in everyday ISL learning or not. Speaker B adds that in this specific area "not much is done, or maybe we are not able to do it, or do not have the right discipline to do it; in these classes where students have family issues, problems with the law, problems of concentration and discipline, Literacy, multimodality and so on are easily overlooked, and teachers are already happy if they are there, at school, there are no rigid programmes to follow ".

The lack of familiarity with the terminology is also confirmed when we are asked to repeat the word "multimodality", which Speaker B could not recall at that exact time and which was later defined as problematic, while, as regards the new forms of Literacy, teachers highlight the lack of critical approach in their students, and appear to disagree with the idea they be automatically considered digital natives. The topic of new
literacies is never approached with the appropriate terminology, but the teachers expressed their opinion about some of the aspects that characterise them, such as critical thinking and their social aspect, several times during the meeting. For example, the students' ability to interact digitally is strongly criticised: "they know how to find some games, play, this sort of things, but if you give them some information to look for they will answer that there is nothing on the internet" (Speaker E), or, on the contrary, that "it says so on the internet and therefore it must be true, they lack any form of critical approach, they are, all in all, passive users" (Speaker B). The interviewees argue that specific training could certainly be beneficial for their students, because even the simplest rules provided by the teachers at both a practical and linguistic level in order, for example, for them to write an email correctly or to be able to work properly with different registers, are rarely put into practice.

## b. The current situation within language classrooms

As far as programmes and learning objectives are concerned, the conversation brings out how "upper secondary schools were forced to lower their starting level, and start from an A2 level instead of a B1", due to the extremely heterogeneous language skills of the students enrolled in the first year, which is partly attributable, according to the teachers, to the lack of preparation provided by elementary schools. This has led to greater difficulties in terms of learning objectives, because, with the teaching hours now available for ISL in upper secondary schools, says Speaker A, "a lot of magic is necessary in order for these students to reach such a level [B2] with 350 hours a year". Speaker B adds that probably "in recent years there has never been a student who enrolled with an A2 starting level and left with a B2 in four years". More will be said about this while analysing the most prominent issues in the following paragraph.

When describing the use of different meaning-making and meaning-transferring modes within the language classroom, several tools used more or less frequently are mentioned, such as mobile phones or computers and projectors (while, according to the teachers, most schools still do not provide interactive whiteboards) and video sharing apps, such as YouTube or Netflix. Speaker A points out that "at least once a week we certainly use these tools, by listening to a song, watching a movie, but, for example, if we are focussing on grammar practice for a certain period of time, we will not be using
technology" as well. It appears, therefore, that technology is perceived as sectoral and not easily compatible with any classroom activity. The choice made by some of their colleagues to try and use communication apps or language exchange apps (such as Skype or Tandem, respectively) in order to establish an authentic linguistic exchange between classes of different origin and backgrounds is also mentioned, but is met with perplexity, because, according to Speakers A and B, they are considered "too artificial, not spontaneous situations" and they also believe that "such a correspondence is not likely to last".

As in the case of the EFL context, it is therefore clear that teachers cannot be expected to propose approaches suited to help students develop multilayered, digital and multimodal literacies if they lack both the knowledge of reference theories and familiarity with technology. It is reiterated how distant these concepts are perceived to be from the reality of the language classroom, and how much work it would require to adopt them, both for teachers and for students.
By providing a description of the situation in the language classrooms, the teachers point out what attempts are made on a daily basis in order to break away from traditional and paper-based approaches, as well as some of the main problems they face, which will be addressed in more detail in the next paragraph.

### 5.3.3 Question 3b: results of the ISL analysis

As mentioned above (§4.3), question 3b asks "What approach can be introduced in the language classroom in order to address the most prominent issues". To answer this sub-question, it was decided to resort to excerpts codified according to the following themes: Issues, and all of its sub-codes (Classroom management, Lack of time, Students' lack of competence, Training and Other, respectively), since they sum up the main issues that emerged in both contexts, which also appear to be limiting elements when it comes to revising the approaches proposed in class, Literacy-wise. More will be said about this at the end of the paragraph.

## a. Time

As mentioned in the previous paragraph, time is a very important issue to address, as
our teachers stress how there are:
I. not enough ISL hours available per year, in the face of
II. an expected jump on the part of the students from an A2 to a B2 level in four years.

The following table collects the most significant passages taken from the Focus Group transcription and categorised as "Lack of time".

| Speaker | Lack of time |
| :---: | :--- |
| All | $[\ldots]$ lime is definitely a problem. |
| A | So, 350 hours from A2 to B2, in my opinion you have to have a lot of magic for <br> these students to be able to reach such a level $[\ldots]$ |
| A | $[\ldots]$ upper secondary schools were forced to lower their standards, we once started <br> from a B1 level, and it was easier in 4 years, with 350,420 hours, to start from B1 <br> and reach B2. |
| B | $[\ldots]$ in my opinion there has never been, or at least in the last twenty years, a <br> student who entered at A2 level and exited at B2 level, I don't think so, I mean, in 4 <br> years this miracle does not happen. |
| D | $[\ldots]$ even if I just want to assess their oral production, how much time am I going to <br> need for 30 people? |
| B | I cannot prepare for each lesson, for each class, three hours, three different lessons, <br> you know, and differentiate, it's just not possible. |

Table 5.7, ISL "Lack of Time" excerpts

According to the teachers, the transition from A 2 to B 2 is extremely difficult with the number of hours available. Regardless of whether or not it is feasible, a higher number of hours or recalibrating the existing learning objectives could improve the learning environment.

## b. Classroom Management

"Classroom Management" is another significantly impacting factor in this sense. The key points that emerge, highlighted by the teachers regarding the daily management of their classes, are the same ones that emerged in the EFL context, namely:
I. number of students per class;
II. relational problems;
III. heterogeneous classes.

| Speaker | Classroom Management | Issue |
| :---: | :--- | :--- | :---: |
| A | $[\ldots]$ in such a large class, because we have large classes, it is difficult to do even <br> just one exercise $[\ldots]$ | I |
| B | $[\ldots]$ if I had unlimited resources I would like more money, that is, more teachers, <br> to be able to differentiate classes $[\ldots]$ | I |
| B | The big problem in advanced level classes, let's say, $[\ldots]$ is that these groups are <br> very heterogeneous, there are children of Italian parents, and there are students <br> who have attended primary and lower secondary school in Italian, and then there | III |
| B | are those who truly don't even understand "What's your name?" |  |
|  | [..] those who speak Italian are bored to death, I apologise to them at the <br> beginning of the first year, $[\ldots]$ but I cannot prepare for each lesson, for each <br> class, three hours, three different lessons, you know, and differentiate, it's just | III |
| B | not possible. |  |
|  | [...] in these classes of students with family issues, problems with the law, <br> problems of concentration and discipline, everything $[\ldots]$, we are already very <br> satisfied if they are there, if they are not on the streets $[\ldots]$ There are no strict <br> programmes to follow. We just try to survive, let's say $[\ldots]$, we try to do what <br> interests them most, if they like football, a class of boys, we will not talk about <br> pollution, we will talk about football. | II |

Table 5.8, ISL "Classroom Management" excerpts

The solution suggested for this ISL context is very similar to the one the EFL teachers came up with, that is, the constitution of smaller classes, with fewer students, thus hiring more teachers and allowing them to better focus on the diversified needs of their students.

## c. Students' lack of competence

Another aspect that emerged recurrently during the meeting was the students' lack of competence in many different areas. The following table contains a selection of the codified passages.

| Speaker | Students' lack of competence |
| :---: | :--- |
| B | Our students have a hard time grasping the meaning of the messages they read. $[\ldots]$ <br> Even more so when there are graphs, when there are pictures involved $[\ldots]$ |
| B | Most students nowadays don't read books, they don't read anything. They take a <br> look and that's it, if they get the message right away it's fine, otherwise they move <br> on. There is a superficiality when it comes to reading [...] |
| A | $[\ldots]$ the last few generations have, in my opinion, a concentration problem $[\ldots]$ <br> C <br> $[\ldots]$ they are very pessimistic, they put up a wall. And then if you, as a teacher, can <br> knock that wall down, that's fine. But if you can't, because some just don't allow us <br> to, then it becomes a problem. |

E [...] they know how to find some games, how to play, but if you give them some information to look for: "But there's nothing on the Internet", you know?
B "But it says so on the Internet, huh, I found it on the Internet, so it's true", right? The non-critical approach. No, no, they are not digital natives [...]
B They are quite passive users. They know how to scroll, they know how to put filters on Instagram, they know how to share photos and videos, this sort of things [...] but they can't write in Word, they don't know how to use a spreadsheet.
Table 5.9, ISL "Students' lack of competence" excerpts

From the ability to manage technological tools when asked to go beyond games and social media, to the difficulties encountered when trying to understand different types of messages, ISL teachers see their students as lacking several skills associated with digital and new literacies, like critical thinking, but also interest and concentration. They also believe that teachers are not the only ones in need of training, technology-wise, and that students could benefit from some sort of training as well.

## d. Other

Several more issues came up and were grouped under the "Other" code, from the primary school system's failure to properly prepare their students before they move on to upper secondary school, to the lack of ability on the part of the students to address their teachers correctly, especially when contacting them by digital means. However, a problem that was perceived as particularly interesting for the purposes of this research and which was strongly emphasised by all the interviewees concerns the relationship that the students have with Italian, per se but also in comparison with English. In fact, the teachers argue that students show a higher level of motivation and interest towards English, where they feel both more confident and more competent. In the case of Italian, teachers witness their lack of motivation, their inability to express themselves, even hatred towards the language at times, whose status as a second language perhaps leads both students and teachers to having higher expectations. The following table contains some of the key points pertinent to this aspect.

## Speaker Other

A As for production, especially oral production, in my opinion theirs can also be a block, because they have a very good command of English, they like English, they are good at it. But they are scarce in Italian, because they don't know how to express themselves.

B [...] I realised that many of my students speak Italian at the same level that they speak English, but if you ask them, I mean, they themselves will say "no, no, I just don't understand Italian, I can't say anything ", and instead they'll say they can speak English well [...] maybe we are partly the cause of this, us teachers, the system, or at least the fact that Italian is the second language here, because if we taught Italian as a foreign language, then probably our students would be considered to be just as good in Italian as they are in English, but since you should already be able to speak Italian once you get to school because it is our second language, and the second language is a language that you're supposed to speak almost like your own, then the expectations are perhaps higher, aren't they? And then of course there is no input from other media, it does not come from outside, Italian is only the subject that you study at school.
A [...] as regards the final exams, most of them choose English, not Italian [...]
A [...] surely the cause is that these are the generations that use the Internet, they play, and all the games, the video games are in English [...]
D [...[they arrive like this, with a hatred for Italian, in my opinion, and many times you have to know how to make your students love you, first as a teacher, and then as a language [...]
E And it is also true that they have English three or four times a week, Italian twice.
E They lack both motivation and the desire to learn Italian [...]
D [...] they don't see the advantage of knowing Italian [...]
D I would like to see a little more motivation because frankly knowing another language can always be useful, but they can't understand it [...]
C [...] the most talented and motivated ones, let's say, some of them, many times they switch to the other side, because their motivation drops [...]
Table 5.10, ISL "Other" excerpts

Speaker D suggested that teachers need to be able to build a relationship with their students first if they want them to approach language learning with a different, more positive attitude. Speaker B, on the other hand, focusses on the difficulties experienced when trying to involve them or to find the best way to approach them, and on the resulting frustration. Someone ascribes these difficult relationships and lack of understanding also to the age gap between teachers and students, and to the progressive detachment they were able to observe over time, to the point of suggesting the need for younger teachers who, although lacking in experience, would certainly have the advantage of being able to find a meeting point more easily (Speakers A and E).

## e. Teacher training

This leads us to elaborate on another aspect, namely whether teachers are able to upskill through professional development courses or not, and what difficulties they encounter
in the process. What emerged from the meeting testifies to the presence of many diverse occasions in this sense, but the non-obligatory nature of the courses results in a rather low percentage of attendance. The following table sums up the most relevant pieces on information when it comes to teacher training.

```
Speaker Training
    C [...] each of us teachers should do some updating to keep up with the times, with
        technologies, but not just technologies, in general, just to be a little updated.
    A [...] it should be decided at an institutional level, that every teacher should be
        present in some training course every two years or so, because there are some
        teachers who perhaps have not shown up at some of those courses for years and
        years.
    C [...] however, even these refresher courses dedicate little time to practice, that is, to
        discussion, to the exchange of ideas.
    B [...] a lot is offered, various types of seminars: online, face-to-face, among us
        teachers, with professors, Italian teachers, with those of the university, there is a bit
        of everything, except that the participation is very low on the part of the teachers.
    B It is not a waste of time, because this would be a big presumption, to think that you
        already know everything and to think you'd be attending something from which
        you would not be able to draw anything.
    C [...] many people I know have said: "What am I going to do there, they always say
        the same things".
```

Table 5.11, ISL "Training" excerpts

If proposing a compulsory presence for teachers in refresher courses at least once every couple of years could prove useful in order to start tackling some of the emerging issues, there are others, such as the attitude with which students approach ISL learning, which are made up of such a number of historical, social and linguistic aspects that make it impossible to come up with a quick and decisive solution. The teachers themselves came up with some ideas and approaches that work for them, and others that do not, in the ISL context, and they will be dealt with in the following paragraph, while a more in-depth discussion and reflection on the data presented will follow in the next chapter.

As we mentioned at the beginning of this paragraph, addressing these issues would be beneficial regardless of whether or not they are considered limiting factors for a Literacy-oriented revision of the approaches proposed in the language classroom. The teachers were aware of the fact that some of the solutions they proposed are far from possible, at least not without major changes that include more funds to hire more
teachers, have available larger bigger spaces, and training for both teachers and learners so as to better benefit from the use of different tools and devices.

As with the EFL context, though, one aspect that was highlighted concerns the fact that research is perceived as distant from the everyday school reality, which is the reason why the problems highlighted, which are not perceived as taken into consideration by research, seem difficult to tackle on the one hand and preponderant with respect to any proposal and approach that comes from research on the other, as they are much more concrete in their daily teaching reality.

For this reason, the aspects dealt with in this paragraph, although not directly linked to Literacy and its many facets, clarify what the problems are that ISL teachers perceive as most relevant as well as partly responsible for the difficulties to be encountered in updating approaches that introduce Literacy into the classroom ISL practices.

### 5.3.4 Question 3c: results of the ISL analysis

Question 3c asks "What approach can be introduced in the language classroom in order to reduce the gap between the specific objectives set for foreign/second language learning and the results achieved by studies conducted in this field".

To answer this sub-question, it was decided to resort to excerpts codified according to the following themes: Ideas and Research and school and their sub-codes (What works and What doesn't work; Teachers and research, respectively), as they deal with the interviewees' knowledge of and relationship with research in this field of language education, and report their views on what appears to work and what does not within ISL classrooms.

## a. Everyday teaching

The ISL context once again turns out to be not unlike the EFL one. In fact, the interviewees point out that, in their opinion, research takes very little account of the reality of the school system. The gap is considered to be very wide and evident, and while everyone deems it useful to keep up to date with regard to the research studies that are carried out in their field, it looks like few teachers are regular readers of theories and research studies, especially in recent years, as the current Covid-19 emergency has been providing schools with more pressing matters to attend to. It appears that the
average contact teachers have with research is neither consolidated nor frequent, and, if it occurs, it is mainly through training. It all comes down, Speaker B says, to how interested each person is: the offer is vast, attendance and motivation much less so.
The fact that younger teachers would be valuable is reiterated, because to some interviewees the divide deriving from the age difference creates too big a fracture between the world of the teachers (with their ideas and viewpoints) and that of their students. If there were unlimited resources, Speaker B states that she would like more money to be able to hire more teachers and thus reorganise the classes, forming more groups, not only to have fewer students per class group, but also to be able to differentiate between their different starting language level, in order to address them properly and to make the learning process less frustrating for everyone.

## b. What works and what does not

An issue that emerges quite evidently is the fact that students struggle when it comes to speaking, both because they are afraid of making mistakes and because they are mainly used to writing, in their second language as well as in their native one. They also have difficulty grasping the meanings of messages, especially if they involve the interpretation of graphs or images: these are all important pieces of information to keep in mind when proposing activities and drafting approaches. To overcome these difficulties, various activities are described as being usually effective: according to Speaker A, for example, it looks like students really appreciate working in groups and using technological devices. In the wake of this argument, the interviewees proceed to illustrate other activities specifically designed with the intention of making them break away from more classic and traditional lessons: CLIL is proposed, as well as different types of games (such as mind maps); a musical approach (Sfera ebbasta was mentioned); the use of mobile phones to access the Ikea web page in order to try to furnish a room during the lessons focussing on the appropriate vocabulary and so forth. Speaker B adds that schools often have a policy that foresees, when they first organise the timetable at the beginning of the school year, that one of the two ISL hours per week is to be carried out by the Italian teacher, while the second sees the presence of a second teacher to support the ISL colleague: the topics discussed can be many, from economics to geography or sports education, all conveyed in Italian, which therefore covers the role of vehicular language. Another activity that seems to work, although it is very
rarely put into practice, involves introducing in the language classroom any Italian Erasmus students: the classes are divided into groups, each interacting with one native speaker: they are thus forced to use their second language without ever resorting to Slovenian, which gives them the opportunity to have authentic language exchanges.

The gap between the two worlds is thus confirmed to be wide, even in the ISL context, where some learning objectives appear difficult to achieve regardless of whether the concept of Literacy is taken into account or not. The problems to be solved are upstream: if teachers struggle with everyday teaching and with the achievement of the established objectives (such as students reaching a B2 level by the end of the course of study), they will hardly be able or motivated enough to consider training and the necessary adjustments to conceive and propose different approaches.

If some teachers draw little from the world of research, and also, it seems, from training opportunities, it is very difficult to think that they can provide hypotheses of approaches aimed at reducing the gap between this world and their daily didactic reality. However, activities and strategies that seem to work more than others were highlighted, and the main hindering problems were reiterated. This reflection takes into account what emerged from the analyses mentioned in this chapter: for it to be possible to introduce the multiple definitions and applications of the concept of Literacy in second language classes, we need to start by evaluating what works and investigating if and how we can better address the problems encountered by teachers. This can therefore be a starting point for future research to understand what the strengths and weaknesses to be considered are in order to address and potentially reduce this gap. It is therefore a question of focusing on tailor-made training first, which involves investigating what the points on which it is necessary to intervene are.

In conclusion, the analyses carried out led us to the following results:

- the school system does not establish specific learning objectives vis-à-vis literacy for foreign language learning in upper secondary schools, which implies the existence of a gap between school and research when it comes to the development of multiple forms of literacy. The concept of digital literacy, however, is taken into account;
- the level of awareness that upper secondary school teachers appear to have regarding the evolution of recent studies within the language education field,
with particular attention paid to literacy, in its multiple definitions, is quite limited.
- as a natural consequence, therefore, so is the teachers' perception of the hypothesised gap between research and the specific learning objectives established for second language education vis-à-vis in upper secondary schools;
- the teachers' competence in the use of technological tools in language learning per se seems to be adequate, while their awareness when it comes to using such tools in developing digital and multimodal literacies appears to be limited;
- due to the points mentioned above, no proposals have emerged for approaches that can be introduced in the language classroom in order to help students develop multiple, digital and multimodal literacies and reduce the gap between the specific objectives set for foreign language learning and the results achieved by studies conducted in this field;
- several other issues that have to do with everyday teaching were highlighted, and research and the school system may wish to take them into consideration before proceeding with the introduction of other topics and approaches in the language classes.


## CHAPTER 6. EFL AND ISL COMPARISON

After reporting the results of the analyses carried out in the previous chapters (see Chapters 4 and 5), the following paragraphs compare the EFL results with the ISL findings, presenting them according to the order of our research questions and related sub-questions.

### 6.1 Research question number 1: EFL and ISL comparison

The first research question ( $\S 3.2, \S 4.1, \S 5.1$ ) asks:


#### Abstract

Does the school system establish specific learning objectives vis-à-vis literacy for foreign and second language learning? If so, what are they? Is there a gap between them and the conclusions drawn from the most recent language education studies in the field, especially when it comes to the development of multilayered, digital and multimodal literacies?


In a more or less detailed way, the normative references of both contexts introduce elements related to ICT use and hint at the development on the part of the students of skills such as critical thinking, despite never inserting them in any way into an actual Literacy framework. Thus, in the articulation of the learning objectives that students are expected to reach (see $\S 4.1$ and $\S 5.1$ ), findings indicate a generalised absence of the concept of Literacy, and consequently of all its plural and multimodal facets.

The significant difference between the two environments consists in the fact that the ISL context does not merely list some ICT skills, but introduces the concept of Digital Literacy. Now, the term pismenost is used several times in both the Slovenian documents examined, and its translation, at least in a language like Italian (which, unlike English, does not have multiple terms to choose from), would be alfabetizzazione, or alphabetization, rather than literacy. There appear to be several terminology-related issues that recur throughout this entire research project, and they deserve to be acknowledged and addressed in their own right (see Chapter 7, paragraph §7.3). However, the fact that some of those specific objectives concern, among other things, the safe and critical use [of ICTs] in learning and communication and the
presentation of the [students'] own products, thus involving elements such as a critical approach and meaning-making, makes them fully fall within the concept of digital literacy.

Furthermore, the concept of digital literacy mentioned in the Slovenian context comes from the fact that both the Slovene normative documents (Šečerov and Zorman, 2008; Šečerov et al., 2010) report and illustrate the Recommendations on key competences for lifelong learning provided by the European Council in 2006, which the Italian context merely mentions en passant, and not even in all documents. This has led to further reflections, which are developed more in depth in paragraph §7.2.

Our findings lead us to conclude that:

- there are no overtly specified learning objectives vis-à-vis literacy (and its plural and multimodal facets) established for foreign language learning in Italian upper secondary schools;
- the only specific learning objective vis-à-vis literacy in Slovenian upper secondary schools concerns the development of digital literacy on the part of the students;
- the gap between said learning objectives and the conclusions drawn from the most recent studies in the field of language education exists in both contexts and appears to be very wide in the Italian context and more moderate in the Slovene one.


### 6.2 Research question number 2

As mentioned in paragraph $\S 5.2$, a low number of observations poses a considerable problem for the use of inferential statistics. As there is a notable difference between the two samples (EFL and ISL) in terms of their size, the results obtained are likewise different. In the EFL context, in fact, statistically significant results were obtained on many occasions, which makes them potentially generalisable to the entire population in our case, teachers of English as a foreign language in Italian upper secondary schools. In the ISL context, however, such results were not possible. For this reason, therefore, descriptive statistics only (and not inferential statistics) will be used to compare the data
of the two questionnaires (which can be consulted in full in APPENDICES 5 and 8). The sub-questions will be addressed one at a time.

In the previous chapters ( $\S 4.2 .1$ and $\S 5.2 .1$ ) an overview of the background data concerning our respondents was provided: two thirds of the EFL respondents teach in a Liceo, the remaining third in technical and professional schools. The largest group belongs to "Liceo Scientifico", the smallest one to "Liceo Artistico". As for ISL respondents, half of them teach in both gimnazija and technical and professional schools, while the others are distributed between the two types of upper secondary school, with only one teacher teaching in gimnazija only.

In terms of teaching experience, the vast majority of our respondents has been teaching for a period of time ranging from 11 to 30 years (in case of ISL teachers, 20 years or more) while most of them are aged between 41 and 60 .

### 6.2.1 Research question 2a: EFL and ISL comparison

Sub-question 2a asks "What level of awareness vis-à-vis literacy is there within the school system regarding the specific learning objectives established for foreign and second language education in upper secondary schools".

The general premise is that, in the EFL context, $95.7 \%$ of respondents state that they are aware of the specific learning objectives, and $89.6 \%$ that they have read the national guidelines (table A5.4 ${ }^{49}$ ); in the ISL context, $100 \%$ of teachers declares that they have both read the national guidelines and that they are aware of the specific learning objectives (table A8.4). As for the concept of Literacy, all ISL respondents (100\%) believe that it is something that teachers should focus their attention on in a language education environment, as do $98 \%$ of EFL teachers (tables A5.14 and A8.14).

[^34]| The specific learning objectives... | Strongly Agree |  | Agree |  | Partially Agree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | EFL | ISL | EFL | ISL | EFL | ISL |
| ...are suitable for the curricula proposed | 10\% | 10\% | 47\% | 70\% | 33.4\% | 20\% |
| ...are suitable for a multicultural environment | 8.4\% | 20\% | 44.3\% | 40\% | 35.5\% | 40\% |
| ...are suitable for a digital environment | 7.3\% | 0\% | 39.8\% | 30\% | 37\% | 50\% |
| ...are suitable for a multimodal environment | 6.4\% | 10\% | 35.5\% | 50\% | 36.6\% | 40\% |
| ...need to be concretely implemented in class | 26.8\% | 0\% | 51.8\% | 40\% | 15\% | 50\% |
| ...need to be updated | 32.1\% | 60\% | 33.6\% | 10\% | 21.1\% | 30\% |
| ...are discussed by the teachers | 34.1\% | 40\% | 26.1\% | 40\% | 23.9\% | 0\% |
| ...and the approaches for the students to meet them are revised by the teachers | 39.8\% | 20\% | 35\% | 80\% | 15.9\% | 0\% |

Table 6.1, The specific learning objectives for language education, EFL and ISL comparison

As can be seen from the table, most EFL respondents appear to agree to some extent with the statement according to which the specific learning objectives established for EFL are suitable for the curricula proposed by the upper secondary school they teach in $(\mathrm{SA}=10 \% ; \mathrm{A}=47 \% ; \mathrm{PA}=33.4 \%)^{50}$, for a multicultural learning environment $(\mathrm{SA}=$ $8.4 \% ; \mathrm{A}=44.3 \% ; \mathrm{PA}=35.5 \%$ ), for a digital environment $(\mathrm{SA}=7.3 \% ; \mathrm{A}=39.8 \% ; \mathrm{PA}$ $=37 \%)$ and a multimodal environment $(\mathrm{SA}=6.4 \% ; \mathrm{A}=35.5 \% ; \mathrm{PA}=36.6 \%)$. At the same time, though, they strongly support the need for those specific learning objectives to be concretely implemented in class ( $\mathrm{SA}=26.8 \% ; \mathrm{A}=51.8 \% ; \mathrm{PA}=15 \%$ ) as well as updated $(\mathrm{SA}=32.1 \% ; \mathrm{A}=33.6 \% ; \mathrm{PA}=21.1 \%)($ table A 5.6$)$. A similar level of agreement exists for the items according to which our respondents actively participate in discussing said learning objectives $(\mathrm{SA}=34.1 \% ; \mathrm{A}=26.1 \% ; \mathrm{PA}=23.9 \%)$ and in revising the best possible approaches so that their students can meet them ( $\mathrm{SA}=39.8 \%$; $\mathrm{A}=35 \% ; \mathrm{PA}=15.9 \%$ ) (table A5.5).

As can be seen from the above table, in the ISL context a very similar situation occurs: we can in fact observe how, on the one hand, our respondents seem to support (with varying levels of agreement) the notion according to which the specific learning

[^35]objectives established for ISL are suitable for the curricula proposed by the upper secondary school they teach in ( $\mathrm{SA}=10 \% ; \mathrm{A}=70 \% ; \mathrm{PA}=20 \%$ ), as well as for a multicultural learning environment $(S A=20 \% ; \mathrm{A}=40 \% ; \mathrm{PA}=40 \%)$, for a digital environment $(\mathrm{SA}=0 \% ; \mathrm{A}=30 \% ; \mathrm{PA}=50 \%)$ and a multimodal environment $(\mathrm{SA}=$ $10 \% ; \mathrm{A}=50 \% ; \mathrm{PA}=40 \%$ ), sometimes even reaching $100 \%$ when different response options are combined. On the other hand, though, they strongly support the need for said objectives to be updated ( $\mathrm{SA}=60 \% ; \mathrm{A}=10 \% ; \mathrm{PA}=30 \%$ ) and concretely implemented in class ( $\mathrm{SA}=0 \% ; \mathrm{A}=40 \% ; \mathrm{PA}=50 \%$ ) (table A8.6). As for their active participation in discussing said learning objectives ( $\mathrm{SA}=40 \% ; \mathrm{A}=40 \%$; $\mathrm{PD}=20 \%$ ) and in revising the best possible approaches to help their students meet them ( $\mathrm{SA}=$ $20 \%$; A $=80 \%$ ), our ISL respondents' level of agreement still proves to be extremely high (table A8.5).

| The specific learning objectives | Strongly Agree |  | Agree |  | Partially Agree |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| take.... | EFL | ISL | EFL | ISL | EFL | ISL |
| ...the concept of Literacy into account | $13.9 \%$ | $20 \%$ | $42 \%$ | $10 \%$ | $28.4 \%$ | $60 \%$ |
| $\ldots$..technology into account | $42.7 \%$ | $70 \%$ | $43 \%$ | $30 \%$ | $11.8 \%$ | $0 \%$ |

Table 6.2, Literacy and technology in the specific learning objectives, EFL and ISL comparison

As for the concept of Literacy, $60 \%$ of ISL teachers only partially agree with the item stating that it is taken into consideration by the specific learning objectives established for foreign and second language education in upper secondary schools, while most EFL respondents agree ( $42 \%$ ), some strongly agree ( $13.9 \%$ ), and others only partially agree (28.4\%) (tables A8.14 and A5.14). On the other hand, the percentage of agreement reached by both contexts ( $\mathrm{EFL}: \mathrm{SA}=42.7 \% ; \mathrm{A}=43 \% ; \mathrm{PA}=11.8 \%$; and $\mathrm{ISL}: \mathrm{SA}=$ $70 \%$; $\mathrm{A}=30 \%$ ) is almost absolute when it comes to the item according to which technology is something that said objectives should take into account (tables A5.21 and A8.21).

At the level of descriptive statistics, therefore, the two contexts seem to present more similarities than differences for this specific sub-question. Some data appear to be conflicting: if, on the one hand, the established learning objectives seem to be considered adequate from multiple points of view (digital, multimodal, multicultural, and so forth), on the other the need for their update is strongly supported.

The fact that most respondents believe that the concept of Literacy is taken into consideration by the national guidelines (see table 6.2 above), does not seem to go hand in hand with what emerge from both the focus groups or the documentary analysis. The key to understanding these data comes from a consideration made in the two previous chapters (i.e., §4.3.2 and §5.3.2) regarding the fact that the relationship that most teachers have with research is, at the very least, quite distant, which is reflected in the lack of familiarity they seem to have when it comes to both terminology and definitions, as well as with the directions taken by recent studies in the field of language education. If the term Literacy (and all its multiple facets) is not perceived as clear, or is misunderstood altogether as a synonym of 'alphabetization', findings are likely to reflect the different viewpoints and definitions, thus appearing contradictory. More considerations will be drawn in the following paragraphs and especially in the next chapter, dedicated to discussing our results.

### 6.2.2 Research question 2b: EFL and ISL comparison

Sub-question 2b asks "What level of awareness vis-à-vis literacy is there within the school system regarding the evolution of recent studies within the language education field, with particular attention paid to literacy, in its multiple definitions".

## a. Research

First of all, it is necessary to highlight the relationship that respondents claim to have with research, as it may influence their level of awareness regarding the evolution of recent studies vis-à-vis literacy within the language education field.

|  | Subscribed to research journals |  | Researcher |  | Author |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Yes | No | Yes | No |
| EFL | 25.9\% | 74.1\% | 17.7\% | 82.3\% | 7.5\% | 92.5\% |
| ISL | 20\% | 80\% | 0\% | 100\% | 0\% | 100\% |

Table 6.3, Respondents and research, EFL and ISL comparison

In the ISL context no respondent identifies as a researcher or author, while the respective percentages for EFL teachers reach $17.7 \%$ and $7.5 \%$. In terms of subscription
to research journals, it concerns $25.9 \%$ of EFL respondents and $20 \%$ of ISL respondents (tables A5.7 and A8.7). As far as the EFL context is concerned, there is no correspondence between the samples: those who define themselves as authors do not necessarily also define themselves as researchers or subscribers to research journals and vice versa. This being said, question number 8 (which concerns the respondents' "knowledge of recently published studies in the field of language education") is one of those with the highest degree of disagreement in both contexts.

| Language teachers... | EFL | ISL | EFL | ISL | EFL | ISL |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\ldots$ independently consult websites and | SA $^{51}$ | SA | A | A | PA | PA |
| online resources | $46.3 \%$ | $10 \%$ | $30 \%$ | $20 \%$ | $10.9 \%$ | $50 \%$ |
| $\ldots$ are encouraged by the school to | SD | SD | D | D | PD | PD |
| look for updates in this field | $9.3 \%$ | $0 \%$ | $13 \%$ | $0 \%$ | $18.6 \%$ | $40 \%$ |
| $\ldots$ are provides with updated resources | $17.9 \%$ | $10 \%$ | $16.8 \%$ | $10 \%$ | $17.9 \%$ | $20 \%$ |
| $\ldots$ receive updates in the field of | $7.7 \%$ | $10 \%$ | $8.2 \%$ | $10 \%$ | $12 \%$ | $50 \%$ |
| language education |  |  |  |  |  |  |

Table 6.4, Relationship with research in the field of language education, EFL and ISL comparison

While a fair percentage of both EFL and ISL respondents state that they independently consult websites and online resources (SA = EFL 46.3\%, ISL 10\%; A = EFL 30\%, ISL $20 \%$; PA $=\mathrm{EFL} 10.9 \%$, ISL $50 \%$ ), the statements according to which their school encourages teachers to look for updates in this field ( $\mathrm{SD}=9.3 \% ; \mathrm{D}=13 \% ; \mathrm{PD}=$ $18.6 \%$ ) or that it provides them with updated resources ( $\mathrm{SD}=17.9 \% ; \mathrm{D}=16.8 \% ; \mathrm{PD}=$ $17.9 \%$ ) reach high percentages of disagreement in the EFL context (table A5.8). Such results are slightly more moderate in the ISL context ( $\mathrm{SD}=0 \% ; \mathrm{D}=0 \% ; \mathrm{PD}=40 \%$ and $\mathrm{SD}=10 \% ; \mathrm{D}=10 \% ; \mathrm{PD}=20 \%$, respectively), where teachers instead declare that they do not receive updates in the field of language education ( $\mathrm{SD}=10 \% ; \mathrm{D}=10 \% ; \mathrm{PD}=$ $50 \%$ ) as much as their EFL colleagues ( $\mathrm{SD}=7.7 \% ; \mathrm{D}=8.2 \% ; \mathrm{PD}=12 \%$ ) (table A8.8).

## b. Terminology

As for their familiarity with terms related to the present research, such as 'Literacy' and 'Digital Literacy', 'Multimodality' and 'New Literacies', most teachers claim that they have come into contact with them ${ }^{52}$ by consulting research studies or, to a lesser extent,

[^36]during professional training courses: the percentages related to their introduction in the classroom are much lower (and low overall).

| Contact with the following terms | Teacher Training |  | Never |  |
| :--- | :---: | :---: | :---: | :---: |
| (number of teachers) | EFL | ISL | EFL | ISL |
| Literacy | 216 | 6 | 11 | 3 |
| Digital Literacy | 241 | 7 | 19 | 2 |
| Mode | 186 | 4 | 100 | 4 |
| Medium | 214 | 2 | 66 | 6 |
| Multimodality | 209 | 8 | 83 | 1 |
| Multimodal Text | 187 | 9 | 100 | 1 |
| Learning styles | 271 | 5 | 7 | 0 |
| Learning modalities | 241 | 5 | 30 | 0 |
| Multiliteracies | 157 | 3 | 124 | 5 |
| New Literacies | 162 | 3 | 121 | 5 |

Table 6.5, EFL and ISL comparison

The terms which the teachers declare that they are less familiar with do not vary excessively when comparing the findings of the two questionnaires: the four that stand out in the EFL context, concerning about one in four teachers, are Multiliteracies (124 teachers), New Literacies (121), Mode (100) and Multimodal Text (100) (table A5.11). In the ISL context, in addition to Multiliteracies and New Literacies ( 5 teachers each), 6 out of 10 teachers declare that they never come in contact with the term Medium and 4 with the term Mode (table A8.11).
Those terms most taken into consideration by training courses vary significantly from one context to the other: 9 out of 10 teachers in the ISL context cite Multimodal Texts and 8 mention Multimodality, which are referred to by less than half of the EFL teachers (187 and 209 respectively). While Learning Styles ( 271 teachers out of 440) obtain the highest score in the Italian context, they are only acknowledged by one teacher out of two in the Slovenian one. Literacy and Digital Literacy follow with good percentages in both contexts (see tables A5.11 and A8.11).

Judging from the definitions provided when answering questions 12 and 16 (which concern the definitions of Literacy and Digital Literacy, respectively), however, it is

[^37]evident that research and training courses are unable to provide a clear and unambiguous presentation of either concept.

## c. Literacy

$22.5 \%$ of EFL teachers define Literacy as the "ability to read and write", $13.5 \%$ as "competence in a specific field", and $10.5 \%$ as broad "language skills", to name the most prominent groups.

| Literacy definitions | EFL | ISL |
| :--- | :---: | :---: |
| Empty set | $1.8 \%$ | $20 \%$ |
| One word | $5.5 \%$ | $30 \%$ |
| Comprehension | $4.5 \%$ | $10 \%$ |
| Ability to read and write | $22.5 \%$ | $20 \%$ |
| Ability to read and write and communication | $0 \%$ | $20 \%$ |
| Competence in a specific area | $13.9 \%$ | $0 \%$ |
| Ability plus competence | $4.5 \%$ | $0 \%$ |
| Four skills | $5 \%$ | $0 \%$ |
| Language skills | $10.5 \%$ | $0 \%$ |
| Communication and interaction | $8.4 \%$ | $0 \%$ |
| (Language) education | $9.8 \%$ | $0 \%$ |
| Social skills | $3.6 \%$ | $0 \%$ |
| Personal growth \& lifelong learning | $5 \%$ | $0 \%$ |
| Complex analysis | $5 \%$ | $0 \%$ |

Table 6.6, Literacy definitions, EFL and ISL comparison

If we exclude $5 \%$ of definitions that are more articulated, often copied and pasted from already existing definitions (see paragraph $\S 4.2 .3$ ), some other options see it as a synonym for 'education', sometimes 'language education' specifically ( $9.8 \%$ ), as communication and interaction skills ( $8.4 \%$ ), or as a synonym of 'alphabetization' (5.5\%) (table A5.12).

As can be seen from the table above, the definitions provided in the ISL context are less heterogeneous, probably because of the low number of respondents: those who stand out the most are synonyms ( $30 \%$ ) and the 'ability to read and write', on its own ( $20 \%$ ), or including the ability to communicate (20\%) (table A8.12).

| Literacy... | Partially Disagree |  | Disagree |  | Strongly Disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | EFL | ISL | EFL | ISL | EFL | ISL |
| ...is a plural concept | 2.3\% | 10\% | 1.4\% | 0\% | 0.9\% | 0\% |
| ...is a multimodal concept | 1.6\% | 10\% | 2.3\% | 0\% | 0.9\% | 0\% |
| ...enables students to achieve their goals | 2\% | 0\% | 2\% | 0\% | 0\% | 0\% |
| ...enables students to develop their knowledge | 1.1\% | 0\% | 1.6\% | 0\% | 0.2\% | 0\% |
| ...enables students to develop their potential | 1.8\% | 0\% | 1.8\% | 0\% | 0.2\% | 0\% |

Table 6.7, The concept of Literacy, EFL and ISL comparison

These definitions, though, do not appear to match the answers provided to the items describing the concept of Literacy in question 14 ("The concept of Literacy"), where it is defined as plural and multimodal, able to help students achieve their goals and develop their knowledge and potential. The overall percentage of disagreement that these items reach (made up of the sum of SD, D and PD) never exceeds 5\% in the EFL context and $10 \%$ in the ISL context: when compared with the vast majority of the definitions reported above, these appear to be extremely contradictory (tables A5.14 and A8.14).

## d. Digital Literacy

The situation regarding Digital Literacy is very similar, and the notion appear to be unclear to the respondents: $26.8 \%$ of EFL teachers describe it as "familiarity with digital devices", $10.7 \%$ as "digital skills for education", while $8.9 \%$ provides a complex analysis, sometimes copied and pasted from existing definitions (see paragraph §4.2.3). This is followed by 'the ability to retrieve and share information', 'ICT competence', 'media competence' and seven other categories (table A5.16). Limited by the smaller number of respondents, the ISL context is less varied: half of the ISL teachers define it as 'ICT skills' (50\%) (table A8.16).

| Digital Literacy definitions | EFL | ISL |
| :--- | :---: | :---: |
| Empty set | $3,4 \%$ | $10 \%$ |
| One word | $3,4 \%$ | $20 \%$ |
| Familiarity with digital devices | $26,8 \%$ | $0 \%$ |
| Media competence | $4,5 \%$ | $0 \%$ |


| ICT competence | $7,5 \%$ | $50 \%$ |
| :--- | :---: | :---: |
| Retrieving information | $5,2 \%$ | $0 \%$ |
| Sharing information and communicating | $8,6 \%$ | $0 \%$ |
| Retrieving and sharing information | $8,6 \%$ | $0 \%$ |
| Ability to decipher digital texts | $6,4 \%$ | $0 \%$ |
| Digital skills for education | $10,7 \%$ | $0 \%$ |
| Personal growth, goal-orientedness | $5,9 \%$ | $0 \%$ |
| Complex analysis | $8,9 \%$ | $20 \%$ |

Table 6.8, Digital Literacy definitions EFL and ISL comparison

These contradictory data indicate that the teachers' familiarity with research is, on the whole, hazy and limited. This can be inferred both from the answers provided to specific statements (only one in four teachers is subscribed to research journals in the EFL context, one in five in the ISL one) and from more implicit considerations. For example, the fact that the definitions provided to the concepts of Literacy and Digital Literacy, for the most part, reflect ideas and definitions that have long since been outdated by the world of research; most terms which the teachers declare that are not part of their daily teaching lives are linked to the multiple forms of Literacy (Multi-, New -) and to the concept of multimodality in both contexts.

Furthermore, it seems that training, which could easily act as a bridge between research and school, appears to be lacking when it comes to certain topics. This aspect, which was already discussed during the analysis of the focus groups, is confirmed by the fact that both EFL and ISL teachers state that the terms least encountered in the course of their education and training are 'Literacy' and 'Digital Literacy'.

The relationship that language teachers have with the world of research, Literacy-wise, therefore, still appears to be far from stable and consolidated. In this sense, it would be useful to re-evaluate the role of professional education and training opportunities in favouring a dialogue between school and research.

### 6.2.3 Research question 2c: EFL and ISL comparison

Sub-question 2c asks "What level of awareness vis-à-vis literacy is there within the school system regarding the gap between $2 a$ and $2 b$, namely between the specific learning objectives established for foreign and second language education and the evolution of recent studies within the language education field".

In evaluating the relationship that exists between research and the approaches proposed in the language classrooms, findings from both the EFL and ISL questionnaires show that the data collected are not consistent either with what emerges from the documentary analysis, which highlights the existence of a gap (wide for the EFL context and moderate for the ISL one, see §6.1) between school and research, or with the focus groups and interview, which, at this juncture, provided similar results to those that emerged from the documentary analysis ( $\S 4.3$ and $\S 5.3$ ).

| Research in the field of language <br> education... | Strongly Agree | Agree | Partially Agree |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| _..and the specific learning objectives <br> established for the target language are <br> in step | EFL | ISL | EFL | ISL | EFL | ISL |
| ...and the approaches proposed in class <br> are in step | $3.9 \%$ | $0 \%$ | $35 \%$ | $30 \%$ | $43.4 \%$ | $60 \%$ |
| ... is the basis on which school <br> curricula are updated | $2.1 \%$ | $0 \%$ | $23 \%$ | $30 \%$ | $37 \%$ | $30 \%$ |
| ...is the basis on which the specific <br> learning objectives are updated | $2.1 \%$ | $0 \%$ | $26.9 \%$ | $30 \%$ | $35.2 \%$ | $30 \%$ |
| ..fails to take into account many <br> factors involved in everyday school <br> reality | $29.3 \%$ | $20 \%$ | $32.3 \%$ | $80 \%$ | $22.5 \%$ | $0 \%$ |

Table 6.9, Perceived relationship between school and research, EFL and ISL comparison

The questionnaires themselves appear to provide contradictory data, as the answers provided to different questions seem to indicate different viewpoints. In fact, teachers agree, at least partially, with the fact that the specific learning objectives established for the target language ( $\mathrm{A}=\mathrm{EFL} 35 \%$, ISL $30 \%$; PA $=$ EFL 43.4\%, ISL 60\%) and the approaches proposed in class ( $\mathrm{A}=\mathrm{EFL} 36.4 \%$, ISL 20\%; PA = EFL 40.9\%, ISL 70\%) are up to date with the most recent studies in the field of language education (tables A5.9 and A8.9). The level of agreement slightly decreases when it comes to the fact that the curricula and said specific learning objectives are updated on the basis of the results obtained from the research studies in this field. Nonetheless, slightly contradicting what has been said so far, most respondents also agree with the statement according to which many studies fail to take into account several factors (first of all the relational aspect) that are part of the daily reality of the school system (SA = EFL 29.3\%, ISL 20\%; A = EFL 32.3\%, ISL 30\%; PA = EFL 22.5\%, ISL 40\%) (tables A5.9 and A8.9).

| My school... | EFL |  | ISL |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Yes | No | Yes | No |
| ...promotes digital approaches | $91.6 \%$ | $6.8 \%$ | $100 \%$ | $0 \%$ |
| $\ldots$ promotes multimodal approaches | $78 \%$ | $12.7 \%$ | $100 \%$ | $0 \%$ |
| ...promotes multicultural approaches | $70.7 \%$ | $20 \%$ | $100 \%$ | $0 \%$ |
| ...provides training opportunities that allow teachers to | $63.6 \%$ | $30.7 \%$ | $60 \%$ | $20 \%$ |
| stay up to date |  |  |  |  |
| ...provides teachers with tools and means to do research | $31.8 \%$ | $51.6 \%$ | $30 \%$ | $50 \%$ |
| ...provides teachers with tools and means to do research | $24.8 \%$ | $57.7 \%$ | $20 \%$ | $60 \%$ |

Table 6.10, EFL and ISL comparison

As for the support provided by educational institutions, the high percentage of teachers stating that their school promotes digital ( $91.6 \%$ EFL, $100 \%$ ISL) and multimodal ( $78 \%$ EFL, $100 \%$ ISL) approaches decreases significantly in both contexts (EFL and ISL) when it comes to providing practical support, as about 6 out of 10 teachers say that their school supplies training opportunities for teachers to stay up to date, while only about 3 out of 10 claim that it invites teachers to do research and provides them with the appropriate tools to do so (tables A5.10 and A8.10).

On the basis of what has been discussed in the previous paragraph, however, it is clear that the answers provided in this area by the teachers of both contexts can be considered only partially reliable. Having ascertained that they are not up to date, neither with terminology nor with research studies in language education, it is difficult to presume that our respondents can have a clear understanding of the gap that exists between the two worlds, given that their knowledge of one of the two is very limited. Therefore, while they appear to be aware of the existence of a gap, they are much less aware of its causes and implications, since the aspects that characterise the world of school are known to them first-hand, but the same cannot be said for research.
In the Slovenian context their lack of familiarity with research and terminology also emerges from the answers provided with respect to the areas covered during their training (initial and in-service): 'Literacy' and 'New Literacies' are two of the points that reach a higher percentage of disagreement overall ( $50 \%$ and $60 \%$, respectively). Although the percentages are fairly more homogeneously distributed in the EFL context, the two concepts still reach a noteworthy level of disagreement ( $30.2 \%$ and $40.5 \%$ ), similar to that obtained by 'ICT skills for teaching' ( $32.7 \%$ ) and by 'Teaching
in plurilingual or multicultural contexts' (35.2\%) (see table 6.5 above and tables A5.13 and A8.13).

### 6.2.4 Research question 2d: EFL and ISL comparison

Sub-question 2d asks "What level of awareness vis-à-vis literacy is there within the school system regarding the use of technological tools in language learning in general, and, specifically, in developing digital and multimodal literacies".

Our EFL respondents appear to strongly support the idea that technology facilitates foreign language learning when it comes to 'interest' ( $\mathrm{SA}=52.7 \% ; \mathrm{A}=37.5 \%$ ) and 'motivation' ( $\mathrm{SA}=41.4 \% ; \mathrm{A}=39.8 \%$ ). Their agreement level also reaches high percentages when dealing with 'attention' $(\mathrm{SA}=39.3 \% ; \mathrm{A}=35.2 \% ; \mathrm{PA}=20.7 \%)$ and 'participation' ( $\mathrm{SA}=42.1 \% ; \mathrm{A}=33.4 \% ; \mathrm{PA}=19.6 \%$ ), while they show lower values in the case of facilitating their relationship with peers and with the teacher, where the highest percentages of disagreement emerge (a total of $15.1 \%$ and $15.5 \%$, respectively) (table A5.20).

| The use of technology facilitates <br> foreign language learning when it <br> comes to | Strongly Agree |  | Agree |  | Partially Agree |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| EFL | ISL | EFL | ISL | EFL | ISL |  |
| Interest | $52.7 \%$ | $40 \%$ | $37.5 \%$ | $50 \%$ | $8 \%$ | $10 \%$ |
| Attention | $39.3 \%$ | $30 \%$ | $35.2 \%$ | $40 \%$ | $20.7 \%$ | $30 \%$ |
| Motivation | $41.4 \%$ | $40 \%$ | $39.8 \%$ | $50 \%$ | $15.4 \%$ | $10 \%$ |
| Participation | $42.1 \%$ | $20 \%$ | $33.4 \%$ | $60 \%$ | $19.6 \%$ | $20 \%$ |
| Retention of information | $22.7 \%$ | $10 \%$ | $30.7 \%$ | $80 \%$ | $33.2 \%$ | $0 \%$ |
| Relationship with the teacher | $19.8 \%$ | $10 \%$ | $32.7 \%$ | $60 \%$ | $32 \%$ | $20 \%$ |
| Relationship with peers | $23.4 \%$ | $10 \%$ | $35.9 \%$ | $70 \%$ | $25.7 \%$ | $20 \%$ |
| Literacy | $27.7 \%$ | $20 \%$ | $43.7 \%$ | $50 \%$ | $23.9 \%$ | $30 \%$ |
| Agency | $14.5 \%$ | $0 \%$ | $35.5 \%$ | $80 \%$ | $35.9 \%$ | $20 \%$ |
| Performance | $22.5 \%$ | $0 \%$ | $42.5 \%$ | $70 \%$ | $27.5 \%$ | $30 \%$ |

Table 6.11, Technology in language learning, EFL and ISL comparison

If the results can be considered similar in the ISL context, with 'interest' and 'motivation' peaking with a total percentage of SA and A of $90 \%$; the fact that 'retention of information' reaches the same percentage is worth mentioning, as it was not perceived as highly in the EFL context, and it was actually openly questioned during the Italian focus group (paragraph §4.3.2.c). The perception according to which
technology acts as a facilitator when it comes to the students' relationship with peers (in which all respondents express different levels of agreement) and with their teacher (SA $=10 \% ; \mathrm{A}=60 \% ; \mathrm{PA}=20 \%$ ) also improves when compared with the EFL environment. As for the concept of 'agency', it reaches an agreement value of $80 \%$ in the Slovene context (table A8.20).

| Technology | Strongly Agree |  | Agree |  | Partially Agree |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | EFL | ISL | EFL | ISL | EFL | ISL |
| ...Is very useful when it comes to <br> language teaching | $48 \%$ | $50 \%$ | $40.3 \%$ | $50 \%$ | $11.2 \%$ | $0 \%$ |
| ...Is very useful when it comes to <br> language learning | $44.8 \%$ | $50 \%$ | $40.9 \%$ | $50 \%$ | $13.2 \%$ | $0 \%$ |
| ..should be implemented in <br> language teaching | $44.3 \%$ | $70 \%$ | $38.4 \%$ | $30 \%$ | $14.1 \%$ | $0 \%$ |
| ...is something students can <br> generally approach better than <br> their teachers | $35.7 \%$ | $40 \%$ | $28.9 \%$ | $40 \%$ | $25.4 \%$ | $20 \%$ |
| The students' digital skills are not <br> sufficient to properly approach <br> digital language learning | $1.6 \%$ | $0 \%$ | $17.3 \%$ | $0 \%$ | $31.8 \%$ | $50 \%$ |

Table 6.12, Technology, EFL and ISL comparison

Both the EFL and ISL contexts appear to think that technology is very useful when it comes to foreign language teaching and learning, and that its use should be promoted $(S A=$ EFL $44.3 \%$, ISL $70 \% ; \mathrm{A}=$ EFL $38.4 \%$, ISL $30 \% ;$ PA $=$ EFL $14.1 \%$, ISL $0 \%)$. They also agree on the fact that it is something that students are generally able to approach better than their teachers (SA = EFL 35.7\%, ISL 40\%; A = EFL 28.9\%, ISL 40\%; PA = EFL 25.4\%, ISL 20\%) (tables A5.21 and A8.21); nonetheless, the idea that their digital skills are not sufficient to properly approach digital language learning is still met with a relatively high percentage of agreement, ( $\mathrm{A}=\mathrm{EFL} 17.3 \%$, ISL 0\%; PA $=$ EFL 28.9\%, ISL 50\%) (tables A5.22 and A8.22).

In discussing possible technology-related issues, moreover, we were able to observe a difference between the two contexts: the Italian one, in fact, appears much more critical towards the means that the school provides (technological tools and the promotion of their use, Wi-Fi network, obsolete devices) than the Slovenian one (tables A5.22 and A8.22).

The questionnaires also proposed a list of technological tools in order to investigate
which ones the teachers felt more competent in, the degree to which the teachers considered their usefulness in language education, and their opinion as to the actual use of these tools in the language classroom.

## a. Tools and teacher competence

The tools which EFL language teachers perceive themselves to be more competent in, with percentages of SA and A exceeding $80 \%$, are Word processing applications (e.g., MSWord); Communication applications (e.g., Skype); Web search engines (e.g., Google) and Dictionary apps (e.g., Dictionary.com). Presentation applications (e.g., MS PowerPoint) and Video sharing sites (e.g., YouTube) also get very high results (table A5.17).

| Tools | Teachers' perceived competence |  | Usefulness in language education |  | Actual use in class |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | EFL | ISL | EFL | ISL | EFL | ISL |
| Word processing applications (e.g. MS Word) | 85.2\% | 100\% | 85.7\% | 100\% | 78.9\% | 100\% |
| Spreadsheet applications (e.g. MS <br> Excel) | 33\% | 40\% | 32.7\% | 20\% | 17.2\% | 0\% |
| Database applications (e.g. MS Access) | 19.8\% | 10\% | 24.8\% | 30\% | 13.2\% | 0\% |
| Presentation applications (e.g. MS PowerPoint) | 74.1\% | 100\% | 90.6\% | 100\% | 77\% | 80\% |
| Communication applications (e.g. Skype) | 80.7\% | 90\% | 76.1\% | 80\% | 55\% | 40\% |
| Learning management Systems (e.g. Moodle) | 48.9\% | 80\% | 57.2\% | 50\% | 38.6\% | 60\% |
| Virtual worlds (e.g. Second Life) | 14.1\% | 10\% | 22.5\% | 10\% | 9.1\% | 10\% |
| Social networking services (e.g. Facebook) | 59.1\% | 60\% | 38\% | 50\% | 15.2\% | 0\% |
| Blogs (e.g. Blogger) | 34.3\% | 10\% | 46.4\% | 20\% | 15.9\% | 0\% |
| Wikis (e.g. PBwork) | 25.7\% | 20\% | 36.1\% | 30\% | 15.2\% | 0\% |
| Podcasts (e.g. Apple Podcasts) | 33\% | 20\% | 52.7\% | 30\% | 23.7\% | 20\% |
| File sharing sites (e.g. Dropbox) | 64.1\% | 20\% | 66.8\% | 60\% | 52.3\% | 0\% |
| Photo sharing sites (e.g. Picasa) | 41.7\% | 30\% | 43.2\% | 20\% | 23.9\% | 0\% |
| Video sharing sites (e.g. YouTube) | 71.5\% | 90\% | 84.8\% | 90\% | 76.8\% | 70\% |
| Web design applications (e.g. Dreamweaver) | 12.9\% | 0\% | 25\% | 10\% | 7.3\% | 0\% |
| Web search engines (e.g. Google) | 92.3\% | 100\% | 92.3\% | 100\% | 83.6\% | 100\% |
| Dictionary apps (e.g. Dictionary.com) | 89.3\% | 90\% | 93.5\% | 90\% | 75\% | 80\% |
| Language exchange apps (e.g. Tandem) | 27.1\% | 20\% | 53.6\% | 30\% | 15\% | 0\% |

Table 6.13, Technological tools in language teaching, EFL and ISL comparison

In the ISL context, all the applications mentioned above reach a percentage of agreement ${ }^{53}$ equal to or higher than $90 \%$, together with Learning management systems (e.g., Moodle), which instead obtained much lower scores in the Italian context (table A8.17).

## b. Tools and their usefulness

As for the tools perceived as the most useful ones in EFL education (table 6.13), we find once again Word processing applications, Presentation applications, Video sharing sites, Web search engines and Dictionary apps (all with a total of SA and A above $80 \%$ ). Communication applications (e.g., Skype), Learning management systems (e.g, Moodle), and File sharing sites (e.g., Dropbox) also rank quite high (table A5.18). With the exception of the last two options, the ISL context provides very similar results (table A8.18).

## c. Tools and their use in the language classroom

As for the actual use in the language classroom of the listed tools (table 6.13), the results do not change much: Word processing applications, Presentation applications, Video sharing sites, Web search engines and Dictionary apps are those that reach the highest agreement level (70\%) in both contexts (tables A5.19 and A8.19).

## d. Means to convey meaning in class

When it comes to the means that teachers choose to resort to in order to convey meaning in class, both groups also state that they use different means to convey meaning in each lesson ( $74.8 \%$ and $90 \%$, respectively).

| When in class. to convey meaning I | Strongly Agree |  | Agree |  | Partially Agree |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| resort to | EFL | ISL | EFL | ISL | EFL | ISL |
| ...the use of printed texts | $49.6 \%$ | $30 \%$ | $27.3 \%$ | $70 \%$ | $15.9 \%$ | $0 \%$ |
| ...the use of texts in digital format | $45 \%$ | $0 \%$ | $37.3 \%$ | $70 \%$ | $14.1 \%$ | $30 \%$ |

[^38]| ...the use of various types of images | $49.1 \%$ | $20 \%$ | $35.9 \%$ | $70 \%$ | $11.6 \%$ | $10 \%$ |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- |
| ...the use of videos | $36.4 \%$ | $20 \%$ | $44.8 \%$ | $70 \%$ | $14.1 \%$ | $10 \%$ |
| ...the use of audios | $41.6 \%$ | $30 \%$ | $44.1 \%$ | $60 \%$ | $11.1 \%$ | $10 \%$ |
| ...the use of facial expressions and body | $55.4 \%$ | $20 \%$ | $25.4 \%$ | $40 \%$ | $13.2 \%$ | $30 \%$ |
| language |  |  |  |  |  |  |
| ...the use of proxemics | $29.1 \%$ | $20 \%$ | $34.3 \%$ | $0 \%$ | $21.8 \%$ | $60 \%$ |
| ...the use of paralanguage | $32.7 \%$ | $10 \%$ | $35.7 \%$ | $20 \%$ | $20.7 \%$ | $50 \%$ |
| ...interacting with objects | $17.7 \%$ | $10 \%$ | $35.5 \%$ | $10 \%$ | $29.3 \%$ | $30 \%$ |
| ...the use of different means in one lesson | $35.7 \%$ | $10 \%$ | $39.1 \%$ | $80 \%$ | $18 \%$ | $10 \%$ |
| ...the combination of two or more means at | $37.3 \%$ | $20 \%$ | $40.2 \%$ | $60 \%$ | $15.7 \%$ | $20 \%$ |
| once |  |  |  |  |  |  |
| ...the use of multimodal texts | $22.7 \%$ | $0 \%$ | $39.3 \%$ | $50 \%$ | $23.4 \%$ | $50 \%$ |

Table 6.14, Mean to convey meaning in class, EFL and ISL comparison

The options that obtain the highest percentage of agreement (sum of SA and A) by the EFL teachers are facial expression and body language (80.8\%) and audios (85.7\%), followed closely by texts in digital and paper format, videos and images. On the other hand, object interaction and multimodal texts appear to be less agreed upon (table A5.15).

As for ISL teachers, there is less variety, given the lower number of observations. The opinions most agreed upon are printed texts ( $100 \%$ ), followed closely by videos, audios and images ( $90 \%$ ). Facial expressions and body language ( $60 \%$ ) are met with a lower percentage of agreement compared with the EFL context, but the least considered options are object interaction, paralanguage and proxemics (table A8.15).

Overall, there appears to be a certain correspondence between the technological tools that teachers feel more competent using and those that are seen as most useful or that are most used in language classrooms. As for whether or not, and to what extent, teachers resort to them or to different modalities to teach and make meaning in class, we see that there are some aspects that are not yet exploited as much as they could be in the approaches proposed daily for language education.

As for the concept of multimodality, we see that it is one of those which teachers appear to be less familiar with, as is that of digital literacy, which is not limited to the mere use of technological tools or devices. In this context, therefore, there certainly seems to be sufficient technical competence in the use of specific tools, but little awareness of the use that can be made of them in a context of language education, so that, in the light of a Literacy-wise approach update, there appears to be room for improvement.

Our findings lead us to conclude that, at the level of descriptive statistics:

- the EFL and ISL contexts present, overall, more similarities than differences;
- the data obtained from specific items within both questionnaires are often conflicting, with respect to what is stated by other items as well as to the results obtained from documentary analysis and focus groups;
- this lack of consistency highlights the lack of familiarity on the part of the teachers with the terminology and concepts covered by this study on the one hand, and the inability of research and professional training to provide the necessary definitions and tools for language teachers to be able to incorporate these concepts into their language teaching .


### 6.3 Research question number 3: EFL and ISL comparison

The third research question asks:
What approach can be introduced in the language classroom in order to:
a. Help students develop multiple, digital and multimodal literacies;
b. Address the most prominent issues; and, hopefully,
c. Reduce the gap between the specific objectives set for foreign/second language learning and the results achieved by studies conducted in this field?

Focus group/interview data were used to answer these sub-questions.
Eleven teachers took part in the focus groups/interview, six Italians and five Slovenes, all women. One of the EFL teachers, as mentioned in Chapter 3 (§3.5.2) was interviewed individually. All the transcriptions of the focus groups/interview were analysed using N-Vivo, a software for qualitative data analysis (§3.7.3).

| Codes and sub-codes | Focus <br> Group | EFL (\%) <br> interview | Mean | ISL <br> $\mathbf{( \% )}$ |
| :--- | :---: | :---: | :---: | :---: |
| Literacy in the classroom | 1,2 | 2,6 | 1,9 | 3,2 |
| Learning Objectives | 2,5 | 0,5 | 1,5 | 0,9 |
| Research and School | Teachers and Research | 3,1 | 5,5 | 4,3 |
| Pandemic | 5,1 | 1,4 | 3,3 | 1,2 |
| Introduction of | 2,7 | 1,8 | 2,3 | 2,7 |


| Digital Literacy | 9,5 | 4,4 | 7 | 5,7 |
| :--- | :---: | :---: | :---: | :---: |
| Multimodality | 3,5 | 0,8 | 2,2 | 0,5 |
| $\quad$ New Literacies | 1,5 | 0 | 0,8 | 0,2 |
| Issues | - | - | - | - |
| $\quad$ Classroom management | 3,1 | 3 | 3 | 4,7 |
| Lack of time | 4,5 | 1,4 | 3 | 3.1 |
| Students' lack of competence | 3,8 | 1,3 | 2,5 | 6,4 |
| Training | 4,8 | 4,2 | 4,5 | 3,6 |
| Other | 1,6 | 4,4 | 3 | 8,3 |
| Ideas | 2,5 | 1,4 | 2 | 2 |
| What works | 4,4 | 1,1 | 2,8 | 2,3 |
| What does not work | 1,1 | 0,7 | 0,9 | 1,4 |

Table 6.15, N-Vivo code distribution

As mentioned in paragraph §3.7.3.a, all said transcriptions were analysed according to speakers (called cases) and the main themes (codes and sub-codes) brought to light. The table above shows how different codes (underlined) and sub-codes (italics) are distributed in terms of percentages in the different transcriptions. While there are differences between the various transcripts, the percentages do not differ much from one another. The highest percentage (7\%) in the EFL context concerns the introduction of "Digital Literacy" in the language classroom, whilst the highest percentages (8.3\%) in the ISL context concern the "Other" sub-code, which includes several issues that emerged during the meeting, such as the students' difficult relationship with Italian, and "Students' lack of competence" (6.4\%). Transcripts of all meetings are available for consultation in full in APPENDICES 13, 14 and 15.

Regardless of the codes and percentages, what transpires from both the EFL and ISL contexts delineates a lack of familiarity with this specific branch of research on the part of the teachers, which, once again, highlights how distant the world of research still is from the everyday school reality: both EFL and ISL teachers, in fact, state that these concepts are perceived to be distant and detached from the reality of the language classroom.

One very big issue that most participants face concerns the specific terminology used, as both terms and concepts frequently appear to be perceived as either unfamiliar or at least obscure (see above, §6.2.2). Both contexts raise perplexities concerning the fact that the word 'Literacy' is used in other languages as well: without resorting to a different term, the appropriation of an English one appears to be one of the reasons that
make it difficult for non-native speakers of English to grasp, so they underline the need for either a translation or coining new terms, in order to facilitate a more immediate understanding. More will be said about this in the following chapter (§7.3).

In all focus groups/interview, the problems that the teachers need to face every day in the language classroom come up immediately and are often treated as the main focus of the conversation. While they may not be necessarily relevant to the area that we meant to investigate, Literacy-wise, it appears clear that there is an underlying issue: it is unlikely that the teachers can provide us with proposals concerning approaches focussed on introducing the multiple forms of Literacy if the concepts we are talking about are neither clear nor regularly approached within the language class, as our interviewees went on to state more than once ( $\$ 4.3 .2$ and $\S 5.3 .2$ ). Moreover, the problems that they address weigh on the conversation more than initially anticipated because they are also considered as limiting factors: research is already perceived as a world in its own right, but it is even more difficult for them to take it into account, to approach it and explore it, when basic elements such as time, tools and motivated class groups are lacking. These premises are true for all three points of the research question, but they specifically relate to point a): before thinking about approaches capable of helping students develop multiple, digital and multimodal literacies, it is necessary for the school system and research to provide schools and teachers with the right tools to address their own professional education, and to find the best possible ways to approach the issues they highlight. On the one hand, when discussing issues and difficulties with the interviewees, similar points emerge from both contexts: how to successfully manage numerous and heterogeneous classes; how to make the most of the little time available; how to face the students' lack of competence and motivation and how to make up for the lack of appropriate training opportunities in order to try and reduce the gap between the two worlds of research and school.

On the other hand, a fairly significant difference emerges in examining the relationship that the students establish with the target language. ISL teachers speak of very strong affective filters on the part of their students towards Italian, and of the different relationship they seem to have with English, which they prefer and in which they feel more competent. This is probably attributable to the different role of the two languages under analysis, second language in the case of Italian, and foreign language in the case of English: this aspect, in fact, never came up during EFL meetings.

Possible solutions are proposed, which are very similar from one context to another, such as smaller classes, more teachers, more teaching hours and training opportunities for students, but the teachers themselves are aware of the fact that they are difficult ideas to implement.

As regards the formulation of approaches capable of reducing the gap between the world of research and that of the school, which is confirmed to be wide, the discussion in both contexts lead us to conclude that these approaches are unlikely to be formulared, in light of the lack of familiarity found in this area on the part of the interviewees, and, it would appear, of the school system in general. Beyond some considerations, therefore, on the individual activities and tools that appear to work more or less than others in the language classrooms, the situation described so far was perceived to be very similar in both contexts.

### 6.4 The pandemic

Questions 23 ("In light of the health emergency developed in 2020, which forced upper secondary schools to hold most of their lessons through different distance learning modalities...") and 24 ("Distance Learning...") of both the EFL and ISL questionnaire asked respondents for an opinion on the transition from face-to-face to distance learning made necessary by the health emergency that arose in March 2020 and on distance learning itself, respectively. Findings are reported in APPENDICES 5 and 8 (tables 23 and 24 , in both cases), while the relative inferential statistical analyses are available in APPENDIX 11. The next paragraphs report the data collected by both questionnaires and compare them, also in the light of the opinions expressed by the participants during interviews and focus groups.

As mentioned in Chapter 4 (§4.2.2), variables 1, 2 and 3 (the different types of upper secondary school; the different lengths of teaching experience; the different age ranges) are considered to be independent in each sub-question and in both contexts (EFL and ISL), and subdivide the total of respondents into independent samples. Variables 7.1, 7.2 and 7.3 (whether respondents are subscribed to research journals or not; whether they are researchers or not; whether they are authors or not) are added as further independent variables (only 7.1 in the ISL context, §5.2.1). Variables 23 ("Distance learning management") and 24 ("Distance learning") are considered dependent
variables. Depending on whether the independent variables divide the sample of respondents into two (e.g., researchers and non-researchers, variable 7.2) or more independent samples (e.g., the different types of upper secondary school, variable 1), it is necessary to resort to different procedures ${ }^{54}$.
The inferential statistical procedures are described in detail in Chapters 4 and 5: reporting an inferential statistical comparison is not possible, because the programme did not always allow us to carry out the same tests for the EFL and ISL variables (see §5.2) and because the statistically significant results elements are different in the two contexts.

The following elements, regarding the transition from face-to-face to distance learning that happened in 2020, are the only ones that can be considered statistically significant in the EFL context:

- respondents with different ranges of teaching experience appear to have different opinions: specifically, teachers with a range of teaching experience of 21-30 years show a considerably higher average rank for variable 23 than the other categories, which indicates a more positive opinion towards the process surrounding the transition from face-to-face to distance learning;
- respondents belonging to different age ranges appear to have different opinions: specifically, teachers in the 26-30 years age category show a considerably higher average rank for variable 23 (Distant learning management) than the other categories, which indicates a more positive opinion on the process surrounding the transition from face-to-face to distance learning.

The following element, regarding distance learning, is the only one that can be considered statistically significant in the ISL context:

[^39]- respondents belonging to different types of upper secondary school appear to have different opinions: those who teach in both gimnazija and technical schools show a lower average rank for variable 24 (Distance learning) than the other categories, which indicates a more negative opinion on distance learning.

As for descriptive statistics, there seems to be a correspondence between the EFL and ISL contexts: in both cases the majority of teachers stated that their technological preparation proved sufficient to properly manage distance learning ( $92.3 \%$ and $90 \%$, respectively). Their perception of their own technological preparation is thus much more positive than the perception of the technological preparation of their students ( $69,8 \%$ and $50 \%$ ) and of the means and devices provided by the school ( $76 \%$ and $60 \%$ ).

| Item | Strongly Agree |  | Agree |  | Partially Agree |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | EFL | ISL | EFL | ISL | EFL | ISL | EFL | ISL |
| 24 a | $13.7 \%$ | $0 \%$ | $23.9 \%$ | $20 \%$ | $35.2 \%$ | $70 \%$ | $72.8 \%$ | $90 \%$ |
| 24 b | $30.9 \%$ | $30 \%$ | $44.3 \%$ | $60 \%$ | $18.9 \%$ | $10 \%$ | $90.1 \%$ | $100 \%$ |
| 24 c | $38.7 \%$ | $40 \%$ | $42.1 \%$ | $50 \%$ | $15.2 \%$ | $10 \%$ | $96 \%$ | $100 \%$ |
| 24 d | $31.4 \%$ | $40 \%$ | $40.2 \%$ | $40 \%$ | $21.3 \%$ | $20 \%$ | $92.9 \%$ | $100 \%$ |

Table 6.16, distance learning

Regarding distance learning per se, extremely high percentages of EFL teachers and the entirety of ISL teachers either strongly agree, agree or partially agree with the statements according to which it has helped to emphasise the importance of greater technological preparation for schools (24b), teachers (24c) and students (24d), respectively, as reported in the table above.

The percentages are a bit lower (and most fall on the "Partially Agree" option) when discussing the possibility that distance learning is a viable alternative to face-to-face lessons (item 24a), but agreement still prevails over disagreement in both contexts.

This result clashes with what emerged from the focus groups / interview, given that the ISL context expresses the opinion that it is only a valid option if there are no alternatives. The ISL teachers point out that their schools followed the best possible course of action considering the situation, but they argue that distance learning is not sustainable in the long run, at least at the level of compulsory schooling, while it might certainly be easier to manage at university level. Speaker B (ISL) argues that, in case of "motivated university students, who are prepared, who have different approaches to study, it works very well for them, or it could work. Even without considering the social
aspect of it all, as far as teaching is concerned there are no great difficulties [at university level], while for a technical or a vocational school, it is an impossible undertaking, because the microphone does not work, the video camera does not work, the chat does not work, the speaker cannot be heard, someone does not receive the emails, you know?".
This point of view is partly shared by the EFL context, which suggests an increase in the use of the technology due to the need to carry out distance learning during the pandemic. A problem that was raised in the EFL context, however, concerns the difference in tools available to individual students, since dealing with different tools and devices creates difficulties at the level of learning environment as well as of individual learning possibilities in terms of both organization and performance. Speaker 7 reiterates that "doing distance learning would be fine, if everyone had the same device, but if one student has a phone, another has a tablet, another has the computer, and the audio doesn't work... That is, in my opinion we can talk about Literacy when we all have at our disposal the same equipment to work with for certain arguments".

If, therefore, the previous chapters have shown that the road to a systematic and multifaceted introduction of technology in language classrooms is still a long one, it is also true that now there might be a broader, more aware use of some tools that previously were not exploited to the fullest of their potential, and this could potentially lead to faster changes than initially anticipated. In the following chapter, several aspects related to this research project are discussed in more detail, including possible developments and directions for further research.

## CHAPTER 7. DISCUSSION

In this final chapter, the results emerging from this research and presented in Chapters 4,5 and 6 will be resumed and discussed to focus on the impact of the findings in the field of foreign/second language education.

The chapter is structured as follows: the first section is dedicated to commenting on how these results relate to previous findings (§7.1); the second section discusses critical issues found when analysing the normative references and the specific learning objectives established for both contexts, EFL and ISL, vis-à-vis Literacy (§7.2); the third section (§7.3) puts forward some considerations regarding some terminological issues supported by our results ( $\S 4.2 .2, \S 5.2 .2$ and $\S 6.2 .2$ ); the fourth section contains some reflections on the limitations of this study, mostly of a methodological nature (§7.4); the last section offers some ideas for future research, in the light of the most recent theoretical developments (§7.5).

### 7.1 The relationship with previous findings

The following discussion arises from a careful reflection on the results of this study, namely the answers to our research questions (§3.2), formulated according to the specific contexts studied (§3.1) and the literature consulted (see Chapters 1 and 2). The results are interpreted in the light not only of the studies presented in the literature review, but also of further regulatory analyses (see APPENDIX 16).

This study attempts to provide an overview of the evolution of the concept of Literacy in foreign and second language education and investigates the relationship between school and research in this sense. For both contexts, EFL and ISL, our findings show:

1. a general absence of specific learning objectives vis-à-vis Literacy in the normative documents that regulate foreign and second language learning in the two contexts analysed, EFL and ISL, respectively. This reflects the existence of a gap between the world of research and that of normative references that regulate language education, albeit with some differences between the two contexts (see $\S 4.1, ~ § 5.1$ and $\S 6.1$ );
2. very different levels of awareness on the part of upper secondary school teachers regarding the specific learning objectives established for foreign and second language education on the one hand and the evolution of recent Literacy-related studies within the language education field on the other. The relationship that both EFL and ISL teachers have with research appears rather distant, and, since their perception of the multiple forms of Literacy (and their evolution over time) is somewhat limited, so is their ability to evaluate the gap between school and research in this specific area ( $\S 4.2, \S 5.2$ and $\S 6.2$ );
3. the struggle to devise and implement teaching approaches based on the concept of Literacy (partly due to the points mentioned above), as well as several other issues that concern both EFL and ISL teachers and that weigh on the everyday reality of the language classes ( $\S 4.3, \S 5.3$ and $\S 6.3$ ).

In its attempt to provide an overview of the concept of literacy in foreign and second language education that can facilitate readers as well as researchers, what this study does, therefore, is describe the state of the art on the one hand, within both the world of research and the school system, and highlight the most problematic aspects on the other hand. This is a starting point to which future research can refer, for a rapid consultation of the theoretical evolution of the concept of literacy over time, as much as to address the problems highlighted (§7.2 and §7.3) with the aim of hypothesising and investigating possible solutions.

## a. The relationship with the results of previous EFL studies

When reviewing our reference literature, we encountered three main problems with respect to the studies related to the context of English as a foreign language that do not facilitate a direct comparison of our results with previous findings:

1. The first issue concerns the amount of material available when looking for papers and articles related to Literacy in EFL teaching and learning: there is a great deal of material available to the researcher, which often makes the selection harder, as it is not always easy to find material relevant to one's study. In this sense, we agree with Brown et. al (2016), according to which several studies have been conducted in the case of English and other commonly taught
languages, but not enough publications focus on less commonly taught ones. We also found this, as we noticed the difference in the amount of material available for English on the one hand and for Italian in the field of second and foreign language teaching and learning on the other. The disparity in the amount of material available is reflected in our literature review, where there are many more EFL references than ISL references.
2. A second issue concerns the sectoral nature of papers and research studies which was addressed in Chapter 2 (see §2.1.2). When the main parameters that we set for the selection of the reference literature were presented (§2.1), one was not mentioned. In the course of the analysis and selection of previous research, we realised that some research studies, despite responding to our general parameters, could not be taken into consideration for the purposes of our study as they were not necessarily pertinent. For this reason they were only mentioned as examples of the different directions that research in the field of language education, vis-à-vis Literacy, was undertaking.
So, in addition to case studies which focus mainly on the introduction of technology (which often has an add-on nature, see §2.1.2), whether it is the introduction of a technological device (smartphones in Bromley, 2012) or applications (twitter, in Morgan, 2014) in language classes, it is also difficult for us to compare our results with findings from research studies concerned with promoting heritage language maintenance (Zapata, 2017); with the role of literacy in maintaining the cultural and identity background of the participants (Ntelioglou, 2012); or with genre studies (Cranny-Francis, 1993). Thus, such a sectorality further narrowed the pool of possible previous studies with which our study could be compared in terms of results.
3. A third issue concerns the fact that, during the selection of articles and research studies, we have noticed that many papers, even recent ones, still approach Literacy in terms of reading and writing skills, and that, in many cases, they concern studies conducted in primary schools, where reading and writing are being introduced for the first time. One of the responsibilities that educators are given today is to make sure that learners develop the necessary skills for the $21^{\text {st }}$ century, and, in this regard, the International Literacy Association (ILA) (2020)
considers early literacy (with Digital Literacy as its current focus) to be extremely important (Anany, Lamptey and Frempong, 2021). As mentioned in §2.1, research studies focussing on this reading and writing perspective were not examined, because it is not in line with the definitions of Literacy (§1.1.1) and with the level of education taken into consideration by this study, which focusses on upper secondary schools.

The fact that the concept of Literacy is associated with different meanings in different papers, for example, and that there is still no univocal, unambiguous definition (§1.1) does not help the reader. Furthermore, such a coexistence of contrasting definitions leads us to draw two considerations:

- reaching a single, unambiguous definition of Literacy in the school system is both difficult and unlikely as long as the concept continues to change and evolve in the world of research;
- our data reflect this variety of ideas and interpretations, in the definitions that our respondents provided of the concepts of Literacy and Digital Literacy (§6.2.2), and in the answers provided to other questions (e.g., question 14 "The concept of Literacy", see §6.2.2).

Such a variety of definitions and interpretations, linked to the specificity of the research studies examined (see above), makes it difficult, within the limits of our knowledge, to directly compare our results with those of previous studies.

## b. The relationship with the results of previous ISL studies

Several articles and studies (Žakelj, 2011; Slosar, 2011; Tomšič Čerkez, 2011; to name a few) explore different subject areas from a literacy perspective (from reading to maths, from science to music, from aesthetic to ICTs). According to Bešter Turk, who compares the 'Curriculum for Slovene Language' (1998) for primary schools and its 2008 variant, literacy is mostly understood as communicative competence (Bešter Turk, 2011), and indeed other studies examine it in the context of immigration or the preservation of minority languages (Bergoč, 2009; Mezgec, 2011).

There are also articles that highlight the need for a different perception of Literacy, one that is updated as well as connected with modern technologies (Starc, 2011), but also
multidimensional, including all forms of digital literacy and raising the question of how various forms of literacy can influences one another (Grosman, 2011). As a complex concept with many definitions, researched using different perspectives, it is not always easy for researchers to pinpoint which definition of literacy underlies each text, which is one of the reasons why the search for research studies related to the concept of Literacy as understood by this study (§1.1.1) in the context of teaching and learning of Italian as a second language in Slovenian upper secondary schools has not, within the limits of our knowledge, led to relevant results.

However, the findings of this study regarding the difficulties reported by ISL teachers during the focus group reflect previous studies. As already mentioned (§5.3.3 and §5.3.4), in our opinion these problems are part of the reason why it is difficult to think of a practical and systematic introduction of the concept of literacy in language classes, and addressing them would therefore be a first step in this direction.

The low level of interest that the teachers interviewed noticed on the part o their students (§5.3.3) towards Italian as a second language in Slovenia, for example, confirms the findings reported by previous studies.
The "Litoral Model" ${ }^{55}$ (Čok, 2009) establishes the compulsory teaching of the Italian language in all schools of the bilingual area of the Slovenian coast for at least two hours a week, starting from the first grade of elementary school to the end of upper secondary school. When the model was first applied, the teaching of Italian appeared to have been fruitful, also thanks to the fact that the students were showing higher levels of previous knowledge of the Italian language, evidence of an active and functional corporate bilingualism (Cavaion, 2020a; Čok, 2009; Mikolic, 2010). In the last decade, however, the model seems to have lost its effectiveness. An in-depth research study carried out between 2006 and 2008 on the operational capacity of bilingual education models in multilingual areas of Slovenia (Čok, 2009) reports the following aspects:

- poor learning of Italian by elementary school pupils, who, at the end of the first cycle of education (see APPENDIX 16) do not reach the minimum established level (A2);

[^40]- very low motivation in learners;
- limited ability to speak the language;
- little knowledge of the socio-cultural and political aspects of local and border languages;
- scarce use of digital tools;
- inadequate and insufficient teaching materials.

Other research informs us that:

- Italian is by no means a prestigious language in the eyes of adolescents (Furlan, 2002);
- there are few contacts between Slovene-speaking and Italian-speaking representatives of both the minority and the neighbouring country (Cavaion, 2012);
- some suspected negative attitudes have occurred, in terms of prejudices, towards the Italian language and its speakers by pupils of the last grades of the Slovenian primary school, i.e. students aged 12 to 15 years old (Cavaion, 2012);
- language education policies do not correspond to the current and real needs and societal characteristics of the Slovenian littoral area (Cavaion, 2020a).

These results describe a difficult situation, recently confirmed by the teaching staff who say that they find themselves without adequate tools to deal with a declared and explicit disinterest in learning the Italian language on the part of the students, replaced over the years with a dominant interest towards English alone (Cavaion, 2020).

Our research, therefore, despite a limited ISL sample and the fact that it only takes into account the point of view of the teachers and not that of the students or other members of the community, confirms these results, from the difficulties encountered by the teachers in terms of interest and motivation towards of the Italian language, to the different, more positive relationship that their students appear to be able to establish with English (§5.3.3).

### 7.2 EFL and ISL normative references for language learning vis-à-vis

## Literacy: critical issues

When it comes to the differences found between the normative references that regulate the two contexts, EFL and ISL (§3.3, §6.1), an important aspect to take into account concerns whether or not the Recommendations of the European Council on key competences for lifelong learning are taken into consideration. The first version of the 'Recommendations' dates back to 2006 and is, therefore, the only one that the normative references ${ }^{56}$ we consulted could have taken into account, given that they were drafted before the revised version of 2018.

The Recommendations are based on the conclusions drawn in 2000 by the Lisbon European Council stating that a European framework should define the new basic skills to be provided through lifelong learning. These eight competences ${ }^{57}$, defined as a combination of knowledge, skills and attitudes and gathered in a "Reference Framework", thus become part of the strategies for lifelong learning and for achieving universal literacy which have been developed by the Member States since 2006.

On the one hand, in the Italian context (§4.1) the MIUR-MEF Interministerial Decree number 211 of 7 October 2010 (which delineates the learning objectives established for the Licei) and the Ministerial Directive 4 of 12 January 2012 (for technical and professional schools) mention the Lisbon Recommendations and the key competences defined by the EU, respectively, only en passant, while the Decree number 92 of 24

[^41]For the ISL context (§3.3):

- Učni načrt za italijanščino kot tuji in kot drugi jezik: gimnazija (Šečerov and Zorman, 2008);
- Italijanščina kot drugi jezik: izpitni katalog za poklicno maturo (Šečerov et al., 2010).

[^42]May 2018 introduces this document amongst the regulatory premises on which the Decree is based.

On the other hand, in the Slovenian context (§5.1) both the documents examined (Šečerov and Zorman, 2008 and Šečerov et al., 2010) not only mention the eight key competences, but describe them one by one, focussing on the most important aspects for the field of language education, such as Communication in foreign languages; Digital competence; Learning to learn; Cultural awareness and expression.

It is at this juncture that the concept of digital literacy is introduced in both Slovene documents, in relation to the 'digital competence' mentioned in the Reference Framework.

The reason why we are drawing these considerations is twofold:

1. first of all, whether or not a document such as the Reference Framework is mentioned is, in our opinion, an indicator of what is considered important to include in the normative references and what is not;
2. secondly, our consideration arises from the fact that the eight key competences have since been updated: the Council Recommendations of 22 May 2018 on key competences for lifelong learning altered the previous version of the document (2006), the most notable change (for the purposes of our study) being that the first of the key competences now concerns Literacy ${ }^{58}$.

This, in our opinion, is important for a very straightforward reason: the fact that Slovenian normative references mention the previous version of the Recommendations suggests that, should said references be updated, the new Recommendations will likely be included once again. This probably means that, as a result, the concept of Literacy will be taken into consideration more in depth, and perhaps this will lead to its integration within the specific ISL learning objectives. The lack of this premise in the Italian context, on the other hand, suggests that it may take much longer for these concepts (and the related terminology) to make their way into the normative references and the specific learning objectives established for EFL.

[^43]
## a. Normative references and language classrooms

This being said, one of the main aspects that we became aware of in the course of exploring theories and regulations on the one hand, and collecting data on the other, concerns the fact that the first research question ${ }^{59}$ (§3.2), which sets out to confirm the existence of a gap, should, in fact, have been looking for two different gaps.

Besides the gap that was initially hypothesised (and later confirmed) between the world of research and the specific learning objectives established for each of the two languages considered, English and Italian, in fact, there appears to be a second divide between said regulatory references and the everyday reality of the language classrooms.

The first gap is mainly theoretical: research draws on theories and results from different case studies and proposes the introduction of specific tools, approaches and methodologies in formal language education environments. On the other hand, the normative aspects (which no longer play a prescriptive role (Saccardo, 2016) but rather act as general guidelines) struggles to provide objectives (both general and specific, namely those for each discipline and for each school year) that are in step with a branch of research that moves very rapidly (Leu et al, 2011), often provides conflicting results (for example, on the students' relationship with technology and whether or not they consider themselves 'digital natives’, Williams, Abraham and Bostelmann, 2014), and proposes the use of tools and the introduction of activities that schools are often not equipped to deal with on a daily basis (such as the creation of digital stories on the part of the students, McAdams and Gentry, 2014; or digital gaming and social media, Vanek, King and Bigelow, 2018).

The second, in our opinion, is a more practical gap, which occurs between the normative references that regulate language learning in both contexts (EFL and ISL) and the teaching reality of language classrooms.

This gap can be seen in the fact that the specific learning objectives (see $\S 4.1, \S 5.1$ and APPENDIX 16) established for both languages, English and Italian, do not seem to take

[^44]into account the means, time and contexts in which the language lessons take place. In this case, therefore, it is not a matter of being updated or in step with theories and references, but rather of acknowledging the issues that teachers report and face on a daily basis, such as managing large and heterogeneous classes, lack of time, lack of competence on the part of the students and possible relational problems ( $\S 4.3 .3$ and §5.3.3). The perception of a divide between teachers and new generations of learners is also quite strong (§5.3.3), together with their lack of motivation and interest and with learning objectives that are unlikely to be achieved, based on the number of hours available (§5.3.3)

The presence of such a gap suggests that both research and the normative references that regulate both contexts, EFL and ISL, take the reality of the classroom into account only partially.

The biggest problem with these issues is the fact that they are perceived by the teachers as almost impossible to solve. When asked to suggest possible courses of action, the interviewees spoke of 'hypothesis of unreality', such as having more funds to be able to create fewer classes, hire more teachers, better distribute the amount of weekly hours in order to have prepared, qualified staff who can take on civic education teaching or the administration of Invalsi tests without taking hours away from other teachers and disciplines (§4.3.3/4 and §5.3.3/4). Moments of debate are also hypothesised, in order to give teachers the opportunity to have profitable discussions with their colleagues and to ask them for advise, should they need to, as well as training occasions which could provide them with the tools suitable for managing heterogeneous and problematic classes. Training occasions are proposed for both teachers and students so that they can all develop a critical, appropriate and safe use of technology in language education (§4.3.3 and §5.3.3). These suggestions, however, are all assumed to be difficult to implement, for several reasons, namely, because such funds are often not available; because, according to some interviewees, such opportunities for discussion and training are often nobody's priority, neither the teachers' nor the school managers'; and because the decisions regarding the number of students per class and the amount of hours available often pass over the heads of the teachers and are tied both to the funds and to the staff available ( $\S 4.3 .4$ and §5.3.4, see also APPENDICES 13, 14 and 15).

As for the available teaching staff, one EFL interviewee mentions a problem that, at least in Italy, is very widespread, and it concerns precarious work (§4.3.3). It is clear in
fact that, when most of the available teaching posts are occupied by temporary recruitments (which, at best, last from September to June), it is not possible to guarantee continuity and stability for either teachers or students, which probably affects the motivation of both, as well as the learning outcomes, and whether or not teachers manage to work with one school community long enough to be able to express themselves and to promote even minimal changes, such as the adoption of different textbooks.

## b. Misalignment between research and education

Despite their lack of familiarity with the world of research (§4.3.2 and §5.3.2), the respondents and interviewees from both the EFL and ISL contexts suggest the need for the specific learning objectives established for both languages, English and Italian, to be updated. Given that a gap between the world of research and said learning objectives was indeed found ( $\S 4.1$ and $\S 5.1$ ), and a second gap between these objectives and the daily reality of the language classroom was hypothesised (see above), the reflection that the researcher makes concerns whether or not such an update of the specific learning objectives should be based on the results obtained from the most recent case studies. If, on the one hand, updating the specific learning objectives, Literacy-wise, introducing multimodality or critical thinking and reinforcing the notion of digital literacy would certainly reduce the gap between these objectives and the world of research, it would hardly change the daily reality of language classrooms on the other.
While it is not realistic to expect the national guidelines and the learning objectives that they establish (or any other normative document) to take into account every possible issue that language teachers may face in their classes, the fact that none of the issues (both literacy and non-literacy related) that have emerged in this research project (§4.3.3 and §5.3.3) is acknowledged inevitably creates a divide between the normative references and the school reality.

What transpires from the focus groups and the interview is the fact that the interviewees perceive that school has changed very rapidly over the last few decades, both at a technological and cultural level, so much so that many teachers struggle to navigate it, as well as to identify the boundaries of their role within it (§5.3.4). Do their students value and respect their role as teachers? What value do they assign to learning in general and to the target language specifically? Do they find it useful? Are they
motivated? How can teachers motivate a generation which they perceive as so detached from their own? Can a different approach, Literacy-oriented, help in this regard?

What the researcher noticed from the results obtained from the three research questions (§3.2) is that the school system and the world of research appear to be misaligned, proceeding on different tracks and at different paces. This confirms previous findings, according to which the classroom construction of literacy, focussed on restrictive paperand language-based notions of literacy, is criticised (Leander, 2007; Sefton-Green, 2006): classroom literacies are still mostly two-dimensional, reflecting "the static, linear, paper-based reading and writing agendas of school language and literacy curricula and assessment" (Lotherington, 2010); digital technologies are often add-on elements, adapted to already existing approaches instead of contributing to the creation of new and multifaceted approaches (Khaddage, Norris, Soloway and Davidson, 2021); and many teachers need training to properly handle digital devices in educational settings (Rajeswaran, 2019), just to name a few examples.

Such circumstances are difficult to change: when altering already existing systems, it is important to ensure that the proposed changes are sustainable over time, but they still require long-term efforts that are likely to meet resistance along the way. Perna and Armijo (2014) state that the most productive course of action for complex educational systems is to focus on specific areas, one step at a time. Since the Multiliteracies pedagogy still does not feature as a core component of language teacher education, neither pre-service nor in-service (Burke and Hardware, 2015), what is needed is alignment, where curricular learning objectives and assessment reflect the classroom activities and strategies (Care, Vista and Kim, 2019).

In the process of investigating how literacy theories are understood and used by educational policymakers and educators, one first step is to decide what counts as 'literacy'. This choice directly affects classroom teaching and learning. New and multiple Literacies practices (which, Lankshear and Knobel (2003) claim, may be new to schools but not necessarily outside of the classroom, where they are often already well established) challenge traditional, print-based schooling and question the "dominant models of literacy as it is currently taught in the majority of schools around
the world in relation to the communicative and technological requirements of contemporary, digitalized society" (Jewitt, 2008).

### 7.3 Terminology issues

Most of our EFL and ISL respondents agree at least partially (see APPENDICES 5 and 8, respectively) with the statement according to which the concept of Literacy is taken into consideration by the specific learning objectives established for foreign and second language education in upper secondary schools (§4.2.2 and §5.2.2). Paragraphs §4.1, $\S 5.1$ and $\S 6.1$ explain how, with small exceptions, this is not the case, and that there are many different factors that come into play.

## a. One Literacy, too many definitions

One factor, perhaps the most important one, has to do with a purely linguistic aspect: this research project makes use of the term 'Literacy', because it is the one that research recurs to, in the field of language education, in order to define
> "the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve his or her goals, develop his or her knowledge and potential, and participate fully in community and wider society" (UNESCO, 2004, 2011).

The term was therefore used in both questionnaires and during the focus groups / interview. The Italian translation of this term is 'alfabetizzazione', the Slovenian one is 'pismenost': both, however, only translate the primary meaning of the term where it is understood as a synonym of 'alphabetization', ignoring the significant evolution the term has recently undergone. If we consider the answers that our respondents provided to question 12 ("Please provide your definition of the concept of Literacy"), we see in fact how in both contexts, EFL and ISL, roughly one teacher out of five described Literacy as the ability to read and write, while others provided a slightly broader meaning, not to mention those who did not provide an answer at all or simply translated the term with the synonym of 'alphabetization' (see $\S 6.2 .2$ and APPENDICES 5 and 8).

Therefore, it is likely to assume that at least part of the respondents have actually answered many other questions presented in the questionnaire on the basis of a notion of Literacy still linked to the idea of alphabetization, and, as such, not in step with the more complex and multifaceted meanings that it has come to assume over the years in the field of language education.

There are, at this point, multiple aspects to take into consideration. One of them concerns the deictic nature of the term "Literacy", which is traced back to the advent of the Internet (Leu, 2000). Even today, in fact, the term continues to be used at least in a double way, even within research itself, where it can indicate the ability to read and write as much as a much more multifaceted set of skills and competences, depending on the specific context or case study. This, of course, partly justifies the confusion that emerged on the part of teachers during interviews and focus groups, as well as the presence of conflicting data (such as, for example, the fact that some teachers believe that specific learning objectives take the concept of Literacy into account against a documentary analysis that proves the opposite, see $\S 4.1$ and $\S 5.1$ ). If we consider the concept of Literacy as alphabetization, then the idea according to which the concept has been taken into consideration by the normative references that regulate the target languages can be considered correct, because 'alphabetization' and 'reading and writing skills' are, in fact, mentioned by all the documents analysed.
However, the issue is broader than this: regardless of which of the two meanings (i.e., reading and writing skills on the one hand and a complex, multifaceted definition that includes different abilities, skills and media on the other) the term "Literacy" may be attributed to in different contexts, today it is not only a concept used in its own right, but is also flanked by a myriad of other terms. In the specific field of language education, for example, we talk about media literacy, information literacy, internet literacy, corpus literacy, critical literacy (§1.1.4 and §1.1.5), just to name a few. In these instances, 'literacy' rather takes on the meaning of "competence in a specific field" (Anani, Lamptey and Frempong, 2021), in which case we have also seen how it is often used relatively interchangeably with other terms (§1.1.4). Faced with a deictic and constantly evolving concept, therefore, Leu et al (2011) claim that "misalignments in public policy, assessment, and instruction impede our ability to prepare students for the effective use of online information and communication".

If it is true that, historically, the concept of Literacy has always changed (Manguel, 1996), but over substantial periods of time, it is also true that the much more rapid changes that it has undergone in recent decades have resulted in distinctly different meanings referring to the same term and in a general lack of clarity at a terminological level. This is a first problem, which mainly concerns the term 'Literacy' as such, that is, when it comes to the language in which it was coined, therefore English.

## b. Need for disambiguation

Another implication of the present study is that it emphasises a second issue tied to the terminology used which emerged when transcribing the interviews of the meetings of both the Italian and Slovene contexts: "Literacy is not an Italian expression, right, that is, it is an English word used in Italian" (Speaker B, ISL), with the idea that "it means 'alphabetization’". The appropriation of the English term, according to some, "is wrong, because it is not an easily understandable concept" (Speaker 7, EFL). Even in proposing a possible Slovenian equivalent, 'funkcionalna pismenost ${ }^{\prime 60}$, in fact, Speaker B introduces the notion of functional literacy (§1.1.1) but not the vast concept that the field of language education ascribes today to the term Literacy.

The problem actually appears to be twofold: at a first glance, the most immediate one might seem to be the absence of an Italian or Slovenian term, of a translated (or translatable) version of the English one, in order to make the concept easier and more immediate to understand for non-native speakers of English. We soon realise, however, that this is not the case, because a translation, however limited, exists in both languages. The issue thus becomes more complex, and concerns the fact that the choice of terminology to indicate an extremely broad, multifaceted and constantly evolving concept has fallen on a word that already existed and was already endowed with meaning. Therefore, explaining to non-native speakers, especially if they lack familiarity with the world of research, not only the complex concept that the term stands for, but also the evolution it has undergone over time and the fact that it is no longer associated with what, until recently, was a legitimate translation, actually creates a lot of

[^45]confusion in the interlocutor and makes a reliable exchange of views way more complicated.

A drastic terminology change at this point would probably not be feasible as it would only create further perplexity. Nonetheless, even if it is not likely that a new English term is coined, working on other languages in order to coin translations that differ from the concept of mere alphabetization could prove useful.

## c. Training

A first step in trying to reduce the issues relating to the lack of familiarity (noticed in teachers from both contexts, EFL and ISL) with the terminology and the topics covered in this study, probably concerns professional training. Teacher training and professional education were addressed by question 13 in both questionnaires ("The following areas were covered during my formal education and/or training"), and we have already mentioned the fact that the concepts of Literacy and New Literacies were amongst the ones taken into account the least by the respondents ( $\S 6.2 .2$ and $\S 6.2 .3$ ). The topic also emerged during both focus groups, where some issues were highlighted regarding the type of training opportunities, the lack of frequent discussion moments between colleagues, and, perhaps consequently, the lack of interest on the part of the teachers themselves when it comes to training.

During the last decade, "reinforcing teacher training institutions and teacher educators," "peer-coaching or collaborative activities with expert input" (UNESCO, 2012, pp.2, 5) and "improving teacher quality by developing standards for teachers," (UNESCO 2015b, p.1) are some of the actions most called for by agencies such as UNESCO and OECD.

If, on the one hand, it is true that there are many training opportunities for teachers, as both our EFL and ISL interviewees themselves stated during the meetings, on the other it is also true that their position of perplexity towards these opportunities seems to be perfectly consistent with several research findings. In fact, they argue that university teachers, or, in any case, educators trained but unrelated to the daily life of upper secondary schools are unlikely to be able to provide training opportunities that manage to take the daily reality and issues that teachers face into account, and opportunities for discussion between colleagues might, therefore, be more useful .

According to Knobel and Kalman (2016), "teachers gain most from professional development experiences that are not delivered by expert-outsiders and that are not one-size-fits-all, one-shot sessions on how to do something better (Carpenter and Krutka, 2014; Hardy and Rönnerman, 2011; Lawless and Pellegrino, 2007)". In suggesting what works and what does not, research states that opportunities to learn something new or explore already familiar topics need to be grounded in immediate teaching contexts, by innovating classroom and school practices, collaborating with fellow teachers within a professional learning group or space (e.g., Carpenter and Krutka, 2014; Opfer and Pedder, 2011). As for what does not work, Opfer and Pedder actually argue that disregarding the situatedness of the teaching experience by focussing on "specific activities, processes, or programs in isolation from the complex teaching and learning environments in which teachers live" (2011, p.377) is a big reason why there is an issue.

Historically, teacher education has followed rather than led developments in school curricula and classroom pedagogy: as such, its role has always been a conservative one, meaning it has been one of conserving and continuing past practices (Cervetti, Damico, and Pearson, 2006). New training and educational challenges might involve preparing teachers not only for schools as they are now, in terms of policies and practices, but also as they might become, and translating the theories and definitions underpinning multiple literacies into a teacher education curriculum is the first step in that direction.

Although understanding what new and multiple literacies look like inside language classrooms still requires development, already in 2006 Cervetti, Damico, and Pearson highlighted some common themes, regardless of different practices and recommendations existing in the field. The following is a revised quotation:

1. "Training future teachers should begin by making sure that at least some internship experiences occur in community or after-school settings, places where multiple literacies are likely to present themselves as a matter of course.
2. School-based internships should occur in multiple settings, and at least some of those settings ought to promote multiple literacies.
3. Future teachers need to be involved in programmes that allow them to embrace the complexities and the contradictions inherent in teaching and learning processes, and that avoid narrow views of learning and literacy even when those
views appear to be supported by current policies' levers, such as standards and assessments.
4. With respect to technology, future teachers should learn about, through, and with technology-based media. Learning about entails awareness of what is available to them as teachers to use in their classrooms. Learning through involves engagement in technology-based programmes designed to enhance their knowledge and skill as teachers. Learning with means that they embrace technologically based environments for their own development as teachers and learners.
5. The very notion of multiplicity implies that not every learner will be at the same point of development in every literacy he or she uses to make sense of the world. Students bring whatever it is that they bring to the classroom, and our job as teachers is to examine their portfolios to find strengths that will propel their own learning, as well as the learning of others". (Cervetti, Damico, and Pearson, 2006, pp. 383-384)

### 7.4 Limitations of the present study

Regarding the limitations of the present study, five main weaknesses have been identified, mostly of a methodological nature, concerning the participant samples, the main tool used for data collection (the questionnaire) and the analyses conducted.

1. As regards the first limitation, the ISL teachers who participated in the research do not constitute a perfectly representative sample of the entire population (i.e. teachers of Italian as a Second Language in service at secondary schools in the bilingual area of Slovenia) because a 'convenience' or 'opportunity sampling' procedure was adopted, which is a form of "non-probability samples" (§3.4.2). Not having the means and resources to do otherwise, it was not possible to proceed with a rigorous random sampling. This circumstance has implications from the point of view of the generalizability of the results obtained, which, given the type of sample involved, is far from perfect. Consequently, caution should be exercised in using said results, which most likely do not accurately reflect the entire target population.
2. This first point is directly connected to the second limitation, which concerns the difference in size between the two samples of EFL (440) and ISL (10) teachers. Such disparity has led to two different problems:
i. The reduced number of observations in the ISL context meant that it was not possible to carry out some of the inferential statistical analyses (different ones with different variables) which instead were carried out smoothly with the data from the EFL context (§3.7.1 and §3.7.2). Furthermore, the reduced number of observations may also be the reason why almost no ISL data was statistically significant.
ii. For these reasons, it was not possible to compare the variables that emerged from the two contexts through inferential statistical analyses, because they would not have been reliable. ${ }^{61}$
3. As for the third limitation, the adoption of the questionnaire as a data collection tool brings with it two main weaknesses:
i. both the EFL and ISL questionnaires allow the researcher to uncover the subjective perceptions of individual foreign and second language teachers as to certain topics (e.g., knowledge of the specific learning objectives, familiarity with research, especially with the concept of Literacy and Digital Literacy, relationship with technology), but they do not allow the researcher to understand reality in an objective way;
ii. both questionnaires, being original tools, created specifically for the study (§3.5.1), are not perfect tools. Although they have been subjected to a preliminary pilot study ( $\S 3.6 .1$ ), they are not free from imperfections. These need to be corrected, in view of possible future uses.
Firstly, they are very long questionnaires, and further researchers might decide to only select some questions or sections (§3.5.1, first section). Secondly, some scales are composed of too few elements for researchers to be able to perform a principal component analysis (e.g., two for Question 4, three for Question 7): to

[^46]overcome this problem, it could be useful to widen the scales, or to do the opposite, which is, treat the items that compose them individually and not as part of a scale. As for Question 3 ("My age range is"), which was clearly misunderstood by several respondents in both data collection phases (perhaps confusing the answer options for the number of years they had been teaching), a more in-depth reflection should be devoted to it, as it introduces a separate problem, that of inconsistent data.
4. A fourth limitation concerns in fact this specific case of inconsistency in the collected data. While a detailed description of the issue is available for consultation in APPENDIX 4, the previous chapters mention the difficulties encountered in analysing the data collected by question 3 ("My age range is") of both questionnaires, EFL (see §4.2.1) and ISL (§5.2.1), given that some answers were not consistent with those provided by the respondents to the previous question (Question 2, "I have been teaching English as a Foreign Language for"). Faced with this problem, and given that it was not possible for us to trace the respondents in any way, there were only two possible options: to discard the answers obtained from this question entirely, despite the fact that the inconsistent answers were a minority, or to proceed with the analysis and decide how to deal with the issue based on the results obtained. Given the fact that the first option would have forced us to give up entirely on analysing data and variables on the basis of the different age ranges of the teachers, we initially chose to proceed with this second option, and the reasons that lead us to acknowledge the issue only in this discussion phase are the following:

- in neither of the two questionnaires, EFL or ISL, has the variable that emerged from question number 3 almost ever been involved in statistical analyses that reported significant results;
- in neither of the two questionnaires EFL or ISL, has the category most affected by the inconsistency issue, that is, the one concerning respondents under the age of 25 , ever led to significant results.

Consequently, this problem does not impact the analyses carried out or our findings: the only caution that is recommended is for the reader to be aware of the fact that, in the overviews provided in order to understand the general distribution of the participants of both contexts, EFL and ISL (§4.2.1 and §5.2.1, respectively), their subdivision by age
group is, most likely, not entirely accurate. A logical consideration to draw concerns the fact that, if the same problem was observed in both questionnaires, it would probably be appropriate to reformulate one or both questions in order to avoid similar problems in the future.
5. A final limitation of this study, that we are aware of, concerns the researcher's lack of knowledge of the Slovenian language. In dealing with texts and documents written in Slovenian and concerning a Slovenian learning environment, being able to interact directly with the language in question and not having to resort to translations would certainly have been helpful, both to better grasp any nuances that may have been lost and to access a wider range of articles and specific research studies.

### 7.5 Possible future research developments

In the light of what has been said so far - with particular reference to the limits of our study (§7.4) and to what has emerged from the discussion phase (§7.1 to §7.3) - some proposals for future research will be discussed in the following paragraphs.
The present suggestions concern case studies of different types (quantitative, qualitative or documentary), depending on the field of investigation that future researchers may be interested in investigating.

Future research might try to understand if and how more specific references relating to multiple forms of Literacy could be inserted in the normative documents that regulate the learning objectives for both languages examined, English and Italian, in the different types of upper secondary school. In that case, proposals could be formulated to combine the experience of those who usually draw up normative references with that of researchers on the one hand and teachers on the other.

This might present the opportunity to evaluate whether or not it could be appropriate to coin new Italian and Slovenian terms suitable for enclosing the plurality of meanings that the English term "Literacy" has assumed over the years (§1.1, §7.3) without having to resort to translations that are usually limited. A specific, in-depth documentary analysis could be supported by linguistic and etymological studies.

In discussing terminological issues, Literacy-wise, the strategic nature of pre- and inservice professional training was mentioned (§7.3), as it can promote and encourage the development of greater terminological and methodological awareness on the part of language teachers, offering them new tools and strategies to improve the quality of their teaching (Knobel and Kalman, 2016; Opfer and Pedder, 2011). Starting from these considerations, it would be interesting for future research to investigate which training options related to Literacy are available to language teachers in their context and to evaluate if and how different samples of teachers (for example, one appropriately trained, Literacy-wise, on the basis of the researcher's indications, and one not trained) differ in their approaches and learning outcomes produced.

Also, in a perspective not strictly tied to Literacy, but just as interesting, there appear to be several different problems that emerge daily in the language classrooms, from classroom management to the lack of digital competences (§4.3.3 and §5.3.3) which could be explored, perhaps through qualitative research made of direct observation, interviews and focus groups. Such a study might actually prove beneficial in terms of Literacy, too: previous paragraphs (see §6.3) have discussed the importance of addressing the already existing issues before proceeding with the introduction of new concepts, tools or approaches in the language classroom, on the one hand to see if the issues observed by new studies coincide with those identified by this research project and to what extent, on the other to outline possible practical solutions that could be implemented in the classroom. If this could be managed, it could open up more possibilities for the development of Literacy-related approaches.

These are just some of the possible directions that any future research might want to explore: since they are all linked to language teaching, however, further research might also choose to investigate the same topics but by focussing on learning. In this case, the questionnaire that was used for this research project could be re-examined and appropriately modified versions of it could be drafted in order to investigate the relationship that learners have with digital literacy (or with literacy itself, although it is assumed that it is a widely unknown concept amongst learners), with multimodality, and with different approaches which, in their opinion, promote effective language learning. Specifically, given what transpired from the focus group held with Slovenian teachers of Italian as a second language (§5.3.3) when it comes to the difficult
relationship between their students and the target language, it might be useful to explore it further by talking directly to them, perhaps through interviews and focus groups. Analysing the students' approach towards Italian as a second language, possibly comparing it with their approach towards English as a foreign language, could, on the one hand, highlight possible differences and any critical points between the two, as well as clarify whether and to what extent the resentment that the teachers interviewed during this research project brought up is confirmed to exist, and, if so, how to try to remedy it.

## CONCLUSIONS

Selecting and analysing theories and research studies focussing on Literacy in the field of language education has shown that this field of research, which is already very vast, also expands and builds on other disciplines, from critical literacy and discourse studies (Lankshear and McLaren, 1993; Luke, 1996; Street, 1995) to social studies (Heath 1983, Street 1984), from genre studies (Cope and Kalantzis, 1993; Cranny-Francis, 1993) to critical cultural studies (Hall, 1997), and so forth (§1.1 and §1.1.1). The evolution of the concept of Literacy, which started as the simple ability to read and write and has now expanded to many broader and, most importantly, coexisting definitions, has been speeded up by the advent of the Internet and by the rapid, ongoing socio-cultural changes in today's society (Leu, 2000). In an area so rich in definitions and so prone to constant transformation, the aims of this study were to offer an overview of the evolution that the concept of Literacy has gone through (and is still going through) in the specific field of language teaching, and to investigate how much the school system, from teachers to normative references, is in step with this evolution.

This study has thus reported an investigation into the concept of Literacy in language education in upper secondary schools in Italy and Slovenia ${ }^{62}$, focussing on exploring the relationship between school and research and on verifying whether there is a gap between the two and what level of awareness there is, within the school system, when it comes to these concepts. The specific learning objectives vis-à-vis literacy established for English as a foreign language in Italy and for Italian as a second language in Slovenia were examined, as well as the teachers' familiarity with a) the normative references that regulate language education; b) research in the field of language education; c) the relationship between a. and b.; d) technology, per se and in language education. The study has also discussed the most prominent issues that teachers face in the language classrooms and what approaches can be proposed, if any, in order to promote multiple forms of literacy in language education.

Our findings:

[^47]a. confirm the presence of a gap between the world of research and that of normative references, vis-à-vis Literacy, in the field of language education, and highlight the differences that exist between the two contexts analysed, EFL and ISL (§4.1, §5.1; §6.1);
b. hypothesise the existence of a second gap between the normative references and the daily reality of the language classrooms (§7.2);
c. report a general lack of awareness on the part of foreign and second language teachers regarding the world of research, vis-à-vis Literacy, as well as its relationship with the specific learning objectives established for the target language, also due to terminological difficulties and the coexistence of different definitions and meanings in research and research studies (§4.2, §5.2, §6.2, §7.3);
d. highlight the difficulty encountered in discussing the design and implementation of Literacy-based approaches in language teaching, not only for the points mentioned above, but also for the presence of many other issues that teachers face on a daily basis ( $\S 4.3, \S 5.3, \S 6.3$ ).

In an attempt to offer an updated overview of the concept of Literacy and its multiple facets that we felt was missing, we have reflected (see the introduction) on what the new forms of Literacy are and what they entail when it comes to a formal language learning environment; on whether they manage to be part of everyday language teaching, or remain theories and definitions dealt with in research and research studies but which do not find practical application in formal language education.

The main question is: what do we mean today when we use the word 'Literacy'? What emerges from this study is that there is no univocal answer. What transpires from the reference literature is mirrored by our results, which reflect the lack of clarity caused by the coexistence of too many definitions ( $\S 1.1, \S 1.1 .1$ and $\S 7.3$ ) and by the co-presence of too many terms that are often used interchangeably.
'Literacy' is used as a stand-alone term, which takes on the meaning of reading and writing skills in some studies, and of a complex and multifaceted concept which is supposed to define the skills needed in the $21^{\text {st }}$ century in others. It is also used as a supporting term, flanking a myriad of other terms (such as media literacy, information literacy, digital literacy, and many others, §1.1.4 and §1.1.5) where the boundary
between 'literacy' and "competence" becomes blurred (Anani, Lamptey and Frempong, 2021).

As long as research keeps evolving so rapidly, it is hard to expect the school system to keep up with its theories and definitions. As society changes and new technologies emerge, Leu et al. (2004) claim that definitions of literacy will also change and evolve, and so will their impact on education and on how teachers address literacy tasks. Thus, it is of pivotal importance for teachers and educators to understand the role that $21^{\text {st }}$ century literacy skills play in classroom instruction.

Both multiple literacies and new literacies challenge the current organization of traditional schooling, and involve many different literacies and modalities beyond print literacy. Several terms are associated with new literacies, and they are strongly connected to new technologies and literacy education (Cervetti, Damico and Pearson, 2006) since, in the processes of "doing" literacy, students learn "what counts as literacy" (Unsworth, 2001)
"The growing complexity of literacy", Hanemann (2015) states, "creates a tension vis-àvis the need to use a terminology which is clear and intelligible to everybody, [as] narrow understandings of literacy coexist with broader ones".

For the very reason that Literacy is not a univocal concept, and is subject to a myriad of variations and points of view, a clear position taken by research in this regard could be helpful. This does not mean choosing a single definition (which would be not only impossible, but also limiting) but highlighting the main ones and make terminological choices accordingly, so as to facilitate their differentiation for both native and nonnative English speakers.
In the light of this and of what has emerged from this study, then, we reiterate the fact that, before focussing on promoting different Literacy-oriented approaches in the foreign/second language classrooms, it is of pivotal importance to provide teachers with appropriate professional training vis-à-vis Literacy. Furthermore, pre- and in-service training needs to focus on setting on very clear and, possibly, realistic parameters, based on the means and tools actually available to the school system but also mindful of the issues that language teachers face on a daily basis ( $\S 4.3 .3$ and $\S 5.3 .3$ ) so that the desired effects in everyday language teaching situations can be produced.

Future research is needed in multiple directions, from investigating the learners' awareness of the topics covered, to examining the issues highlighted by the EFL and ISL teachers in order to understand if other findings confirm them and how they can be addressed; from hypothesising suggestions to be proposed at the regulatory level in both countries, Italy and Slovenia, to reduce the gap between school and research, to investigating the hypothesised gap between normative references and the everyday reality of the language classrooms.

Given how vast the field of literacy in language education is, these are just some of the directions that future research could take in the light of the evolution that the meaning of Literacy has undergone in recent decades and of all that it has entailed in the field of language education: according to the words of Toffler, "the illiterate of the $21^{\text {st }}$ century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn" (2006).

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## New Literacies Awareness Questionnaire for EFL Teachers

This questionnaire aims to verify the level of awareness that teachers of English as a Foreign Language have regarding the concept of Literacy and the evolution of recent studies within the language education field, the specific learning objectives established for foreign language education in upper secondary schools, and the use of technological tools in language teaching and learning.
*Campo obbligatorio

1. Type of upper secondary school I teach in * Mark only one ovalLiceo ClassicoLiceo ScientificoLiceo LinguisticoLiceo delle Scienze UmaneLiceo ArtisticoLiceo Musicale e CoreuticoIstituto tecnico economicoIstituto tecnico tecnologicoIstituto Professionale

## 2. I have been teaching English as a Foreign Language for * <br> Mark only one oval

Less than one year$1-5$ years6-10 years11-20 years$21-30$ years$30+$ years3. My age range is *

Mark only one ovalUnder 2526-3031-4041-5051-6061+Prefer not say

> 4. I have read the national guidelines relating to the specific learning objectives for English as a foreign language ostablished for the type of upper secondary school I toach in (Decroto Interministerialo MIUR-MEF 211, 07/10/2010; Dirottiva Ministoriale $4,16 / 01 / 2012$ )

Mark only one ovalYes
No
) I can't remember
5. Specific learning objectives for foreign language learning for the type of upper secondary school I teach in *
Mark one choice in each row



1 attend staff
meetings to discuss
the established

learning objectives

I revise the best approaches for the students to meet

said learning
objectives

I discuss the
selection of instructional media

I decide the
selection of instructional media

I develop (part of) a school curriculum

6. I believe that the specific learning objectives established for foreign (second) language education (Decreto Interministeriale MIUR-MEF 211, 07/10/2010; Direttiva Ministeriale 4, 16/01/2012) *
Express your level of agreement with the following items by marking one choice in each row


...are suitable
for a
 learning environment
...are suitable for a digital learning

environment
...are suitable for a multimodal learning environment
...are suitable to promote lifelong
learning
...should be concretely implemented in
 class
...should be an integral part of

teacher training
...should be updated
(0

7. Familiarity with research in language education *

Mark one oval in each row

|  | Yes |
| :--- | :--- |
| I am a subscriber to one (or more) printed |  |
| journals (e.g. EL.LE, Electronic.Journal of |  |
| Foreign Language Teaching, ...) |  |
| I am a researcher myself |  |
| I am an author myself |  |

8. Knowledge of the recently published studies in the field of language education * Mark one choice in each row


My school encourages: teachers to look for updates in our field

My school proyides teachers with updated resources

I independently consult websites and online resources related to language education (e.g.
 frour field


Google Scholar, Google
Books, ResearchGate...)
9. usually come in contact with these terms *

Tick every option that applies in each row

|  | When reading research studies | In <br> class | During teacher training | Never |
| :---: | :---: | :---: | :---: | :---: |
| Literacy | $\square$ | $\square$ | $\square$ | $\square$ |
| Digital Literacy | $\square$ | $\square$ | $\square$ | $\square$ |
| Mode | $\square$ | $\square$ | $\square$ | $\square$ |
| Medium | $\square$ | $\square$ | $\square$ | $\square$ |
| Multimodality | $\square$ | $\square$ | $\square$ | $\square$ |
| Multimodal text | $\square$ | $\square$ | $\square$ | $\square$ |
| Learning stiles | $\square$ | $\square$ | $\square$ | $\square$ |
| Learning modalities | $\square$ | $\square$ | $\square$ | $\square$ |
| Multiliteracies | $\square$ | $\square$ | $\square$ | $\square$ |
| New Literacies | $\square$ | $\square$ | $\square$ | $\square$ |

10. Relationship between the results obtained by language education studies and the approaches proposed by the school system *
Express your level of agreement with the following items by marking one choice in each row
The specific learning
objectives established
for FLL are in step with
the most recent studies
in the field of language
education
The approaches
proposed for FLL are in
step with the most
recent studies in the
field of language
education
Disagree
The school curricula
updated on the basis of
the results obtained
from studies in the
language education
field
The specific learning
The
objectives are updated
on the basis of the
results obtained from
studies in the language
education field
Most research studies
fail to take into account
many factors involved
in everyday school
reality
11. My school *

Mark one choice in each row

|  | Yes $\quad$ No |  |
| :--- | ---: | ---: |
| ..promotes digital approaches | $\square$ | $\square$ |

...promotes multimodal approaches
...promotes multicultural approaches
...provides training opportunities that allow teachers to stay up to date
...invites teachers to do research
...provides teachers with tools and means to do research
12. Please provide a definition of the concept of "Literacy" *

## 13. The following areas were covered during my formal education and/or training * Mark one choice in each row

|  | Fully covered (6) | (5) | (4) | (3) | (2) | Not covered at all (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Knowledge of the curriculum |  |  |  |  |  |  |
| Content and performance standards in my main subject field(s) |  |  |  |  |  |  |
| ICT (information and communication technology) skills for teaching |  |  |  |  |  |  |
| Pedagogical competencies in teaching my subject field(s) |  |  |  |  |  |  |
| Educational Psychology |  |  |  |  |  |  |
| Studies and theories related to my subject field(s) |  |  |  |  |  |  |
| Teaching students with special learning needs |  |  |  |  |  |  |
| Teaching in a multicultural or multilingual setting |  |  |  |  |  |  |
| Communicating with people from different cultures or countries |  |  |  |  |  |  |
| Teaching cross-curricular skills (e.g. problem solving, learning-to-learn) |  |  |  |  |  |  |
| Student assessment practices |  |  |  |  |  |  |
| School management and administration |  |  |  |  |  |  |
| Litoracy |  |  |  |  |  |  |
| New Literacles (e.g. critical thinking, scientific reasoning, multi-cultural awarenese...) |  |  |  |  |  |  |

```
14. The concept of Literacy *
Express your level of agreement with the following items by marking one choice in each row
```

| Strongly |
| :---: |
| Agree |$\quad$ Agree | Partially |
| :---: |
| Agree | | Partially |
| :--- |
| Disagree |


| Disagree |
| :--- |
| significantly over the |
| last few decades |


| disagree |
| :--- |

_.enables students to
achieve their goals
...enables students to develop their potential

$\square$
...is something teachers should focus their attention on when
 teaching EFL
...is something teachers should make sure their students are familiar with


...is a plural concept

| ..is a multimodal |
| :--- |
| concept |


| ..involves multiple |
| :--- |
| skills |

...involves a continuum of learning

...is taken into
 consideration by the specific learning objectives established for foreign language
education in upper secondary schools
15. When in class, to convey meaning I resort to *

Mark one choice in each row

|  | Very often (6) | (5) | (4) | (3) | (2) | Never <br> (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ...the use of printed texts | $\Omega$ |  |  |  |  |  |
| ...the use of texts in digital format |  |  |  |  |  |  |
| ...the use of various types of images (e.g. illustrations, graphs...) | ) | C |  |  |  |  |
| ...the use of videos |  |  |  |  |  |  |
| ...the use of audios (e.g. recordings, podcasts, songs ...) | $D$ | D | C |  | C |  |
| ...the use of facial expressions and body language | D | ( | C |  | C |  |
| ...the use of proxemics | ) |  |  |  |  |  |
| ...the use of paralanguage | $\square$ | $C$ | $C$ |  |  |  |
| interacting with objects (e.g. games, technological devices ...) | , | C |  | C | C |  |
| ...the use of different means in one lesson |  |  |  |  |  |  |
| ...the combination of two or more means at once (e.g. multimedia presentations) | $D$ | C | C |  |  |  |
| the use of multimodal texts |  | ( |  | ( |  |  |

16. Please provide a definition of the concept of "Digital Literacy"
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
17. My degree of competence in using the following tools is *

Mark one choice in eoch row

|  | Excellent <br> (6) | (5) | (4) | (3) | (2) | scarce <br> (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Word processing applications (e.g. MS Word) |  |  |  |  |  |  |
| Spreadsheef applications (e.g., MS Excel) |  |  | $\square$ | $\square$ | C | , |
| Database applications (e.g.. MS Access) |  |  |  | $7$ |  |  |
| Presentation applications (e.g., MS PowerPoint) |  |  |  |  |  |  |
| Communication applications (e.g. skype) |  |  |  | $\square$ | $\square$ |  |
| Learning managernent systams (e.g. Moadle) |  |  |  | $\square$ |  |  |
| Virtual worlds (e.g. Second Life) |  |  |  |  |  |  |
| Social networking services (e.g. Facebook) |  |  |  |  |  |  |
| Blogs (e.g. Blogger) |  | $\square$ | $\square$ | $\square$ |  |  |
| Wikis (eg., PBwarks) |  |  |  | $0$ | C |  |
| Podcasts (e.g. Apple <br> Podcasts) |  |  |  |  |  |  |
| File sharing sites (e.g. Dropbox) |  |  |  |  |  |  |
| Photo sharing sites (e.g., Picasa) |  |  |  |  |  |  |
| Video sharing sites (e. g. YouTube) |  |  |  |  |  |  |
| Web design applications (eg, Drearmwoaver) |  |  |  |  |  |  |
| Woh search engines (o.g. Google) | ) |  |  |  |  |  |
| Dictionary apps (e.g., Dictionary com) | $\square$ |  | D |  |  |  |
| Language exchange app (o.g. Tandorn) |  |  |  |  |  |  |

18. Degree of usefulness of the following tools in foreign language teaching and learning *
Mark one ehoico in each row

|  | Very Usoful (6) | (5) | (4) | (3) | (2) | Not useful at all (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Word procosssing applications (e.g., MS Word) |  |  |  |  | $\square$ |  |
| Spreadsheet applications (e.g. MS Excel) |  |  |  | $\because$ | - |  |
| Database applications (e.g. MS Accesss) |  |  |  |  |  |  |
| Presentation applications (o.g. Ms Fowerpoint) |  |  |  |  |  |  |
| Communication applications (e.g., Skype) |  |  |  |  | $\square$ |  |
| Learning managernent systerns (e.g., Moodie) |  |  |  |  |  |  |
| Virtual worids (e.g. Second Lifo) |  |  |  |  | $\square$ |  |
| Social notworking services (o.g. Facobook) |  |  |  |  |  |  |
| Blogs (eg., Blogger) |  |  |  |  | . |  |
| Wikis (eg. PBworks) |  |  |  |  | $\square$ |  |
| Podcasts (e.g. Apple Podcasts) |  |  |  |  |  |  |
| File sharing sites (e.g., Dropbox) |  |  |  |  |  |  |
| Photo charing sites (e.gPicass) |  |  |  |  |  |  |
| Video sharing sites (e.g., YouTube) |  |  |  |  |  |  |
| Web design applications (e.g., Dreamweaver) |  |  |  |  |  |  |
| Wob search engines (e.g., Google) |  |  |  |  |  |  |
| Dictionary apps (a.g. Dictionary.oom) |  |  |  |  |  |  |
| Language exchange app (e.g. Tandem) | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |  |

19. I resort to these tools in class * Mark one chovice in each row

|  | At least once a Jesson (6) | (5) | (4) | (3) | (2) | Never (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Word procesaling applications (o.g- MS Word) | , |  |  |  |  |  |
| Spreadaheat <br> applications (o.g~MS <br> Excof) | 2 |  |  | ) | , |  |
| Database epplications (e.g., Ms Access) |  |  |  |  |  |  |
| $\begin{aligned} & \text { Preaontation } \\ & \text { applications (0.9-4 MS } \\ & \text { FowerPoint) } \end{aligned}$ | 3 |  |  | , | $\square$ |  |
| Communication applications (o.gskypo) |  |  |  |  | ? |  |
| Learning managernent systerns (e.g., Moodle) |  |  |  |  |  |  |
| Virtual worlds (e.g. Second Lifa) |  |  |  |  |  |  |
| Social networking sorvices (e.g. Facobook) |  |  |  | 2 |  |  |
| Blogs (eg, Elogger) |  |  |  | $\bigcirc$ |  |  |
| Wikis (e.g. PBworks) |  |  |  | , |  |  |
| Podoasts (e.g. Apple Podeasts) |  |  |  |  |  |  |
| File sharing sites (e.g. Dropbox) |  |  |  |  |  |  |
| Photo sharing sites (e.g., Picesa) | $\square$ | $=$ | $\square$ | $\square$ | $\square$ | E |
| Vidoo sharing sitos (e.g. YouTube) |  |  |  |  |  |  |
| Web design applications (e.g. Dreamweaver) |  |  |  |  |  |  |
| Web search engines (o.g., Googla) |  |  |  |  |  |  |
| Dictionary apps (eg. <br> Dictionary.com) |  |  |  |  |  |  |
| Language exchange app (e.g. Tandem) | $7$ |  |  |  |  |  |

20. I believe that the use of technology facilitates foreign language learning at the level of ${ }^{*}$
Express your level of agreement with the following items by marking one choice in each row

| Strongly |
| :---: |
| Agree |

Interest
Attention
Motivation
Participation
Retention of
information
Relationship with the
students
Relationship between
the students
Agerformance

[^48]| Strongly <br> Agree | Agree | Partially <br> Agree | Partially <br> Disagree | Disagree | Strongly <br> Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |

```
...is very useful when it
comes to foreign

```

language teaching

```
...is very useful when it comes to foreign language learning
...and the use of technological tools in language learning can help develop digital literacies
...and the use of technological tools in language learning can
 help develop multimodality

...is something students can generally approach better than their
 teachers
...is something the specific learning objectives established for foreign language education in upper secondary schools should take into consideration
...should be implemented in foreign language teaching

\section*{22. Reasons that might have hindered the use of technology so far * \\ Express your level of agreement with the following items by marking one choice in each row}
\begin{tabular}{ccccc}
\begin{tabular}{c} 
Strongly \\
Agree
\end{tabular} & Agree & \begin{tabular}{c} 
Partially \\
Agree
\end{tabular} & \begin{tabular}{c} 
Partially \\
Disagree
\end{tabular} & Disagree
\end{tabular} \begin{tabular}{c} 
Strongly \\
Disagree
\end{tabular}

My school lacks the appropriate
technological tools

My school fails to promote the use of



technological tools

The tools provided are obsolete


The wifi network is not sufficient to support intensive use of said

tools

The time available is not sufficient to introduce new tools and
 activities

My digital skills are not sufficient to regularly approach language

teaching through
technological tools

The students' digital skills are not sufficient to properly approach digital language learning

23. In light of the health emergency developed in 2020, which forced upper secondary schools to hold most of their lessons through different distance learning modalities *
Mark one choice in each row
_.my technological preparation proved
sufficient to properly manage distance
learning
_.the technological means provided by my
school proved sufficient to properly manage
distance learning
...the technological preparation of the
students proved sufficient for them to
properly manage distance learning
_...my school helped to provide a smooth
transition
_.my school helped to provide the
appropriate intructions and/or training

\section*{24. Distance learning *}

Express your level of agreement with the following items by mariking one choice in each row
\begin{tabular}{c} 
Strongly \\
Agree
\end{tabular}
\begin{tabular}{l} 
Agree \\
alternative to in-situ \\
lessons
\end{tabular}
\begin{tabular}{l} 
Partially \begin{tabular}{l} 
Partially \\
Disagree
\end{tabular} \\
Agree holpod to \\
emphasize the \\
importance of greater \\
technological \\
preparation for schools
\end{tabular}
...has helped to ormphasize the importance of greater tochnological preparation for teachers
```

    has helped to
    emphasize the
importance of greater
technological
preparation for students

```

\section*{New Literacies Awareness Questionnaire for EFL Teachers}

This questionnaire aims to verify the level of awareness that teachers of English as a Foreign Language have regarding the concept of Literacy and the evolution of recent studies within the language education field, the specific learning objectives established for foreign language education in upper secondary schools, and the use of technological tools in language teaching and learning.
* Campo obbligatorio
*The topic of research is very low risk and no personal data will be collected completing the following questionnaire thus implies an implicit consent to data collection. More information is provided in the privacy notice distributed together with the present questionnaire.
1. Type of upper secondary school I teach in *

Mark only one ovalLiceo ClassicoLiceo ScientificoLiceo LinguisticoLiceo delle Scienze UmaneLiceo ArtisticoLiceo Musicale e CoreuticoIstituto tecnico economicoIstituto tecnico tecnologicoIstituto Professionale
2. I have been teaching English as a Foreign Language for * Mork only onc aral
3. My age range is * Mark only one ovalLess than one yearUnder 25\(1-5\) years26-306 -10 years\(31-40\)\(11-20\) years41-5021-30 years\(30+\) years51-60\(61+\)Prefer not say
4. When it comes to specific learning objectives for English as a foreign language established for the type of upper secondary school I teach in (Decreto Interministeriale MIUR-MEF 211, 07/10/2010; Direttiva Ministeriale 4, 16/01/2012) *
Mark one oval in each row
I have read the national guidelines relating
to the specific learning objectives for
English as a foreign language
I am aware of the specific learning
objectives for English as a foreign
language
5. Specific learning objectives for foreign language learning for the type of upper secondary school 1 teach in *
Mark one oval in each row
I attend staff meetings to
discuss the established
learning objectives
often (6)
f revise the best approaches
learning objectives
I discuss the selection of
instructional media
I decide the selection of
instructional media
I develop (part of) a school
curriculum
6. I believe that the specific learning objectives established for foreign language learning (Decreto interministeriale MIUR-MEF 211, 07/10/2010; Direttiva Ministeriale 4. 16/01/2012) *

Express your level of agreement with the following items by marking one oval in each row

it
```

_.are suitable
for the
curriculum
proposed by
the upper
secondary
school I teach
in

```
...are suitable
for a
multicultural
learning
environment
t. are suitable
for a digital
learning
environment
,..are suitable
for a

learning
environment
,ware suitable
to promote
lifelong

learning
```

wshould be

```
concretely
implemented in class
..should be an integral part of
 teacher training
...should be updated

\section*{7. Familiarity with research in language education *}

Mark one oval in each row
\begin{tabular}{l|l} 
& Yes \\
\hline lam a subscriber to one (or more) printed \\
journals (e.g. EL.LE, Electronic Journal of \\
Foreign Language Teaching,...) \\
\hline I am a researcher myself & \\
\hline Lam an author myself & \\
\hline
\end{tabular}
8. Knowledge of the recently published studies in the field of language education * Mark one oval in each row
Very Often - at least once a
(5)
(4)
(3)
(2)
Never
(1) week (6)

I receive updates in the field of language

education

I read updated
research in the field of
language education


My school encourages teachers to look for updates in our field

My echool provides teachers with updated resources

I independently consult
websites and online resources related to language education
(e.g. Google Scholar, Google Books,
ResearchGate....)
9. Relationship between the results obtained by language education studies and the approaches proposed by the school system *

Express your level of agreement with the following items by marking one oval in each row
Agree \begin{tabular}{l} 
Strongly \\
Agree
\end{tabular} \begin{tabular}{c} 
Partially \\
Agree
\end{tabular} \begin{tabular}{l} 
Partially \\
Disagree
\end{tabular} Disagree \begin{tabular}{l} 
Strongly \\
Disagree
\end{tabular}

The approaches proposed for FLL are in step with the most recent studies in the field of language education

The school curricula are updated on the basis of the results obtained from studies in the language education field

The specific learning objectives are updated on the basis of the results obtained from studies in the language education field

Most research studies fail to take into account many factors involved in
 everyday school reality
10. My school *

Mark one oval in each row


Literacy
11. I come in contact with these terms *

Tick every option that applies in each row
\begin{tabular}{|c|c|c|c|c|}
\hline & When reading research studies & \[
\begin{gathered}
\text { In } \\
\text { class }
\end{gathered}
\] & During teacher training & Never \\
\hline Literacy & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Digital Literacy & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Mode & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Medium & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Multimodality & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Multimodal text & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Learning styles & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Learning modalities & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Multiliteracies & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline New Literacies & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline
\end{tabular}
12. Please provide your definition of the concept of "Literacy" *
13. The following areas were covered during my formal education and/or training * Mark one oval in each row
Knowledge of the
curriculum
Content and performance
standards in my main
subject field(s)
ICT (information and
communication
technology) skills for
teaching
Pedagogical
competencies in teaching
my subject field(s)
Educational Psychology
Studies and theories
related to my subject
field(s)
Teaching students with
special learning needs
at all
Teaching in a multicultural
or multilingual setting
peommunicating with
cultures or countries

Teaching cross-curricular skills (e.g. problem

solving, learning-to-learn)

Student assessment practices


School management and
 administration

Literacy


New Literacies (egg. critical thinking, scientific reasoning, multi-cultural
 awareness...)

\section*{14. The concept of Literacy *}

Express your level of agreement with the following items by marking one oval in each row
\begin{tabular}{lcccc} 
& \begin{tabular}{c} 
Strongly \\
Agree
\end{tabular} & Agree & \begin{tabular}{c} 
Partially \\
Agree
\end{tabular} & \begin{tabular}{c} 
Partially \\
Disagree
\end{tabular} \\
Disagree & \begin{tabular}{c} 
Strongly \\
Disagree
\end{tabular} \\
\hline \begin{tabular}{l} 
has changed \\
significantly over the \\
last few decades
\end{tabular} & & &
\end{tabular}
...enables students to achieve their goals


...enables students to develop their


knowledge
...enables students to develop their potential


...is something teachers should focus their attention on when

teaching EFL
...is something teachers should make sure their students are familiar with




```

... is a plural concept

```
...is a multimodal concept

...involves a continuum of learning


...is taken into
 consideration by the specific learning objectives established for foreign language education in upper secondary schools
15. When in class, to convey meaning I resort to *

Mark one oval in each row
Very often - at least once a
(5) (4)
(3)
(2) \(\quad\) Never
lesson (6)
...the use of printed texts

...the use of texts in digital format

...the use of various types of images (e.g. illustrations,

graphs...)
...the use of videos

...the use of audios
(egg. recordings,
 podcasts, songs...)
...the use of facial expressions and
 body language
...the use of proxemics
...the use of paralanguage
...interacting with objects (egg. games, technological

devices...)
...the use of different
means in one lesson

...the combination of two or more means
at once (egg.
multimedia
presentations)
...the use of multimodal texts



\section*{Digital Literacy}
16. Please provide your definition of the concept of "Digital Literacy" *
\(\qquad\)
\(\qquad\)
17. My degree of competence in using the following tools is *

Mark one oval in each row
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \begin{tabular}{l}
Excellent \\
(6)
\end{tabular} & (5) & (4) & (3) & (2) & \begin{tabular}{l}
Scarce \\
(1)
\end{tabular} \\
\hline Word processing applications (e.g., MS Word) & & \[
C
\] & & &  & \\
\hline Spreadsheet applications (e.g., MS Excel) & & & & & & \\
\hline Database applications (e.g., MS Access) & & & & & & \\
\hline Presentation applications (e.g., MS PowerPoint) & & & & & & \\
\hline Communication applications (e.g., Skype) & & & & & & \\
\hline Learning management systems (e.g., Moodle) & & & & & & \\
\hline Virtual worlds (e.g., Second Life) & &  & & &  & \\
\hline Social networking services (e.g., Facebook) & & & \[
0
\] & & & \\
\hline Blogs (e.g., Blogger) & \[
2
\] & & & & & \\
\hline Wikis (e.g., PBworks) & \[
0
\] & C & & &  & \\
\hline Podcasts (e.g., Apple Podcasts) & & & & & & \\
\hline File sharing sites (e.g., Dropbox) & \[
0
\] & & & & & \\
\hline Photo sharing sites (e.g., Picasa) & & & & & & \\
\hline Video sharing sites (e.g., YouTube) & \[
\square
\] & C & & & & \\
\hline
\end{tabular}
Web design applications
(e.g., Dreamweaver)
\begin{tabular}{l} 
Web search engines (e.g., \\
Google) \\
Dictionary apps (e.g., \\
Dictionary.com) \\
Language exchange app \\
(e.g, Tandem)
\end{tabular}
18. Degree of usefulness of the following tools in foreign language teaching and learning *
Mark one oval in each row
\begin{tabular}{llllll} 
Very \\
\begin{tabular}{llll} 
Useful \\
(6)
\end{tabular} & (5) & (4) & (3) & (2) & \begin{tabular}{c} 
Not \\
useful \\
at all
\end{tabular} \\
\end{tabular}
(1)

Word processing applications (e.g., MS Word)


Spreadsheet applications (e.g., MS Excel)

Database applications (e.g., MS Access)


Presentation applications (e.g., MS PowerPoint)

Communication
applications (e.g., Skype)


Learning management systems (e.g., Moodle)


Virtual worlds (egg., Second Life)


19. | resort to these tools in class *

Mark one oval in each row
\begin{tabular}{c} 
Very often - at \\
leastonce a \\
lesson (6)
\end{tabular}
\begin{tabular}{l} 
Word processing \\
applications (e.g., MS \\
Word)
\end{tabular}
\begin{tabular}{l} 
Sproadshoot \\
applications (e.g., MS \\
Excel)
\end{tabular}
\begin{tabular}{l} 
Database \\
applications (e.o. MS \\
Access)
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline ```
Presentation
applications (e.g., MS
PowerPoint)
``` & ( & \(\square\) & - & ( & D & \(\square\) \\
\hline Communication applications (e.g., Skype) & \[
0
\] & \(D\) & 0 & ( & \(\bigcirc\) & ( \\
\hline Learning management systems (e.g., Moodle) & \[
0
\] & \(D\) & C & 0 & ( & ( \\
\hline Virtual worlds (e.g., Second Life) & \(D\) & 0 &  & 0 & ( & ( \\
\hline Social networking services (e.g., Facebook) & (D) & 0 & \[
0
\] &  & D & ( \\
\hline Blogs (e.g., Blogger) & \[
0
\] & D & \[
0
\] & D & ( & \[
0
\] \\
\hline Wikis (e.g., PBworks) & ( & ( & \[
0
\] & (D) & \[
0
\] & \[
0
\] \\
\hline Podcasts (e.g., Apple Podcasts) & \[
D
\] & \(\square\) &  & D & \[
0
\] & ( \\
\hline File sharing sites (e.g., Dropbox) &  & \[
\square
\] & \[
\because
\] & \[
\because
\] & \[
巳
\] & \[
\because
\] \\
\hline Photo sharing sites (e.g., Picasa) & \[
0
\] & \[
0
\] &  &  & ( & \[
0
\] \\
\hline Video sharing sites (e.g., YouTube) & \[
0
\] & \[
0
\] &  & ( & ( & \[
0
\] \\
\hline Web design applications (e.g., Dreamweaver) & \[
0
\] & D & ( & ( & ( & D \\
\hline Web search engines (e.g., Google) & \[
0
\] & \[
0
\] & \[
D
\] & ( & ( & ( \\
\hline Dictionary apps (e.g., Dictionary.com) &  & 0 &  & \(\square\) & ( & ) \\
\hline Language exchange app (e.g, Tandem) & \[
D
\] & D & ( & ( & (D) & ) \\
\hline
\end{tabular}
20. I believe that the use of technology facilitates foreign language learning at the level of students' *
Express your level of agreement with the following items by marking one oval in each row
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \begin{tabular}{l}
Strongly \\
Agree
\end{tabular} & Agree & Partially Agree & \begin{tabular}{l}
Partially \\
Disagree
\end{tabular} & Disagree & Strongly Disagree \\
\hline Interest & ( & D & (D) & (D) & (0) & (D) \\
\hline Attention & \[
0
\] & \[
0
\] & \[
0
\] & \[
0
\] & D & 0 \\
\hline Motivation & \[
0
\] & ( & ( & ( & ( & ( \\
\hline Participation & \[
0
\] & \[
0
\] & (D) & (0) & ( & ( \\
\hline Retention of information & 工 & \[
0
\] & (D) & D & ( & ( \\
\hline Relationship with the teacher & \[
0
\] & \[
0
\] & (D) &  & (0) & ( \\
\hline Relationship with peers & \[
D
\] & \[
0
\] & D & C & C & C \\
\hline Literacy & ( & ( & ( & ( & D & ( \\
\hline Agency & 0 & ( & (D) & D & \(\bigcirc\) & ( \\
\hline Performance & ( & (D) & \(\bigcirc\) & D & (0) & ( \\
\hline
\end{tabular}

\section*{21. Technology *}

Express your level of agreement with the following items by marking one oval in each row
\begin{tabular}{lcccc} 
& \begin{tabular}{c} 
Strongly \\
Agree
\end{tabular} & Agree & \begin{tabular}{c} 
Partially \\
Agree
\end{tabular} & \begin{tabular}{c} 
Partially \\
Disagree
\end{tabular} \\
\begin{tabular}{l} 
Disagree
\end{tabular} & \begin{tabular}{c} 
Strongly \\
Disagree
\end{tabular} \\
\begin{tabular}{l} 
_.is very useful when it \\
language teaching
\end{tabular} & &
\end{tabular}
...and the use of technological tools in language learning can
 help develop digital literacies
...and the use of technological tools in language learning can help develop multimodality
...is something students can generally approach better than their
 teachers
...is something the specific learning objectives established for foreign language education in upper secondary schools should take into consideration
...should be implemented in foreign
 language teaching
22. Reasons that might have hindered the use of technology so far *

Express your level of agreement with the following items by marking one oval in each row
\begin{tabular}{lllllll} 
& \begin{tabular}{c} 
Strongly \\
Agree
\end{tabular} & Agree & \begin{tabular}{c} 
Partially \\
Agree
\end{tabular} & \begin{tabular}{c} 
Partially \\
Disagree
\end{tabular} & Disagree & \begin{tabular}{l} 
Strongly \\
Disagree
\end{tabular} \\
\hline \begin{tabular}{l} 
My school lacks the \\
appropriate \\
technological tools
\end{tabular} & & & & \\
\hline
\end{tabular}

My school fails to promote the use of
 technological tools

The tools provided by my school are obsolete


My school's wifi
network is not sufficient to support intensive use
of said tools

The time available is not sufficient to introduce new tools and
activities

My digital skills are not sufficient to regularly approach language
 teaching through technological tools

The students' digital skills are not sufficient to properly approach

digital language learning

The students lack the appropriate technological tools

23. In light of the health emergency developed in 2020, which forced upper secondary schools to hold most of their lessons through different distance learning modalities *

Mark one oval in each row

\section*{Yes No}
...my technological preparation proved sufficient to properly manage distance
 learning
...the technological means provided by my school proved sufficient to properly manage distance learning
...the technological preparation of the students proved sufficient for them to
 properly manage distance learning
....my school helped to provide a smooth transition
...my school helped to provide the appropriate instructions and/or training

\section*{24. Distance learning *}

Express your level of agreement with the following items by marking one oval in each row
\begin{tabular}{lcccc} 
& \begin{tabular}{c} 
Strongly \\
Agree
\end{tabular} & Agree & \begin{tabular}{c} 
Partially \\
Agree
\end{tabular} & \begin{tabular}{c} 
Partially \\
Disagree
\end{tabular} \\
Disagree & \begin{tabular}{c} 
Strongly \\
Disagree
\end{tabular} \\
\hline \begin{tabular}{l} 
_.proved to be a valid \\
alternative to in-situ \\
lessons
\end{tabular} & &
\end{tabular}
```

...has helped to
emphasize the
importance of greater © O D D
technological
preparation for teachers

```
```

...has helped to
emphasize the
technological
preparation for students

```
importance of greater \(\square \longrightarrow\)

\section*{New Literacies - Questionario per insegnanti di Italiano L2}

Questo questionario ha lo scopo di verificare il livello di consapevolezza degli insegnanti di Italiano come lingua seconda per quanto riguarda il concetto di Literacy e l'evoluzione dei recenti studi nel campo dell'educazione linguistica, gli obiettivi di apprendimento specifici stabiliti per lìnsegnamento delle lingue seconde nelle scuole superiori, e l'uso di strumenti tecnologici nell'insegnamento e nell'apprendimento delle lingue.
* ll soggetto della ricerca è a rischio molto basso e non verranno raccolti dati personali: la compilazione del seguente questionario implica quindi un consenso implicito alla raccolta dei dati. Maggiori informazioni sono fornite nell'informativa sulla privacy distribuita insieme al presente questionario.
*Campo obbligatorio
1. 1. Tipo di scuola superiore in cui insegno *

Seleziona tutte le voci applicabili
Seleziona tutte le voci applicabili.
LiceoIstituto tecnicoEntrambi
2. Insegno italiano come lingua seconda/d'ambiente da *

Contrassegna un solo ovale
Contrassegna solo un ovale.Meno di un anno\(1-5\) anni6-10 anni\(11-20 \mathrm{ami}\)21-30 anniOlttre 30 anni
3. Fascia d'etả * Contrassegna un solo ovale

Contrassegna solo un ovale.Meno di 25 anni26-30 anni31-40 anni41-50 anni51-60 anniOltre 60 anniPreferisco non rispondere
4. Per quanto riguarda gli obiettivi di apprendimento specifici per l'Italiano come lingua seconda stabiliti per il tipo di scuola secondaria in cui insegno (Učni načrt za italijanśčino kot tuji in kot drugi jezik: gimnazija (Šečerov e Zorman, 2008);
Italijanśčina kot drugi jezik: izpitni katalog za poklicno maturo (Šečerov et al, 2010), rispettivamente) *
Contrassegna un solo ovale per riga
Contrassegna solo un ovale per riga.
\begin{tabular}{llll} 
& Si & No & Non ne so abbastanza \\
\hline \begin{tabular}{l} 
Ho letto le linee guida nazionali relative agli \\
obiettivi specifici di apprendimento \\
dellitaliano come lingua seconda
\end{tabular} & & \\
\hline \begin{tabular}{l} 
Sono a conoscenza degli obiettivi specifici di \\
apprendimento per litaliano come lingua \\
seconda
\end{tabular} & \(\square\) & \\
\hline
\end{tabular}
5. Per quanto riguarda gli obiettivi specifici di apprendimento della lingua seconda nel tipo di scuola superiore in cui insegno *
Contrassegna un solo ovale per riga
Contrassegna solo un ovale per riga.
Molto
spesso (6)
(5)
(4)
(3)
(2) Mai (1)

Partecipo alle riunioni del personale per discutere gli obiettivi di apprendimento





© stabiliti

Valuto i migliori approcci perché gli studenti raggiungano tali obiettivi di
 apprendimento

Discuto la selezione dei supporti didattici


Mi occupo della selezione dei supporti didattici


Sviluppo (parte di) un curriculum scolastico


D
6. Ritengo che gli obiettivi specifici di apprendimento stabiliti per l'apprendimento delle lingue seconde (Učni načrt za italijanščino kot tuji in kot drugi jezik: gimnazija (Šečerove Zorman, 2008): Italijanščina kot drugi jezik: izpitni katalog za poklicno maturo (Šečerov et al. 2010), rispettivamente) *

Esprimi il tuo livello di accordo con i seguenti elementi contrassegnando un ovale per ogni riga
Contrassegna solo un ovale per riga.
Molto
d'accordo D'accordo \begin{tabular}{cc} 
Parzialmente & \begin{tabular}{c} 
Parzialmente \\
d'accordo
\end{tabular} \\
disaccordo
\end{tabular}\(\quad\) Disaccordo \begin{tabular}{c} 
Molto in \\
disaccordo
\end{tabular}
...siano adatti
al curriculum proposto dalla scuola
secondaria in
cui insegno

...siano adatti
per un
ambiente di apprendimento digitale
...siano adatti
per un
ambiente di apprendimento multimodale
...siano adatti
a promuovere
lifelong

learning
...dovrebbero
essere concretamente
implementati

in classe
_. dovrebbero
essere parte
integrante
della
formazione
degli
insegnanti
_..dovrebbero
essere
aggiornati
7. Familiarità con la ricerca nell'ambito dell'educazione linguistica * Contrassegna un solo ovale per riga

Contrassegna solo un ovale per riga.
Sono abbonato a una (o più) riviste cartacee
(e.g. EL.LE, Electronic Journal of Foreign
Language Teaching, ...)
Sono a mia volta un ricercatore
Sono a mia volta un autore

\section*{8. Conoscenza degli studi pubblicati di recente nel campo dell'educazione} linguistica *
Contrassegna un solo ovale per riga
Contrassegna solo un ovale per riga.
Molto spesso -
Almeno una volta (5) (4) (3) Mai (1)
a settimana (6)

Ricevo
aggiornamenti nel
campo \(\square\)
dell'educazione
linguistica

Leggo ricerche aggiornate nel campo dell'educazione linguistica

La mia scuola
incoraggia gli insegnanti a cercare aggiornamenti nel proprio campo disciplinare

La mia scuola
fornisce agli insegnanti risorse aggiornate

Consulto
autonomamente siti
Web e risorse online
relative
all'educazione
linguistica (e.g.
Google Scholar,
Google Books,
ResearchGate, ...)
9. Rapporto tra i risultati ottenuti dagli studi condotti nell'ambito dell'educazione linguistica e gli approcci proposti dal sistema scolastico *
Esprimi il tuo livello di accordo con i seguenti elementi contrassegnando un ovale per ogni riga
Contrassegna solo un ovale per riga.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & Molto d'accordo & D'accordo & Parzialmente d'accordo & Parzialmente in disaccordo & Disaccordo & Molto in disaccordo \\
\hline Gli obiettivi specifici di apprendimento stabiliti per l'apprendimento delle lingue seconde (Second Language Learning) sono in linea con gli studi più recenti nel campo dell'educazione linguistica & \[
\square
\] & \[
0
\] & \[
0
\] & \[
0
\] & \[
\square
\] & \[
\square
\] \\
\hline Gli approcci proposti per SLL sono in linea con i più recenti studi nel campo dell'educazione linguistica &  & \(\square\) & \[
0
\] & \[
0
\] & \[
\square
\] & \[
\square
\] \\
\hline \begin{tabular}{l}
I curricula \\
scolastici \\
vengono \\
aggiornati sulla \\
base dei \\
risultati ottenuti \\
dagli studi nel \\
campo \\
dell'educazione \\
linguistica
\end{tabular} &  & \[
0
\] & \[
0
\] & \[
\square
\] & \[
D
\] & \[
0
\] \\
\hline Gli obiettivi specifici di apprendimento vengono aggiornati sulla base dei risultati ottenuti &  & \[
\square
\] & \[
\square
\] & \[
\square
\] & \[
0
\] &  \\
\hline
\end{tabular}

La maggior
parte degli
studi di ricerca
non tiene conto
di molti fattori
coinvolti nella
realtà
scolastica
quotidiana
10. 10. La mia scuola *

Contrassegna un solo ovale per riga
Contrassegna solo un ovale per riga.


Literacy

\section*{11. Entro in contatto con questi termini *}

Seleziona tutte le voci applicabili per ciascuna riga
Seleziona tutte le voci applicabili.
\begin{tabular}{lllll} 
& \begin{tabular}{c} 
Durante la lettura di \\
ricerca/casi studio
\end{tabular} & \begin{tabular}{c} 
In \\
classe
\end{tabular} & \begin{tabular}{c} 
Durante corsi di \\
formazione
\end{tabular} & Mai \\
\hline Literacy & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Literacy digitale & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Mode & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Medium & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Mutimodalità & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Testo multimodale & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline \begin{tabular}{l} 
Stili di \\
apprendimento
\end{tabular} & \(\square\) & \(\square\) & \(\square\) \\
\hline Modalità di \\
apprendimento & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline Multiliteracies & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline New Literacies & \(\square\) & \(\square\) & \(\square\) & \(\square\) \\
\hline
\end{tabular}
12. Fornisci la tua definizione del concetto di "Literacy" *
13. Le seguenti aree sono state trattate durante la mia formazione universitaria/post-laurea e/o durante corsi di formazione professionale * Contrassegna un solo ovale per riga

Contrassegna solo un ovale per riga.
\(\left.\begin{array}{lllll} & \begin{array}{c}\text { Ampiamente } \\ \text { trattata (6) }\end{array} & \text { (5) } & \text { (4) } & \text { (3) }\end{array} \begin{array}{c}\text { Per } \\ \text { nulla } \\ \text { trattata } \\ \text { (1) }\end{array}\right]\)

Contenuti e standard di rendimento nel mio campo disciplinare

Competenze TIC
(tecnologie dell'informazione e della comunicazione) per l'insegnamento
```

Competenze
pedagogiche
nell'insegnamento del
mio campo
disciplinare

```
Studi e teorie relative
ai miei campi
disciplinari
Insegnare a studenti
con bisogni speciali di
apprendimento
Insegnamento in un
contesto multiculturale
o multilingue
Comunicare con
persone di culture o
Paesi diversi
Insegnare abilità
interdisciplinari (e.g.
problem solving,
learning-to-learn)
Pratiche di valutazione
degll atudienti
Gestione e
ammintertazione della
souola
Literacy \(\square \longrightarrow \square \square \square\)

New Literacles (e.g. critical thinking. scientific reasoning, multi-cultural ewareness...)
```

14. Il concetto di Literacy *
Esprimi il tuo livello di accordo con i seguenti elementi contrassegnando un ovale per ogni riga
```

Contrassegna solo un ovale per riga.
Molto
d'accordo D'accordo \begin{tabular}{c} 
Parzialmente \\
d'accordo
\end{tabular} \begin{tabular}{c} 
Parzialmente \\
in \\
disaccordo
\end{tabular}\(\quad\) Disaccordo \begin{tabular}{c} 
Molto in \\
disaccorc
\end{tabular}
...è cambiato in
```

significativo negli

```
 ultimi decenni
...consente agli
studenti di raggiungere i
 propri obiettivi
...consente agli studenti di sviluppare le proprie conoscenze
...consente agli studenti di sviluppare il
 proprio potenziale
...è qualcosa su cui gli insegnanti dovrebbero concentrare la loro attenzione
 nellinsegnamento
di una lingua
seconda
...è qualcosa con cui gli insegnanti dovrebbero far

familiarizzare i propri studenti
...è un concetto plurale
```

...è un concetto
multimodale

```

...coinvolge molteplici abilità


15. In classe, per trasmettere significato ricorro *

Contrassegna un solo ovale per riga
Contrassegna solo un ovale per riga.

(6)
...alluso di testi stampati

\(\square\)

...alluso di testi in formato digitale
(


...all'uso di vari tipi
di immagini (e.g. illustrazioni, grafici,
 ...)

...alluso di
espressioni facciali e linguaggio del corpo
_.alla prossemica
\begin{tabular}{l} 
_al paralinguaggio \\
oggetti (e.g. giochi, \\
dispositivi \\
tecnologici, ...)
\end{tabular}
...all'uso di più strumenti diversi in una sola lezione
...all'uso combinato
đì đue o piû̀
strumenti in
contemporanea (e.g. presentazioni
multimediali)
...all'uso di testi
multimodali

\section*{Literacy digitale}
16. 16. Fornisci la tua definizione del concetto di "Literacy digitale" *
17. Il mio livello di competenza nell'utilizzo dei seguenti strumenti e *

Contrassegna un solo ovale per riga
Contrassegna solo un ovale per riga.

Applicazione di elaborazione testi (e.g. MS
Word)
Fogli di calcolo (e.g. MS
Excel)
Applicazioni database
(e.g. MS Access)

Applicazioni di presentazione (e.g. MS
PowerPoint)
Applicazioni di comunicazione (e.g. Skype)

Learning Management Systems (e.g. Moodle)

Eccellente
(6)

(5) (4)
(3)
(2) Scarso
Mondi Virtuali (e.g.
Second Life)
Social Networks (e.g.
Facebook)
Blogs (e.g. Blogger)
Wiki (e.g. PBworks)
Podcasts (e.g. Apple
Siti per condividere file
Siti per condividere foto
(e.g. Picasa)
Siti per condividere video
(e.g. YouTube)
Applicazioni di Web
Design (e.g.
Motori di ricerca (e.g.
Dictionari digitali (e.g.
Applicazioni di scambi
linguistici (e.g. Tandem)
(eneaver)
18. Grado di utilità dei seguenti strumenti nell'insegnamento e nell'apprendimento delle lingue seconde *
Contrassegna un solo ovale per riga
Contrassegna solo un ovale per riga.
Molto
utile (6)
(5)
(4)
(3)
Per niente (1)

\footnotetext{
Applicazione di elaborazione testi (e.g. MS Word)
}

Fogli di calcolo (e.g. MS
Excel)


Applicazioni database (e.g.
MS Access)

Applicazioni di presentazione (e.g. MS


PowerPoint)
Applicazioni di
comunicazione (e.g. Skype)
Learning Management
Systems (e.g. Moodle)
\begin{tabular}{l} 
Mondi Virtuali (e.g. Second \\
Life) \\
Focial Networks (e.g. \\
Wiki (e.g. PBworks) (e.g. Blogger) \\
Podcasts (e.g. Apple \\
Podcasts)
\end{tabular}

Siti per condividere file (e.g. Dropbox)


Siti per condividere foto (e.g. Picasa)


Siti per condividere video (e.g. YouTube)



Applicazioni di Web Design
(e.g. Dreamweaver)

Motori di ricerca (e.g.
Google)


Dizionari digitali (e.g. Dictionary.com)


Applicazioni di scambi linguistici (e.g. Tandem)
19. Ricorro a questi strumenti in classe *

Contrassegna un solo ovale per riga
Contrassegna solo un ovale per riga.
Molto spesso-
Almeno una
(5)
(4)
(3)
(2) Mai (1) volta a lezione
(6)

Applicazione di elaborazione testi (e.g. MS Word)

Fogli di calcolo (e.g.
MS Excel)


Applicazioni database (e.g. MS Access)


Applicazioni di presentazione (e.g.
MS PowerPoint)


Applicazioni di comunicazione (e.g. Skype)

Learning
Management Systems (e.g. \(\square\) \(\square\)


Moodle)
Mondi Virtuali (e.g.
Second Life)
Social Networks
(e.g. Facebook)

Blogs (e.g. Blogger)
\begin{tabular}{l} 
Wiki (e.g. PBworks) \\
Podcasts (e.g. Apple \\
Podcasts) \\
Siti per condividere (e.g. Dropbox)
\end{tabular}
\begin{tabular}{l} 
Siti per condividere \\
foto (e.g. Picasa)
\end{tabular}

APPENDIX 3 - ISL Questionnaire
\begin{tabular}{l} 
Siti per condividere \\
video (e.g. YouTube)
\end{tabular} \begin{tabular}{l} 
Applicazioni di Web \\
Design (e.g. \\
Dreamweaver) \\
\begin{tabular}{l} 
Motori di ricerca \\
(e.g. Google)
\end{tabular} \\
\begin{tabular}{l} 
Dizionari digitali \\
(e.g. \\
Dictionary.com)
\end{tabular} \\
\begin{tabular}{l} 
Applicazioni di \\
(e.g. Tandem)
\end{tabular}
\end{tabular},
20. Credo che l'uso della tecnologia faciliti gli studenti nell'apprendimento delle lingue seconde a livello di *
Esprimi il tuo livello di accordo con i seguenti elementi contrassegnando un ovale per ogni riga

Contrassegna solo un ovale per riga.
Molto
d'accordo D'accordo \begin{tabular}{c} 
Parzialmente \\
d'accordo
\end{tabular} \begin{tabular}{c} 
Parzialmente \\
in \\
disaccordo
\end{tabular} Disaccordo \begin{tabular}{c} 
Molto in \\
disaccordo
\end{tabular}

\section*{21. La tecnologia *}

Esprimi il tuo livello di accordo con i seguenti elementi contrassegnando un ovale per ogni riga
Contrassegna solo un ovale per riga.
\begin{tabular}{llccc} 
& \begin{tabular}{c} 
Molto \\
d'accordo
\end{tabular} & D'accordo & \begin{tabular}{c} 
Parzialmente \\
d'accordo
\end{tabular} & \begin{tabular}{c} 
Parzialmente \\
in \\
disaccordo
\end{tabular} \\
\begin{tabular}{l} 
_è̀ molto utile \\
nell'insegnamento \\
delle lingue \\
seconde
\end{tabular} \\
\begin{tabular}{l} 
_è molto utile \\
nell'apprendimento \\
delle lingue \\
seconde
\end{tabular} &
\end{tabular}
...e l'uso di
tecnologici nell'apprendimento delle lingue può aiutare a sviluppare le competenze digitali
...e l'uso di
strumenti
tecnologici
nell'apprendimento delle lingue può
aiutare a
sviluppare la
multimodalità

22. Motivi che possono aver ostacolato Puso della tecnologia fino ad ora *

Esprime it tue livetio di scoordo con ' seguenti slemonci oontraesegnondo un ovele per opni rige
Corntrassegna solo wh ovale per riga.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & Molto d'accordo & D'amcordo & Parzialmente diaccordo & Parzialrnente in diaacgordo & Dizaccordo & Molto in dizacerord \\
\hline La mia pouola non ha gli strumenti tecnologici appropriati & \[
0
\] & \(\longrightarrow\) & \(\square\) & \(\square\) & 3 & \(\square\) \\
\hline La mia scuoia non promuave「unilizzo dl otrumenti tecnologici & \[
0
\] &  &  &  & - &  \\
\hline Gli strumenti forniti celle mia acuola sono obroleti & \[
\longrightarrow
\] & \[
7
\] &  & \[
0
\] & 3 & \[
3
\] \\
\hline La rete wifi della mis scuols non e sufficiente per supportare un uso intensivo ol teli strumeati & \[
5
\] &  & - &  &  & \[
3
\] \\
\hline It tempo a diaposizione non è sufficiente per introdurre nuovi strumentied atuvità &  &  & \[
0
\] & \[
0
\] &  & \[
\square
\] \\
\hline \begin{tabular}{l}
Lemie \\
comperenze \\
digitali non sono \\
sufficienti per \\
approcciare \\
regolormente \\
Tinsegnarnento \\
delle lirigue \\
atteverso \\
strumenti \\
tecnologici
\end{tabular} & \(\square\) & \(\square\) & \(\square\) & \(\square\) & ) & - \\
\hline
\end{tabular}
digitali deoli
vtuclenti mon
sono aufficienti
per affrontare
adeguatamento
un appraccio

\section*{digitale}
alliapprendimento
delle lingue
Agli atudenti mancano gli strumenti tecnologici adegueti
23. Alla luce dell'emergenza sanitaria sviluppatasi nel 2020, che ha costretto molte scuole superiori a tenere la maggior parte delle lezioni attraverso diverse modalità di apprendimento a distanza *
Contrassegna un solo ovale per riga
Contrassegna solo un ovale per riga.

\section*{Si No}
...la mia preparazione tecnologica si è
dimostrata sufficiente per gestire
adeguatamente l'apprendimento a distanza
...gli strumenti tecnologici forniti dalla mia scuola si sono dimostrati sufficienti per gestire adeguatamente l'apprendimento a distanza
...la preparazione tecnologica degli studenti si è dimostrata sufficiente per gestire
 adeguatamente l'apprendimento a distanza
...la mia scuola ha contribuito a garantire una transizione graduale
...la mia scuola ha contribuito a fornire le istruzioni e/o la formazione appropriate

\section*{24. L'apprendimento a distanza *}

Esprimi il tuo livello di accordo con i seguenti elementi contrassegnando un ovale per ogni riga
Contrassegna solo un ovale per riga.
Molto
d'accordo \(\quad\) D'accordo \begin{tabular}{c} 
Parzialmente \\
d'accordo
\end{tabular} \begin{tabular}{c} 
Parzialmente \\
in \\
disaccordo
\end{tabular}\(\quad\) Disaccordo \begin{tabular}{c} 
Molto in \\
disaccordo
\end{tabular}

...ha
contribuito a
sottolineare
l'importanza


This appendix collects in detail the preliminary analyses carried out for each question and scale of both the EFL and the ISL Questionnaire. Tables and figures cited in the following paragraphs refer to APPENDIX number for the EFL Questionnaire and to APPENDIX number for the ISL Questionnaire.

\section*{EFL Questionnaire - Preliminary analyses}

As mentioned in Chapter 3 (see §3.7.1) the aims of this preliminary analysis are four: first, to identify the main dimensions underlying each scale of the questionnaire; secondly, to calculate the reliability (Cronbach's alpha coefficient) of the scales; third, to explore the distribution of the data collected by the individual scales in order to verify that the parameters to be able to apply the parametric statistical techniques are respected (see paragraph number); finally, identify the variables measured by the individual scales. The main parameters to be respected are the following: measurement level (i.e. only continuous variables), normality of the distribution (i.e. the data in the histogram are arranged to form a Gauss curve), homoskedasticity (i.e. homogeneous variance) (Lowie \& Seton, 2013).

\section*{Question analysis 1}

Question 1, consisting of item 1a ("Type of upper secondary school I teach in..."), identifies the variable indicating the type of upper secondary school our respondents teach in ( \(\mathrm{Min}=1\); Max = 9; Median = 3; Mode: 2, or Liceo Scientifico; \(\mathrm{N}=440\) ). The answer options available for this question are neither scaled nor sortable ones, making it a nominal qualitative variable. As with other similar questions (i.e. questions \(4,7,10,12,16\) and 23 ), we did not proceed by carrying out a principal components analysis or by checking the normality of the distribution, since both procedures work for quantitative variables only. Rather, a frequency distribution analysis was opted for (figure number), and since ordinal or categorical (i.e. nominal) data require nonparametric techniques (Dörnyei, 2007), any further statistical analyses will require the adoption of non-parametric tests.

\section*{Question analysis 2}

Question 2, consisting of item 2a ("I have been teaching English as a second language for..."), identifies an ordinal qualitative variable indicating the level of experience of our respondents, as measured by the years they spent teaching in the EFL field (Max \(=6\); Median \(=5\); Mode \(=5\), or 21-30 years; \(\mathrm{N}=440\) ). The fact that it is an ordinal qualitative variable automatically entails
the use of non-parametric techniques for any further statistical analyses, which is why it was not necessary to check the normality of the distribution. Rather, a frequency distribution analysis was opted for instead (figure number).

\section*{Question analysis 3}

Question 3, consisting of item 3a ("My age range is..."), identifies the variable indicating the age range of our respondents, with age groups being coded from 1 to 7 , with 7 indicating the Prefer not say response option ( \(\mathrm{Max}=7\); Median \(=5\); \(\mathrm{Mode}=5\), or \(51-60\) years; \(\mathrm{N}=440\) ). The fact that it is an ordinal qualitative variable automatically entails the use of non-parametric techniques for any further statistical analyses, which is why it was not necessary to check the normality of the distribution. Rather, a frequency distribution analysis was opted for instead (figure number).

However, several entries (i.e. number 15; 50; \(73 ; 80 ; 82 ; 102 ; 105 ; 125 ; 169 ; 392 ; 425\) ) are not consistent with the answer provided for Question 2: some respondents declared that they belong to the "Under 25" age group, but also stated that they've been teaching for over 10, 20 or 30 years, and such statements cannot possibly be both correct. Given the fact that there have been similar issues with the ISL Questionnaire, we chose to consider the answers provided for Question 2 as the correct ones, and the ones related to age range as the result of a misinterpretation of some sort, which will be acknowledged during the actual analysis phase.

\section*{Scale analysis 4}

The 2 items making up Scale 4 of the ESL Questionnaire ("When it comes to specific learning objectives for English as a foreign language established for the type of upper secondary school I teach in (Decreto Interministeriale MIUR-MEF 211, 07/10/2010; Direttiva Ministeriale 4, 16/01/2012)...") presuppose as possible answers Yes, No, and I don't know enough about it. Being neither orderable nor quantifiable, this makes the items in question nominal qualitative variables. It is therefore not possible to examine them through a principal components analysis, nor to check the normality of the distribution. A frequency distribution analysis was opted for instead (figure number), and it will be necessary to resort to non-parametric tests for any further statistical analyses. Before carrying out the analysis, however, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of a correlation coefficient equal to .512; the Kaiser-Meyer-Olkin (KMO) measure of
sampling adequacy is .500, lower than the recommended value of .6 (Kaiser, 1970, 1974); so, despite the fact that Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. <.001), it would not have been advisable for us to carry out the principal components analysis anyway. (Table number).

The following variables were then identified:
- Variable 4.1, consisting of item 4a, exploring whether respondents have read the national guidelines relating to the specific learning objectives for English as a foreign language;
- Variable 4.2, consisting of item 4b, exploring whether respondents are aware of the specific learning objectives for English as a foreign language.

\section*{Scale analysis 5}

The 5 items making up Scale 5 of the EFL Questionnaire ("When it comes to the specific learning objectives for foreign language learning for the type of upper secondary school I teach in...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .771, higher than the recommended value of . 6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. <.001), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of one component with eigenvalue higher than 1 , which by itself explains \(52,4 \%\) of the variance. The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the first two components, the second one measuring substantially less than one (Figure number), while the parallel analysis results identify only one component with eigenvalue significantly higher than the corresponding criteria value of the data matrix ( 5 variables \(\times 440\) respondents) randomly generated by the software (Table number). For this reason, and because of the fact that an attempt to extract two components shows that in any case each item weighs more on the first component than
on the second (in some cases even with negative values above .3), it was decided to proceed in a different direction. Since the Cronbach coefficient confirms the reliability of the scale (.770), and since keeping only one component to explain the entire Scale 5 would allow us to work with roughly half our data, as can be deduced from the percentage of the variance explained, an ordinal count variable was opted for instead, which sums up the scores obtained from the individual items and therefore takes into account the data as a whole.

The following subscale was identified:
- Subscale 5.1, consisting of the sum of all the items (i.e. \(5 a, 5 b, 5 c, 5 d\) and \(5 e\) ).

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which measures the level of participation of each teacher in those decisions concerning the achievement of the pre-established learning objectives, was then subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected.

As for the variable identified by the total of subscale 5.1 (TOT subscale 5.1: Max \(=60\); Average \(=23,8\); Stdev \(=4,1 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered completely normal. Given the lack of a normal distribution, the variable was transformed mathematically through the reflect and logarithm transformation to try and solve these problematic aspects, and a new variable was obtained. Observing the Q-Q plot (Figure) as well as the histogram (Figure) and the Boxplot (Figure), it can reasonably be said that the distribution still cannot be considered normal, as the Kolmogorov-Smirnov test of normality also maintains, and therefore is not suitable for the adoption of parametric techniques. The original variable and not the transformed one will thus be taken into consideration for any further statistical analyses, and non-parametric tests will have to be adopted instead.

\section*{Scale analysis 6}

The 8 items making up Scale 6 of the EFL Questionnaire ("I believe that the specific learning objectives established for foreign language learning (Decreto Interministeriale MIUR-MEF 211, 07/10/2010; Direttiva Ministeriale 4, 16/01/2012)...") were subjected to a preliminary principal
components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .846 , higher than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. <.001), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of two components with eigenvalues higher than 1 , which explain respectively \(48,5 \%\) and \(14,9 \%\) of the variance, for a cumulative total of \(63,4 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the second component (Figure number ..), while the parallel analysis results identify two components with eigenvalues higher than the corresponding criteria values of the data matrix ( 8 variables \(\times 440\) respondents) randomly generated by the software (Table number). It was therefore decided to keep both components to explain a larger percentage of the variance.

To facilitate the interpretation of the two components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which both components have quite high factorial weights (all higher than .3). Almost all the items, except for a couple, only weigh on one component, usually with very high values. (Table number). There appears to be a minimal positive correlation between the two components (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into two separate subscales, thus highlighting the presence of two underlying dimensions.

The two subscales identified are the following:
- subscale 6.1 (Cronbach's alpha \(=.863\) ), consisting of the items referring primarily to the first component (i.e. 6a, 6b, 6c, 6d and 6e);
- subscale 6.2 (Cronbach's alpha \(=.552\) ), consisting of the items referring to the second component (i.e. 6f, 6 g and 6 h );

The extraction of a third component was attempted to see whether a redistribution of the items would lead to a higher value of the Cronbach coefficient, but this was not confirmed by the data nor by the values with which the individual items weighed on each components, therefore It was decided to proceed despite a questionable alpha value for the second subscale. By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our two continuous variables. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. The first variable identifies the suitability of the specific learning objectives established for EFL teaching and learning for a multifaceted learning environment, while the second investigates the possibility that they need to be updated and taken more into consideration.

As for the first variable identified by the total of subscale 6.1 (TOT subscale 6.1: \(\mathrm{Max}=35\); Average \(=22,3 ;\) Stdev \(=4,1 ; N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is not exactly normal. Also, the Boxplot (Figure) highlighted the presence of some outliers (i.e., abnormal extreme values), sometimes deriving from particularly low scores, other times from particularly high scores (with a maximum of 35 ) as a result of some respondents choosing to answer I don't know enough about it to every single item.

As for the variable identified by the total of subscale 6.2 (TOT Subscale 6.2: Max \(=28\); Average \(=15,1 ; \operatorname{Stdev}=2,1 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is not exactly normal. As for the previous subscale, some outliers were highlighted, mostly deriving from particularly high scores (with a maximum of 28) as a result of some respondents choosing to answer I don't know enough about it to every single item. To try and solve these problematic aspects, both variables were transformed mathematically through the reflect and square root transformation, and new variables were obtained. Observing the histograms (figures) and the Q-Q plots (Figures) it can reasonably be said that the distribution of both scales is still not normal, as the Kolmogorov-Smirnov test of normality also maintains, as well as both Boxplots (Figure), which keep highlighting the presence of several outliers. The original variables and not the transformed ones will be taken
into consideration for any further statistical analyses: it appears that neither is suitable for the adoption of parametric techniques and non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 7}

The 3 items making up Scale 7 of the EFL Questionnaire ("Familiarity with research in language education...") are dichotomous, as they require a Yes/No answer. The fact that they are neither orderable nor quantifiable makes the items in question nominal qualitative variables. It is therefore not possible to treat them as a scale, thus performing a principal components analysis, nor to check the normality of the distribution. Rather, a frequency distribution analysis was opted for instead (figure number), and it will be necessary to resort to nonparametric tests for any further statistical analyses.

The three variables identified are the following:
- Variable 7.1, consisting of item 7a, exploring whether respondents are subscribed to one or more printed research journals;
- Variable 7.2, consisting of item 7b, exploring whether respondents are researchers themselves;
- Variable 7.3, consisting of item 7c, exploring whether respondents are authors themselves.

\section*{Scale analysis 8}

The 5 items making up Scale 8 of the EFL Questionnaire ("Knowledge of the recently published studies in the field of language education...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .718 , higher than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. <.001), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of two components with eigenvalues higher than 1 , which explain respectively \(58,2 \%\) and \(21,9 \%\) of the variance, for a cumulative total of \(80,1 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a marked elbow after the second component (Figure number), while the parallel analysis results identify two components with eigenvalues higher than the corresponding criteria values of the data matrix (5 variables x 440 respondents) randomly generated by the software (Table number). It was therefore decided to keep both components to explain a larger percentage of the variance.

To facilitate the interpretation of the two components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which both components have quite high factorial weights (all higher than .3). Almost all the items weigh on both components, usually with very high values. (Table number). There appears to be a good correlation between the two components (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into two separate subscales, thus highlighting the presence of two underlying dimensions.

The two subscales identified are the following:
- subscale 8.1 (Cronbach's alpha \(=.827\) ), consisting of the items referring primarily to the first component (i.e. \(8 \mathrm{a}, 8 \mathrm{~b}\) and 8 e );
- subscale 8.2 (Cronbach's alpha \(=.856\) ), consisting of the items referring to the second component (i.e. 8 c and 8 d );

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our two continuous variables. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. When it comes to the recently published studies in the field of language education, our first variable appears to investigate whether and to what extent respondents actively consult research-related resources in the field of language education, while the second one explores whether or not schools support their teachers in consulting said resources.

As for the first variable identified by the total of subscale 8.1 (TOT subscale 8.1: \(\operatorname{Max}=18\); Average \(=13,3\); Stdev \(=3,5 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a
significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is not exactly normal. To try to solve this problematic aspect, this variable was transformed mathematically through the reflect and logarithm transformation, and a new variable was obtained. Observing the Q-Q plot (Figure) and the histogram (Figure) it can reasonably be said that the distribution is still not normal, even if the Boxplot (Figure) no longer shows the presence of outliers.

As for the variable identified by the total of subscale 8.2 (TOT Subscale 8.2: Max \(=12\); Average = 6,9; Stdev = 2,7; \(\mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is relatively normal; however, since the Kolmogorov-Smirnov test indicates otherwise, the variable was transformed mathematically through the reflect and square root transformation. The difference is relative, but it can be seen from the histogram that the values are spaced and that the mild asymmetry moves from right to left. It appears that this variable might be suitable for the adoption of parametric techniques, while for the first one non-parametric techniques will have to be adopted instead.

\section*{Scale analysis 9}

The 5 items making up Scale 9 of the EFL Questionnaire ("Regarding the relationship between the results obtained by language education studies and the approaches proposed by the school system...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .683, higher than the recommended value of . 6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. <.001), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of only one component with eigenvalue higher than 1 , while a second component's eigenvalue is very close to one: they explain respectively \(55,8 \%\) and \(19,7 \%\) of the variance, for a cumulative total of \(71,5 \%\). The screeplot clearly shows a marked elbow after the second component (Figure number), while the parallel analysis, performed with an online Parallel Analysis Engine, identifies only one
component with eigenvalue higher than the corresponding criteria value of the data matrix (5 variables x 440 respondents) randomly generated by the software (Table number). However, since the second component's eigenvalue is very close to one it was decided to initially try and keep both components to explain a larger percentage of the variance.

To facilitate the interpretation of the two components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which both components have quite high factorial weights (all higher than .3). All the items only weigh on one component, usually with very high values. (Table number). There appears to be a minor positive correlation between the two components (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into two separate subscales, thus highlighting the presence of two underlying dimensions.

The two subscales identified are the following:
- subscale 9.1 (Cronbach's alpha \(=.851\) ), consisting of the items referring primarily to the first component (i.e. 9a, 9b, 9c and 9d);
- subscale 9.2, consisting of one single item referring to the second component (i.e. 9e);

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our two continuous variables. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. Regarding the relationship between the results obtained by language education studies and the approaches proposed by the school system, the first variable shows how much, according to EFL teachers, said approaches and objectives are in step with the most recent studies in the field of language education. The second one, which in the end is not a subscale but an item considered in its own right, evaluates the possibility that such research studies fail to take into account many factors involved in everyday school reality.

As for the first variable identified by the total of subscale 9.1 (TOT subscale 9.1: Max \(=28\); Average \(=17,2 ;\) Stdev \(=4,2 ; N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is not normal. Also, some outliers were highlighted, sometimes deriving from particularly low scores, other times from particularly

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high scores (with a maximum of 28) as a result of some respondents choosing to answer I don't know enough about it to every single item.

As for the variable identified by the total of subscale 9.2 (TOT Subscale 9.2: Max =7; Average \(=\) 4,9; Stdev = 1,2; \(\mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than . 001. Observing the histogram (Figure number) and the Q-Q plot, though, it can be said that the distribution is quite asymmetrical and cannot be considered normal.

To try to solve this problematic aspect, both variables were transformed mathematically through the reflect and square root and the reflect and logarithm transformation, respectively, and new variables were obtained. Although more normal, observing the Q-Q plots (Figure), the histograms (figure) and the Boxplots (Figure) it can reasonably be said that the distribution of either variable is not normal, as the Kolmogorov-Smirnov test of normality also maintains. The original variables, and not the transformed ones, will thus be taken into consideration for any further statistical analyses, and the adoption of non-parametric techniques will have to be contemplated for both of them.

\section*{Scale analysis 10}

The answer options available for the 6 items making up Scale 10 of the EFL Questionnaire ("My school...") are neither scaled nor sortable ones, making them nominal qualitative variables. As with other similar questions (i.e. questions 1), we did not proceed by carrying out a Principal Components Analysis or by checking the normality of the distribution, since both procedures work for quantitative variables only. Rather, a frequency distribution analysis was opted for instead (figure number). However, given that one of the objectives of this preliminary analysis was to reduce the amount of data in view of subsequent statistical analyses, it was decided to try and proceed with a sum. Every Yes was then recoded as 1, and every No was then recoded as 0 . As for the I don't know enough about it option, we were pondering on what value to assign to them. Their presence is undoubtedly relevant, but, in order to establish whether the school was able to promote a research-related approach or not, it does not provide us with new, relevant information. They would most likely have to be interpreted as missing data, and probably be excluded from the analysis altogether. It was therefore decided to consider them at the level of descriptive statistics (the entire report can be consulted in APPENDIX number) but not inferential statistics. Their value was therefore considered null. The scores were then added up (being 6 variables, the value could range from a minimum of 0 to a maximum of 6 ).

The result is an ordinal count variable, which explores the ability of the schools to integrate digital, multimodal and multicultural approaches in their everyday life, and promoting research.

The following variable was identified:
- Variable 10.1, consisting of the sum of all the items (i.e. 10a, 10b, 10c, 10d, 10e and 10f).

As for the variable identified by the total of subscale 10.1, (TOT subscale 10.1: Max = 6; Average \(=3,6\); Stdev \(=1,6 ; N=440\) ), subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected, the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

To try to solve this problematic aspect, the variable was transformed mathematically through the reflect and square root transformation, and a new variable was obtained. Observing the QQ plot (Figures) and the histogram (Figures) it can reasonably be said that the distribution is still not normal (figure numbers), as the Kolmogorov-Smirnov test of normality also maintains. The original variable and not the transformed one will thus be taken into consideration for further statistical analyses, and non-parametric techniques will have to be contemplated.

\section*{Scale analysis 11}

The 10 items making up Scale 11 of the EFL Questionnaire ("I come in contact with these terms...") were more complex to translate into code, as they stemmed from a question where respondents were allowed to tick all the options that applied, and there were four for each item. The respondents were then able to indicate whether they came in contact with the selected terminology during teacher training, in class, when reading research studies, or never. A first analysis attempt involved creating codes not only for each different response options, but also for all their possible combinations. Continuing in this direction and carrying out a principal components analysis (allowed by the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy being .872, higher than the recommended value of .6 (Kaiser, 1970, 1974), and by Bartlett's sphericity test (Bartlett, 1954) reaching statistical significance (Sig. .000) thus allowing us to carry out the analysis), we realised that the variables did not allow an easy
interpretation of the data. Furthermore, since we are not dealing with a scale, but rather a control grid, it would have been more correct to treat them as nominal qualitative ones. However, given that one of the objectives of this preliminary analysis was to reduce the amount of data in view of subsequent statistical analyses, it was decided to recode the data and proceed with a sum. The first step was to clean up the data: some respondents, in fact, had selected Never along with other options. It can be assumed that the intention was to signal poor contact with the terms in question, but statistically the two answers are conflicting, so those specific Never were eliminated. All the others were instead coded as 0 . The next step was to evaluate the other answer options (When reading research studies, In class, and During teacher training) based on how many were selected (1, 2 or 3 ) by the respondents without specifying which ones, since this is deducible from the descriptive statistics reported in the APPENDIX number. It is therefore a matter of considering how many areas of contact with terminology there are, rather than focussing on which ones. The scores were then added up (being 10 variables, the value could range from a minimum of 0 to a maximum of 30 ). The result is an ordinal count variable, which indicates how many opportunities for contact the respondents have with the terminology linked to a broader definition of Literacy (which therefore includes various aspects, from multimodality to the digital sphere).

The following variable was identified:
- Variable 11.1, consisting of the sum of all the items (i.e. 11a, 11b, 11c, 11d, 11e, 11f, \(11 \mathrm{~g}, 11 \mathrm{~h}, 11 \mathrm{i}\), and 11I).

As for the variable identified by the total of subscale 11.1, (TOT subscale 11.1: Max = 30; Average \(=12,6 ;\) Stdev \(=5.8 ; N=440\) ), subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected, the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

To try to solve this problematic aspect, the variable was transformed mathematically through the square root transformation, and a new variables was obtained. Observing the Q-Q plot (Figure) and the histogram (Figure) it can reasonably be said that the distribution is still not normal (figure number), as the Kolmogorov-Smirnov test of normality also maintains. The
original variable and not the transformed one will thus be taken into consideration for further statistical analyses, and non-parametric techniques will have to be contemplated.

\section*{Question analysis 12}

Question 12, consisting of item 12a ("Please provide your definition of the concept of 'Literacy'"), is an open question, which, as can be inferred from the item itself, asked respondents to briefly explain their idea of Literacy. Their answers were analysed by searching for head nouns so that they could then be grouped into different categories. A numerical code was then associated to each category in order to eventually proceed with the statistical analysis. Thirteen categories were identified, which are neither scaled nor sortable ones, making it a nominal qualitative variable. As with other similar questions (i.e. questions 1 and others), we did not proceed to carry out a principal components analysis or to check the normality of the distribution, since both work for quantitative variables only. Rather, a frequency distribution analysis was opted for instead (figure number). The fact that the present variable ( \(\mathrm{Max}=99\); Median \(=3\); Mode: 1,5 , or Ability to read and write; \(\mathrm{N}=440\) ) is qualitative means it requires the use of non-parametric tests for any further statistical analyses.

\section*{Scale analysis 13}

The 14 items making up Scale 13 of the EFL Questionnaire ("The following areas were covered during my undergraduate/postgraduate education and/or professional training...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .922 , significantly higher than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .000), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of one component with eigenvalue higher than 1 , which by itself explains \(55,8 \%\) of the variance. The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular,
the screeplot clearly shows a very marked elbow after the first two components, even though the second one measures .999 (Figure number), while the parallel analysis results identify only one component with eigenvalue significantly higher than the corresponding criteria value of the data matrix ( 14 variables \(\times 440\) respondents) randomly generated by the software (Table number). Before proceeding, though, we wondered if it was possible to try and explain a higher percentage of the variance with the extraction of two components, especially given the borderline eigenvalue of the second one. This attempt, however, did not produce the desired results for two reasons: the Cronbach coefficient was lower in the new subscales (. 921 and .843, respectively) than in the collective scale (.938), and it was not as easy to highlight a tangible difference in the two dimensions that were outlined, given that all items refer to the preparation of EFL teachers in a list of areas. It was therefore decided to proceed with the first extraction, as also confirmed by the parallel analysis. Since keeping only one component to explain the entire Scale 13 would allow us to work with roughly half our data, as can be deduced from the percentage of the variance explained, an ordinal count variable was opted for instead, which sums up the scores obtained from the individual items and therefore takes into account the data collected as a whole.

The following subscale was identified:
- Subscale 13.1, consisting of the sum of all the items (i.e. 13a, 13b, 13c, 13d, 13e, 13f, \(13 \mathrm{~g}, 13 \mathrm{~h}, 13 \mathrm{i}, 13 \mathrm{l}, 13 \mathrm{~m}, 13 \mathrm{n}, 13 \mathrm{o}\) and 13 p ).

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which evaluates the preparation that teachers believe they have received during their education and/or professional training, was then subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. This variable is identified by the total of subscale 13.1 (TOT subscale 13.1: Max = 84; Average = 58; Stdev = 15,5; \(N=440\) ). The Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal. To try and solve these problematic aspects, the variable was transformed mathematically through the reflect and square root transformation, and a new variable was obtained. Observing the histogram (Figure) and the Boxplot (Figures) it can reasonably be said
that the distribution is less asymmetric, but still not normal, and it appears that this variable, therefore, may not be suitable for the adoption of parametric techniques. The original variable, and not the transformed one, will thus be taken into consideration for further statistical analyses, and the adoption of non-parametric techniques will have to be contemplated.

\section*{Scale analysis 14}

The 11 items making up Scale 14 of the EFL Questionnaire ("The concept of Literacy...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .878, higher than the recommended value of . 6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .000), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of two components with eigenvalues higher than 1: they explain respectively \(51,6 \%\) and \(13 \%\) of the variance, for a cumulative total of \(64,6 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the second component and a less pronounced one after the third (Figure number), while the parallel analysis results identify two components with eigenvalues higher than the corresponding criteria values of the data matrix ( 11 variables \(\times 440\) respondents) randomly generated by the software (Table number). It was initially decided to keep both components to explain a larger percentage of the variance.

To facilitate the interpretation of the two components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which both components have quite high factorial weights (all higher than .3). Most of the items weigh on both components, usually with very high values. (Table number). There appears to be a negative correlation between the two components (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into two separate subscales, thus highlighting the presence of two underlying dimensions.

The two subscales identified are the following:
- subscale 14.1 (Cronbach's alpha \(=.892\) ), consisting of the items referring primarily to the first component (i.e. \(14 \mathrm{e}, 14 \mathrm{f}, 14 \mathrm{~g}, 14 \mathrm{~h}, 14 \mathrm{i}\) and 14 I );
- subscale 14.2 (Cronbach's alpha \(=.819\) ), consisting of the items referring to the second component (i.e. 14a, 14b, 14c, 14d and 14m);

However, after observing the distribution of the items within the variables, as well as the values of the pattern and structure matrix, one item seemed to isolate itself from the others, namely 14 m , ("...is taken into consideration by the specific learning objectives established for foreign language education in upper secondary schools "). It was therefore decided to try and consider the two variables without said item, and to analyse it on its own. The result is a higher value of the Cronbach coefficient, a higher percentage of the variance explained \((72,2 \%)\), and also a more consistent delineation of the dimensions highlighted by the PCA. The following variables were then identified:
- subscale 14.1 (Cronbach's alpha \(=.892\) ), consisting of the items referring primarily to the first component (i.e. 14e, 14f, 14g, 14h, 14i and 14I);
- subscale 14.2 (Cronbach's alpha \(=.859\) ), consisting of the items referring to the second component (i.e. 14a, 14b, 14c and 14d);
- subscale 14.3 , consisting of item 14 m .

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our two continuous variables. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. While the second variable explores the hypothesis that the concept of Literacy has changed over the years, especially in terms of agency, the first one explores the characteristics Literacy has today, as an extremely multifaceted concept, pivotal within an EFL environment. The third one, finally, examines whether the concept has found its way into the specific learning objectives established for EFL education.

As for the first variable identified by the total of subscale 14.1 (TOT subscale 14.1: Max \(=36\); Average \(=31,4 ;\) Stdev \(=4,1 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot

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(Figure number) it can be said that the distribution is not normal. Also, some outliers were highlighted, sometimes deriving from particularly low scores.

As for the variable identified by the total of subscale 14.2 (TOT Subscale 14.2: Max \(=24\); Average \(=20,3 ;\) Stdev \(=2,8 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is not normal. Also, some outliers were highlighted, sometimes deriving from particularly low scores.

Finally, as for the variable identified by the total of subscale 14.3 (TOT Subscale 14.3: Max = 6; Average \(=4,5 ; \operatorname{Stdev}=1,1 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is not normal. Also, some outliers were highlighted, sometimes deriving from particularly low scores.

To try to solve these problematic aspects, both variables were transformed mathematically through the reflect and logarithm transformation, and new variables were obtained. Although more normal, observing the Q-Q plots (Figures) and histograms (Figures) it can reasonably be said that the distribution is not normal, as the Kolmogorov-Smirnov test of normality also maintains, even if some figures (Figures) are less asymmetrical and there appear to be fewer outliers. Given the difficulty in considering the distribution of either scale normal, the original variables and not the transformed ones will thus be taken into consideration for further statistical analyses, and since neither is suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 15}

The 12 items making up Scale 15 of the EFL Questionnaire ("When in class, to convey meaning I resort to...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .848 , higher than the recommended value of .6
(Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .000), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of three components with eigenvalues higher than 1 , which explain respectively \(39,9 \%, 14,8 \%\) and \(9,6 \%\) of the variance, for a cumulative total of \(64,3 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a marked elbow between the second and the third component, both with eigenvalues higher than 1 (Figure number), while the parallel analysis results identify two components with eigenvalues higher than the corresponding criterion values of the data matrix (12 variables \(x\) 440 respondents) randomly generated by the software (Table number), while a third one is smaller, but only by a few thousandths. It was therefore decided to try and keep all three components to explain a larger percentage of the variance.

To facilitate the interpretation of the three components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which all three components have quite high factorial weights (all higher than .3). Most of the items, however, weigh on two components with very high values. (Table number). There is a minimal positive correlation between components 1 and 3, and a minimal negative correlation between component 2 and components 1 and 3 (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into three separate subscales, thus highlighting the presence of three underlying dimensions.

The three subscales identified are the following:
- subscale 15.1 (Cronbach's alpha \(=.854\) ), consisting of the items referring primarily to the first component (i.e. \(15 \mathrm{c}, 15 \mathrm{~d}, 15 \mathrm{e}, 15 \mathrm{i}, 15 \mathrm{l}, 15 \mathrm{~m}\) and 15 n );
- subscale 15.2 (Cronbach's alpha \(=.860\) ), consisting of the items referring to the second component (i.e. \(15 f, 15 \mathrm{~g}\) and 15 h );
- subscale 15.3 (Cronbach's alpha = .449), consisting of the items referring to the third component (i.e. 15a, 15b);

We decided to proceed anyway, despite the low value of the Cronbach coefficient in the third subscale because with only two items, alpha is equivalent to a split-half reliability test, also equivalent to test-retest. In two-item scales, Cronbach's alpha is only accurate in estimating
reliability under rather restrictive assumptions, which are usually not met: this means that coefficient alpha almost always substantially underestimates true reliability (Eisinga, Grotenhuis and Pelzer, 2013).

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our three continuous variables. The first variable measures the use of different elements related to multimodality in the transmission of meaning in the language classroom, the second evaluates different aspects related to paralanguage and the third the use of printed and digital texts. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As for the first variable identified by the total of subscale 15.1 (TOT subscale 15.1: Max = 42; Average = 34,7; Stdev = 6,1; \(\mathrm{N}=\) 440), the Kolmogorov-Smirnov test of normality shows a significance of less than .001 . Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

As for the variable identified by the total of subscale 15.2 (TOT Subscale 15.2: Max = 18; Average \(=14,8 ;\) Stdev \(=3,1 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than \(\mathbf{. 0 0 1}\). Observing the histogram (Figure number) and the Q-Q plot (Figure number) it appears obvious that the distribution cannot be considered normal.

As regards the variable identified by the total of subscale 15.3 (TOT Subscale 15.3: Max = 12; Average \(=10,4 ;\) Stdev \(=1,5 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can reasonably be said that the distribution cannot be considered normal.

Also, some outliers were highlighted in each of the three subscales, usually deriving from particularly low scores. To try to solve these problematic aspects, the variables were transformed mathematically through the reflect and logarithm transformation, and new variables were obtained. Although more normal, observing the \(\mathrm{Q}-\mathrm{Q}\) plots (Figures) and histograms (Figures) it can reasonably be said that the distribution is not normal, as the Kolmogorov-Smirnov test of normality also maintains, even if some Boxplots (Figures) seem to indicate the opposite. The original variables, and not the transformed ones, will thus be taken into consideration for further statistical analyses, and since no variable is suitable for the

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adoption of parametric techniques the corresponding non-parametric ones will have to be contemplated instead.

\section*{Question analysis 16}

Question 16, consisting of item 16a ("Please provide your definition of the concept of 'Digital Literacy"'), is an open question, which, as can be inferred from the item itself, asks respondents to briefly explain their idea of Digital Literacy. Their answers were analysed by searching for head nouns so that they could then be grouped into different categories. A numerical code was then associated with each category in order to eventually proceed with the statistical analysis. Twelve categories were identified, which are neither scaled nor sortable ones, making it a nominal qualitative variable. As with other similar questions (i.e. questions 1 and others), we did not proceed to carry out a principal components analysis or to check the normality of the distribution, since both work for quantitative variables only. Rather, a frequency distribution analysis was opted for instead (figure number). The fact that the present variable ( \(\mathrm{Max}=118\); Median = 3; Mode: 1, or Familiarity with digital devices; \(\mathrm{N}=440\) ) is qualitative means it requires the use of non-parametric tests for any further statistical analyses.

\section*{Scale analysis 17}

The 18 items making up Scale 17 of the EFL Questionnaire ("My degree of competence in using the following tools is...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .923 , higher than the recommended value of . 6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .000), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of three components with eigenvalues higher than 1, which explain respectively \(43,9 \%, 11,2 \%\) and \(7,3 \%\) of the variance, for a cumulative total of \(63,4 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very
marked elbow after the second component and a less pronounced one after the third (Figure number), while the parallel analysis results identify three components with eigenvalues higher than the corresponding criteria values of the data matrix (18 variables \(\times 440\) respondents) randomly generated by the software (Table number). It was initially decided to keep all three components to explain a larger percentage of the variance.

To facilitate the interpretation of the three components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which all three components have quite high factorial weights (all higher than .3). Almost all the items, however, weigh at least on two, sometimes even on all three components with very high values. (Table number). There is a minimal positive correlation between component 2 and components 1 and 3 , and a slightly stronger positive correlation between component 1 and component 3 (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into three separate subscales, thus highlighting the presence of three underlying dimensions.

The three subscales identified are the following:
- subscale 17.1 (Cronbach's alpha \(=.910\) ), consisting of the items referring primarily to the first component (i.e. 17g, 17h, 17i, 17l, 17m, 17n, 17o, 17p, 17q, 17t);
- subscale 17.2 (Cronbach's alpha \(=.731\) ), consisting of the items referring to the second component (i.e. 17e, 17r, 17s);
- subscale 17.3 (Cronbach's alpha \(=.793\) ), consisting of the items referring to the third component (i.e. 17a, 17b, 17c, 17d, 17f);

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our three continuous variables. Each variable was subjected to the control of the normality distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As for the first variable identified by the total of subscale 17.1 (TOT subscale 17.1: \(\mathrm{Max}=60\); Average \(=36,3\); Stdev = 11,7; \(\mathrm{N}=\) 440), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is relatively normal.

As for the variable identified by the total of subscale 17.2 (TOT Subscale 17.2: Max = 18; Average \(=16 ;\) Stdev \(=2,2 ; N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it appears clear that the distribution cannot be considered normal.

As regards the variable identified by the total of subscale 17.3 (TOT Subscale 17.3: \(\mathrm{Max}=36\); Average \(=21.2 ;\) Stdev \(=4.8 ; N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can reasonably be said that the distribution is normal.

Considering the lack of uniformity in the normality distribution of each subscale, as well as the Cronbach coefficient (which was lower for the single subscales than for the entire set of items: .923), the relatively low percentage of variance explained overall, and the fact that all subscales measure the same thing, that is, the level of competence of our respondents when it comes to technology (as evidenced by the fact that various items weigh with high values on two or even three components), it was decided to try to measure the scale by summing up the values of all the items, thus treating it as an ordinal count variable. The alternative method of only extracting one component would entail explaining only \(43,9 \%\) of the variance, thus losing more than half of our data, and it did not appear to be a viable option. As regards the variable identified by the total of scale 17 (TOT scale 17: Max = 108; Average = 73,5; Stdev = 16,7; N = 440), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can reasonably be said that the distribution is not quite normal, but way less asymmetrical. For these reasons, it was decided to proceed by considering variable 17 to be the sum of the scores of all the items belonging to the initial scale 17, instead of grouping them into three different components, thus measuring, as we mentioned, how competent EFL teachers consider themselves to be when it comes to using specific ICT tools.

To try and solve the problematic aspects, including the fact that the Boxplot (Figure) highlighted the presence of some outliers deriving from particularly low scores, the variable was transformed mathematically through the reflect and square root transformation and a new variable was obtained. Observing the Q-Q plot (Figure) as well as the histogram (Figure) and the Boxplot (Figure), it can reasonably be said that the distribution still cannot be considered normal, as the Kolmogorov-Smirnov test of normality also maintains, and therefore
is not suitable for the adoption of parametric techniques: the original variable will thus be taken into consideration for further statistical analyses and non-parametric techniques will have to be contemplated instead.

\section*{Scale analysis 18}

The 18 items making up Scale 18 of the EFL Questionnaire ("Degree of usefulness of the following tools in foreign language teaching and learning...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .921, higher than the recommended value of 6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .000), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of three components with eigenvalues higher than 1, which explain respectively \(41,3 \%, 12,2 \%\) and \(7,8 \%\) of the variance, for a cumulative total of \(61,3 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the second component and a less pronounced one after the fourth (Figure number): given that its value is below 1, as was also highlighted by the parallel analysis, however, it was decided not to consider it as a possible fourth component. The parallel analysis results identify three components with eigenvalues higher than the corresponding criteria values of the data matrix ( 18 variables \(\times 440\) respondents) randomly generated by the software (Table number). It was therefore decided to keep all three components to explain a larger percentage of the variance.

To facilitate the interpretation of the three components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which all three components have quite high factorial weights (all higher than .3). Almost all the items, however, weigh at least on two, sometimes even on all three components with very high values. (Table number). There is a minimal positive correlation between all components (Table number). According to the results of this preliminary analysis, we decided to try to break down

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the scale into three separate subscales, thus highlighting the presence of three underlying dimensions.

The three subscales identified are the following:
- subscale 18.1 (Cronbach's alpha \(=.909\) ), consisting of the items referring primarily to the first component (i.e. 18e, 18f, 18g, 18h, 18i, 18l, 18m, 18o, 18q, 18t);
- subscale 18.2 (Cronbach's alpha = .815), consisting of the items referring to the second component (i.e. 18a, 18d, 18n, 18p, 18r, 18s);
- subscale 18.3 (Cronbach's alpha \(=.803\) ), consisting of the items referring to the third component (i.e. 18b, 18c);

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our three continuous variables. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As for the first variable identified by the total of subscale 18.1 (TOT subscale 18.1: Max \(=60\); Average \(=40,2\); Stdev = 11,3; \(N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is relatively normal.

As for the variable identified by the total of subscale 18.2 (TOT Subscale 18.2 : Max \(=36\); Average \(=32,2 ;\) Stdev \(=4,2 ; N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it appears clear that the distribution cannot be considered normal.

As regards the variable identified by the total of subscale 18.3 (TOT Subscale 18.3: Max \(=12\); Average \(=7\); Stdev \(=2.8 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can reasonably be said that the distribution is normal.

Considering the lack of uniformity in the normality distribution of each subscale, as well as the Cronbach coefficient (which was lower for the single subscales than for the entire set of items: .913), the relatively low percentage of variance explained overall and the fact that all subscales measure the same thing, that is the level of usefulness of specific ICT tools according to the respondents (as evidenced by the fact that various items weigh with high values on two or
even three components), it was decided to try to measure the scale by summing up the values of all the items, thus treating it as an ordinal count variable. The alternative method of only extracting one component would entail explaining only \(41,3 \%\) of the variance, thus losing more than half of our data, and it did not appear to be a viable option. As regards the variable identified by the total of scale 18 (TOT scale 18: Max = 108; Average = 79,4; Stdev = 15,6; \(\mathrm{N}=\) 440), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001 . Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can reasonably be said that the distribution is not quite normal, but is way less asymmetrical. For these reasons, it was decided to proceed by considering variable 18 to be the sum of the scores of all the items belonging to the initial scale 18 , instead of grouping them into three different components, thus measuring, as we mentioned, how useful EFL teachers consider specific ICT tools.

To try and solve the problematic aspects, including the fact that the Boxplot (Figure) highlighted the presence of some outliers deriving from particularly low scores, the variable was transformed mathematically through the reflect and logarithm transformation and a new variable was obtained. Observing the Q-Q plot (Figure) as well as the histogram (Figure) and the Boxplot (Figure), it can reasonably be said that the distribution still cannot be considered normal, as the Kolmogorov-Smirnov test of normality also maintains, and therefore is not suitable for the adoption of parametric techniques: the original variable will thus be taken into consideration for further statistical analyses and non-parametric techniques will have to be contemplated instead.

\section*{Scale analysis 19}

The 18 items making up Scale 19 of the EFL Questionnaire ("I resort to these tools in class...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .923 , significantly higher than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .000), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of three components with eigenvalues higher than 1 , which explain respectively \(41,6 \%, 11 \%\) and \(5,8 \%\) of the variance, for a cumulative total of \(58,4 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the second component and a less pronounced one after the third one (Figure number). The parallel analysis results identify only two components with eigenvalues higher than the corresponding criteria values of the data matrix (18 variables x 440 respondents) randomly generated by the software (Table number). Given that the eigenvalue of the third component is still higher than one, it was decided to keep all three components, to explain a larger percentage of the variance as well.

To facilitate the interpretation of the three components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which all three components have quite high factorial weights (all higher than .3). Almost all the items, however, weigh at least on two, sometimes even on all three components with very high values. (Table number). There is a minimal positive correlation between component 2 and components 1 and 3, and a slightly stronger positive correlation between components 1 and 3 (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into three separate subscales, thus highlighting the presence of three underlying dimensions.

The three subscales identified are the following:
- subscale 19.1 (Cronbach's alpha \(=.909\) ), consisting of the items referring primarily to the first component (i.e. 19b, 19c, 19g, 19h, 19i, 19I, 19m, 19o, 19q, 19t);
- subscale 19.2 (Cronbach's alpha \(=.815\) ), consisting of the items referring to the second component (i.e. 19d, 19p, 19r, 19s);
- subscale 19.3 (Cronbach's alpha \(=.803\) ), consisting of the items referring to the third component (i.e. 19a, 19e, 19f, 19n);

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our three continuous variables. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As for the first
variable identified by the total of subscale 19.1 (TOT subscale 19.1: Max = 60; Average \(=25,7\); Stdev \(=12,4 ; N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

As for the variable identified by the total of subscale 19.2 (TOT Subscale 19.2: Max = 24; Average \(=20,3 ;\) Stdev \(=3,3 ; N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it appears clear that the distribution cannot be considered normal.

As regards the variable identified by the total of subscale 19.3 (TOT Subscale 19.3: \(\mathrm{Max}=24\); Average \(=16,9 ;\) Stdev \(=4,7 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can reasonably be said that the distribution is relatively more normal.

Considering the lack of uniformity in the normality distribution of each subscale, as well as the Cronbach coefficient (which was lower for the single subscales than for the entire set of items: .912), the relatively low percentage of variance explained overall and the fact that all subscales measure the same thing, that is, how frequently specific ICT tools are used in class according to EFL teachers (as evidenced by the fact that various items weigh with high values on two or even three components), it was decided to try to measure the scale by summing up the values of all the items, thus treating it as an ordinal count variable. The alternative method of only extracting one component would entail explaining only \(41,6 \%\) of the variance, thus losing more than half of our data, and it did not appear to be a viable option. As regards the variable identified by the total of scale 19 (TOT scale 19: \(\operatorname{Max}=108 ;\) Average \(=62,8 ;\) Stdev \(=17,4 ; \mathrm{N}=\) 440), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001 . Observing the histogram (Figure number) and the Q-Q plot (Figure number), it can reasonably be said that the distribution is not quite normal, but is way less asymmetric. For these reasons, it was decided to proceed by considering variable 19 to be the sum of the scores of all the items belonging to the initial scale 19, instead of grouping them into three different components, thus measuring, as we mentioned, how frequently EFL teachers resort to specific ICT tools.

To try and solve the problematic aspects, the variable was transformed mathematically through the square root transformation and a new variable was obtained. Observing the \(\mathrm{Q}-\mathrm{Q}\)
plot (Figure) as well as the histogram (Figure) and the Boxplot (Figure), it can reasonably be said that the distribution still cannot be considered normal, as the Kolmogorov-Smirnov test of normality also maintains, and therefore is not suitable for the adoption of parametric techniques: the original variable will thus be taken into consideration for further statistical analyses and non-parametric techniques will have to be contemplated instead.

\section*{Scale analysis 20}

The 10 items making up Scale 20 of the EFL Questionnaire ("I believe that the use of technology facilitates foreign language learning at the level of students'...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .920, significantly higher than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .000), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of one component with eigenvalue higher than 1 , which by itself explains \(62,3 \%\) of the variance, and another equal to 1 , which the PCA did not take into consideration. The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the first two components, the second one measuring exactly 1 (Figure number), while the parallel analysis results identify only one component with eigenvalue significantly higher than the corresponding criteria value of the data matrix (10 variables x 440 respondents) randomly generated by the software (Table number). Considering the very high Cronbach coefficient value (.932), it was therefore decided to try to measure the scale by summing up the values of all the items, thus treating it as an ordinal count variable. The alternative method of only extracting one component would entail explaining a relatively small percentage of the variance, thus losing a large amount of data, and it did not appear to be a viable option. We then proceeded by summing up the values of all the items, creating a new ordinal count variable, which would allow us to avoid losing data.

The following subscale was identified:

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- Subscale 20.1, consisting of the su of all the items (i.e. 20a, 20b, 20c, 20d, 20e, 20f, 20g, 20h, 20i and 20I).

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which evaluates how much EFL teachers agree with the idea that technology can be a facilitator for students in their learning process, was then subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. This variable is identified by the total of subscale 20.1 (TOT subscale 20.1: Max \(=60\); Average \(=48,6 ;\) Stdev \(=7,8 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001 . Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal. Also, the Boxplot (Figure) highlighted the presence of some outliers, usually deriving from particularly low scores. To try and solve these problematic aspects, the variable was transformed mathematically through the reflect and logarithm transformation and a new variable was obtained. Observing the Q-Q plot (Figure) as well as the histogram (Figure) and the Boxplot (Figure), it can reasonably be said that the distribution still cannot be considered normal, as the Kolmogorov-Smirnov test of normality also maintains, and therefore is not suitable for the adoption of parametric techniques: the original variable will thus be taken into consideration for further statistical analyses and non-parametric techniques will have to be contemplated instead.

\section*{Scale analysis 21}

The 7 items making up Scale 21 of the EFL Questionnaire ("Technology...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .843, higher than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .000), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of one component with eigenvalue higher than 1 , which by itself explains \(62,6 \%\) of the variance. The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the first two components, the second one measuring less than one (Figure number), while the parallel analysis results identify only one component with eigenvalue significantly higher than the corresponding criteria value of the data matrix ( 7 variables \(\times 440\) respondents) randomly generated by the software (Table number). It was therefore decided to initially keep only one component to explain the entire Scale 21. The decision to keep only one component makes it impossible to perform any form of rotation.

The following subscale was identified:
- Subscale 21.1 (Cronbach's alpha = .932), consisting of all the items (i.e. 21a, 21b, 21c, \(21 d, 21 e, 21 f\) and \(21 g\) ).

This new variable considers the usefulness of using technology in an EFL environment. However, the component matrix indicates an element whose value, although higher than 0.3, is not particularly high. This suggest that the item in question (21e), which considers the possibility that technology is something students can generally approach better than their teachers, should perhaps be analysed separately. For this reason, a second analysis of the main components was carried out, instructing the software to extract two components regardless of their eigenvalues. The second one, which in any case is not far from 1 (.943) and helps us to explain \(13,5 \%\) of the variance, for a cumulative total of \(76 \%\), corresponds to item 21 e . To facilitate the interpretation of the two components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which both components have quite high factorial weights (all higher than .3). Almost all the items weigh on one single component with very high values. (Table number). There is a minimal positive correlation between the two components (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into two separate subscales, thus highlighting the presence of two underlying dimensions.

The following subscales were identified:

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- Subscale 21.1 (Cronbach's alpha = .919), consisting of the items referring to the first component (i.e. 21a, 21b, 21c, 21d, 21f and 21g);
- Subscale 21.2, consisting of the item referring to the second component (i.e. 21e).

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which measures how useful and well integrated ICTs are in an EFL learning environment, was then subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected.

As for the first variable identified by the total of subscale 21.1 (TOT subscale 21.1: \(\mathrm{Max}=36\); Average \(=31,6 ;\) Stdev \(=4,1 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

As for the second variable identified by the total of subscale 21.2 (TOT subscale 21.2: \(\mathrm{Max}=6\); Average \(=4,8\); Stdev \(=1,2 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal. To try to solve these problematic aspects, the variables were both transformed mathematically through the reflect and logarithm transformation, and new variables were obtained. Observing the Q-Q plots (Figures) the histograms (figures) and the Boxplots (Figures) it can reasonably be said that the distribution of either variable is still not normal, as the Kolmogorov-Smirnov test of normality also maintains. The original variables and not the transformed ones will thus be taken into consideration for further statistical analyses, and since neither is suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 22}

The 8 items making up Scale 22 of the EFL Questionnaire ("Reasons that might have hindered the use of technology so far...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the
correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .797 , higher than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. <.001), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of three components with eigenvalues higher or equal to 1 , which explain respectively \(46,6 \%, 14,7 \%\) and \(12,5 \%\) of the variance, for a cumulative total of \(73,8 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, however, do not seem to be confirming this analysis. In particular, the screeplot clearly shows a very marked elbow after the second component (Figure number), and no particular elbow after the third (even though its value is exactly 1), while the parallel analysis results identify two components with eigenvalues higher than the corresponding criterion values of the data matrix (8 variables \(\times 440\) respondents) randomly generated by the software (Table number). Therefore, an attempt was initially made to reformulate the principal component analysis by asking the software to extract only two components. In addition to explaining a smaller percentage of the variance, however, there was an item (i.e. 22b, which fell into the third component in the first factorialization) that did not present high enough factorial weights (higher than .3) in either of the other two. It was therefore decided to try and proceed with the extraction of three components, as initially suggested by the PCA.

To facilitate the interpretation of the three components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which all three components have quite high factorial weights (all higher than .3). Most of the items, however, weigh on two components with very high values. (Table number). There is a moderate positive correlation between components 1 and 2 , and a minimal negative correlation between component 3 and components 1 and 2 (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into three separate subscales, thus highlighting the presence of three underlying dimensions.

The three subscales identified are the following:

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- subscale 22.1 (Cronbach's alpha \(=.883\) ), consisting of the items referring primarily to the first component (i.e. 22a, 22c and 22d);
- subscale 22.2 (Cronbach's alpha = .772), consisting of the items referring to the second component (i.e. \(22 \mathrm{e}, 22 \mathrm{f}, 22 \mathrm{~g}\) and 22 h );
- subscale 22.3 , consisting of the only item referring to the third component (i.e. 22b);

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our three continuous variables. The first variable evaluates the possibility that schools lack the appropriate technological tools, and the third one that they fail to promote their use. Finally, the second one merges together other independent elements, like digital skills and time available. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As for the first variable identified by the total of subscale 22.1 (TOT subscale 22.1: \(\mathrm{Max}=18\); Average = 11,1; Stdev = 4,2; \(\mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram, we can state that the distribution appears to be lacking variance, and a mathematical transformation (reverse and square root) vas attempted; because of the Boxplot (Figure number) and the Q-Q plot (Figure number), however, it can be said that the distribution pre-transformation is symmetrical enough to be considered normal, even if the KolmogorovSmirnov test of normality states otherwise, and the adoption of parametric statistical techniques can be contemplated.

As for the variable identified by the total of subscale 22.2 (TOT Subscale 22.2: Max \(=24\); Average \(=14,4 ;\) Stdev \(=4,2 ; N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it appears that the distribution cannot be considered normal.

As regards the variable identified by the total of subscale 22.3 (TOT Subscale 22.3: Max = 6; Average \(=3,1 ; \operatorname{Stdev}=1,4 ; \mathrm{N}=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can reasonably be said that the distribution cannot be considered normal.

To try to solve these problematic aspects, the variables were transformed mathematically through the square root transformation, and new variables were obtained. Observing the \(\mathrm{Q}-\mathrm{Q}\)
plots (Figures) and histograms (Figures) it can reasonably be said that the distribution still is not normal, as the Kolmogorov-Smirnov test of normality also maintains, despite slightly higher \(p\) values. Given the difficulty in considering the distributions of either scale normal, it seems that these variables may not be suitable for the adoption of parametric techniques and the corresponding non-parametric techniques will have to be contemplated instead.

\section*{Scale analysis 23}

The 5 items making up Scale 23 of the EFL Questionnaire ("In light of the health emergency developed in 2020, which forced upper secondary schools to hold most of their lessons through different distance learning modalities...") are dichotomous, as they require a Yes/No answer. Being neither orderable nor quantifiable, this makes the items in question nominal qualitative variables. It is therefore not possible to treat them as a scale, thus performing a principal components analysis, nor to check the normality of the distribution. Rather, a frequency distribution analysis was opted for at first (figure number), and in that case it would have been necessary to resort to non-parametric tests for any further statistical analyses.

The following variables were then identified:
- Variable 23.1, consisting of item 23a, exploring whether the respondents' technological preparation proved sufficient to properly manage distance learning;
- Variable 23.2, consisting of item 23b, exploring whether the technological means provided by the respondents' school proved sufficient to properly manage distance learning;
- Variable 23.3, consisting of item 23c, exploring whether the technological preparation of the students proved sufficient for them to properly manage distance learning;
- Variable 23.4, consisting of item 23d, exploring whether schools helped to provide a smooth transition;
- Variable 23.5, consisting of item 23e, exploring whether schools helped to provide the appropriate instructions and/or training.

However, since one of the objectives of this preliminary analysis was to reduce the amount of data in view of subsequent statistical analyses, it was decided to try and proceed with a sum. The procedure was the same: every Yes was recoded 1, and every No was recoded 0 . The scores were then added up (being 5 variables, the value could range from a minimum of 0 to a

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maximum of 5). The result is an ordinal count variable, which indicates how well the transition from on-site to distance learning that happened in the spring of 2020 was managed by upper secondary schools as a whole, thus including teaching staff and students.

The following variable was identified:
- Variable 23.1, consisting of the sum of all the items (i.e. 23a, 23b, 23c, 23d, and 23e).

As for the variable identified by the total of subscale 23.1, (TOT subscale 23.1: Max \(=5\); Average \(=4 ; \operatorname{Stdev}=1,3 ; N=440\) ), subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected, the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

To try to solve this problematic aspect, the variable was transformed mathematically through the reflect and inverse transformation, and a new variable was obtained. Observing the \(\mathrm{Q}-\mathrm{Q}\) plot (Figures) and the histogram (Figures) it can reasonably be said that the distribution is still not normal (figure numbers), as the Kolmogorov-Smirnov test of normality also maintains. The original variable and not the transformed one will thus be taken into consideration for further statistical analyses, and non-parametric techniques will have to be contemplated.

\section*{Scale analysis 24}

The 4 items making up Scale 24 of the EFL Questionnaire ("Distance learning...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .748 , higher than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. <.001), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of one component with eigenvalue higher than 1 , which by itself explains \(67,3 \%\) of the variance. The screeplot and parallel
analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the first two components, the second one measuring less than one (Figure number ..), while the parallel analysis results identify only one component with eigenvalue significantly higher than the corresponding criteria value of the data matrix ( 4 variables \(\times 440\) respondents) randomly generated by the software (Table number). It was therefore decided to keep only one component to explain the entire Scale 24. The decision to keep only one component makes it impossible to perform any form of rotation.

The following subscale was identified:
- Subscale 24.1 (Cronbach's alpha = .831), consisting of all the items (i.e. 24a, 24b, 24c and 24 d ).

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which measures the validity of distance learning, was then subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As for the first variable identified by the total of subscale 24.1 (TOT subscale 24.1: \(\operatorname{Max}=24\); Average \(=19\); Stdev \(=3,4 ; N=440\) ), the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number), the Q-Q plot (Figure number) and the Boxplot (Figure number) it can be said that the distribution cannot be considered completely normal. Also, some outliers were highlighted, deriving from particularly low scores. To try and solve these problematic aspects, the variable was transformed mathematically through the reflect and logarithm transformation and a new variable was obtained. Observing the Q-Q plot (Figures) as well as the histogram (Figures), it can reasonably be said that the distribution still cannot be considered normal, as the Kolmogorov-Smirnov test of normality also maintains. The original variable and not the transformed one will thus be taken into consideration for further analyses, and since it is not suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{ISL Questionnaire - Preliminary analyses}

As mentioned in Chapter 3 (see §3.7.2) the aims of this preliminary analysis are four: first, to identify the main dimensions underlying each scale of the questionnaire; secondly, to calculate
the reliability (Cronbach's alpha coefficient) of the scales; third, to explore the distribution of the data collected by the individual scales in order to verify that the parameters to be able to apply the parametric statistical techniques are respected (see paragraph number); finally, identify the variables measured by the individual scales. The main parameters to be respected are the following: measurement level (i.e. only continuous variables), normality of the distribution (i.e. the data in the histogram are arranged to form a Gauss curve), homoskedasticity (i.e. homogeneous variance) (Lowie \& Seton, 2013).

\section*{Question analysis 1}

Question 1, consisting of item 1a ("Type of upper secondary school I teach in..."), identifies the variable indicating the type of upper secondary school our respondents teach in (Min=1; Max \(=5 ;\) Median = 2,5; Mode = 3, or Both; \(\mathrm{N}=10\) ). The answer options identified for this question are neither scaled nor sortable ones, making it a nominal qualitative variable. As with other similar questions (i.e. questions \(4,12,10,16\) an 23), we did not proceed by carrying out a principal components analysis or by checking the normality of the distribution, since both work for quantitative variables only. Rather, a frequency distribution analysis was opted for instead (figure number). Also, since ordinal or categorical (i.e. nominal) data require non-parametric techniques (Dörnyei, 2007), any further statistical analyses will require the adoption of nonparametric tests.

\section*{Question analysis 2}

Question 2, consisting of item 2a ("I have been teaching Italian as a second language for..."), identifies the variable indicating the level of experience of our respondents, as measured by the years they spent teaching in the ISL field ( \(\mathrm{Max}=6\); Median \(=5\), Mode \(=5\), or 21-30 years; N \(=10\) ). The fact that it is an ordinal qualitative variable automatically entails the use of nonparametric techniques for any further statistical analyses, which is why it was not necessary to check the normality of the distribution. Rather, a frequency distribution analysis was opted for instead (figure number).

\section*{Question analysis 3}

Question 3, consisting of item 3a ("My age range is..."), identifies the variable indicating the age range of our respondents, with age groups being coded from 1 to 7 , with 7 indicating the Prefer not say response option ( \(\mathrm{Max}=7\); Median \(=4\); \(\mathrm{Mode}=4\), or \(41-50\) years; \(\mathrm{N}=10\) ). The
fact that it is an ordinal qualitative variable automatically entails the use of non-parametric techniques for any further statistical analyses, which is why it was not necessary to check the normality of the distribution. Rather, a frequency distribution analysis was opted for instead (figure number).

However, one entry (number 8) is not consistent with the answer provided to Question 2: the respondent declared to belong to the "Under 25" age group, but also that they've been teaching for over 20 years, and the two options cannot possibly be both correct. Given the fact that there have been similar issues with the EFL Questionnaire, we chose to consider the answers to Question 2 as the correct one, and this one as the result of a misinterpretation of some sort, which will be acknowledged during the actual analysis phase.

\section*{Scale analysis 4}

The 2 items making up Scale 4 of the ISL Questionnaire ("When it comes to specific learning objectives for English as a foreign language established for the type of upper secondary school I teach in (Učni načrt zaitalijanščino kot tuji in kot drugi jezik: gimnazija (Šečerov e Zorman, 2008); Italijanščina kot drugi jezik: izpitni katalog za poklicno maturo (Šečerov et al, 2010), respectively)"...) presuppose as possible answers Yes, No, and I don't know enough about it. Being neither orderable nor quantifiable, this makes the items in question nominal qualitative variables. It is therefore not possible to perform the principal components analysis, nor to check the normality of the distribution. Rather, a frequency distribution analysis was opted for instead (figure number), and it will be necessary to resort to non-parametric tests for any further statistical analyses. Also, a careful inspection of the correlation matrix revealed the presence of no correlation coefficient; in addition, it was impossible to measure the alpha coefficient of the scale, and the Kaiser-Meyer-Olkin (KMO) and Bartlett's sphericity test (Bartlett, 1954) could not be run, due to the fact that both variables had no variance (the value measuring 0). This happened because the entire set of respondents answered Yes to both items, making them constant variables, which proves that other analyses could not have been run anyway.

The following variables were then identified:
- Variable 4.1, consisting of item 4a, exploring whether the respondents have read the national guidelines relating to the specific learning objectives for Italian as a second language;
- Variable 4.2, consisting of item 4b, exploring whether the respondents are aware of the specific learning objectives for Italian as a second language.

\section*{Scale analysis 5}

The 5 items making up Scale 5 of the ISL Questionnaire ("When it comes to the specific learning objectives for foreign language learning for the type of upper secondary school I teach in...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .554 , lower than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) shows a statistical significance of .259, thus suggesting we do not carry out the analysis (Table number).

The principal components analysis revealed the presence of two components with eigenvalues higher than 1 , which explain \(47,5 \%\) and \(28,3 \%\) of the variance, for a cumulative total of \(75,8 \%\). The screeplot does not show any marked elbow (Figure number), and parallel analysis, performed with an online Parallel Analysis Engine, identifies two components with eigenvalues significantly higher than the corresponding criteria value of the data matrix ( 5 variables \(\times 10\) respondents) randomly generated by the software (Table number).

Given the low KMO value, the lack of statistical significance when it comes to Bartlett sphericity test and the low number of observations, as well as the conflicting results obtained by the parallel analysis and the screeplot, however, this was not perceived as a viable options. In any case, since we still thought it appropriate to try to resize the scale dimensions and avoid analysing each item individually, it was decided to resort to another expedient.

It was hypothesised, as it often happens in these situations, that the small number of observations may have influenced the results of the factor analysis, which could have been different with a greater number of cases. Therefore, being the EFL and ISL Questionnaires
identical in substance, and having the EFL Questionnaire obtained a high number of responses, it was hypothesised that the same distribution of items and factors could be the best solution, and we therefore proceeded in this direction, thus basing our choice on a previous experiment, formulated in the same way as well as statistically convincing. We then opted for an ordinal count variable, which sums up the scores obtained from the individual items and therefore takes into account the data collected as a whole.

The following subscale was identified:
- Subscale 5.1 (Cronbach's alpha \(=.586\) ), consisting of the sum of all the items (i.e. \(5 \mathrm{a}, 5 \mathrm{5}\), \(5 c, 5 d\) and \(5 e)\).

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which measures the level of participation of each teacher in those decisions concerning the achievement of the pre-established learning objectives, was then subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected.

As for the first variable identified by the total of subscale 5.1 (TOT subscale 5.1: Max \(=29\); Average \(=23,3 ;\) Stdev \(=3,6 ; N=10\) ), the Shapiro-Wilk test of normality shows a significance value of .174/.276. Observing the histogram (Figure number) and the Q-Q plot (Figure number), though, it can be said that the distribution cannot be considered completely normal. To try and solve these problematic aspects, the variable was transformed mathematically through the reflect and square root transformation, and a new variable was obtained. Observing the Q-Q plot (Figures) as well as the histogram (Figures) and the Boxplot (Figures), it can reasonably be said that the distribution cannot he considered normal, and is actually less normal than the original variable, which is why the first one, and not the transformed variable will be taken into consideration for further statistical analyses, and non-parametric techniques will have to be contemplated.

\section*{Scale analysis 6}

The 8 items making up Scale 6 of the EFL Questionnaire ("I believe that the specific learning objectives established for foreign language learning (Učni načrt zaitalijanščino kot tuji in kot drugi jezik: gimnazija (Šečerov e Zorman, 2008); Italijanščina kot drugi jezik: izpitni katalog za
poklicno maturo (Šečerov et al, 2010), respectively)"...) were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; however, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .319, lower than the recommended value of . 6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) did not reach statistical significance (Sig. .017), at least not within a \(1 \%\) confidence interval, which suggests we should not carry out the analysis (Table number).

The principal components analysis revealed the presence of three components with eigenvalues higher than 1, which explain respectively \(36,9 \%, 27 \%\) and \(15,1 \%\) of the variance, for a cumulative total of \(79 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, do not confirm this analysis. In particular, the screeplot shows no marked elbow (Figure number), while the parallel analysis results identify only two components with eigenvalues higher than the corresponding criteria values of the data matrix ( 8 variables x 10 respondents) randomly generated by the software (Table number).

Given the low KMO value, the lack of statistical significance when it comes to Bartlett sphericity test and the low number of observations, as well as the conflicting results obtained by the parallel analysis and the screeplot, this was not perceived as a viable options. In any case, since we still thought it appropriate to try to resize the scale dimensions and avoid analysing each item individually, it was decided to resort to another expedient.

It was hypothesised, as it often happens in these cases, that the small number of observations may have influenced the results of the factor analysis, which could have been different with a greater number of cases. Therefore, being the EFL and ISL Questionnaires identical in substance, and having the EFL Questionnaire obtained a high number of responses, it was hypothesised that the same distribution of items and factors could be the best solution, and we therefore proceeded in this direction, thus basing our choice on a previous experiment, formulated in the same way as well as statistically convincing.

The two subscales identified are the following:

APPENDIX 4 - EFL and ISL Questionnaires validation procedure
- subscale 6.1 , consisting of the items referring primarily to the first component (i.e. 6 a , \(6 b, 6 c, 6 d\) and \(6 e\) );
- subscale 6.2 , consisting of the items referring to the second component (i.e. \(6 \mathrm{f}, 6 \mathrm{~g}\) and 6h);

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our two continuous variables. Their Cronbach's alpha value is low (. 420 and .121 , respectively), however, Bujan et al. (2018) state that, in the assessment of the internal consistency of an instrument, the Cronbach coefficient is usually set at 0.5 in the null hypothesis and this would require sample size larger than 30 in order to achieve a minimum desired effect size of 0.7 . Since this is not our case, lower alpha values are to be expected, which is why each variable was subjected to the control of the normality of the distribution anyway, in order to verify that the parameters for applying the parametric statistical techniques are respected. The first variable identifies the suitability of the specific learning objectives established for EFL teaching for specific learning environments, while the second investigates the possibility that they need to be taken more into consideration.

As for the first variable identified by the total of subscale 6.1 (TOT subscale 6.1: Max \(=27\); Average = 22,8; Stdev = 2,3; \(\mathrm{N}=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of more than \(\mathbf{2 0 0}\). Observing the histogram (Figure number) and the \(\mathrm{Q}-\mathrm{Q}\) plot (Figure number) it can be said that the distribution is not normal.

As for the variable identified by the total of subscale 6.2 (TOT Subscale 6.2: \(\mathrm{Max}=16\); Average \(=14,4 ;\) Stdev \(=1,6 ; N=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of .091. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is not normal.

To try and solve these problematic aspects, the variables were transformed mathematically through the square root and the reflect and inverse transformation respectively, and new variables were obtained. Although slightly more normal, observing the histograms (figures) and one Boxplot (Figure) it can reasonably be said that the distribution is still not normal, despite the Kolmogorov-Smirnov test of normality suggesting otherwise. The original variables and not the transformed ones will thus be taken into consideration for further statistical analyses, and non-parametric techniques will have to be contemplated.

APPENDIX 4 - EFL and ISL Questionnaires validation procedure

\section*{Scale analysis 7}

The 3 items making up Scale 7 of the ISL Questionnaire ("Familiarity with research in language education...") are dichotomous, as they require a Yes/No answer. Being neither orderable nor quantifiable, this makes the items in question nominal qualitative variables. It is therefore not possible to treat them as a scale, thus performing a principal components analysis, nor to check the normality of the distribution. Rather, a frequency distribution analysis was opted for instead (figure number), and it will be necessary to resort to non-parametric tests for any further statistical analyses.

The three variables identified are the following:
- Variable 7.1, consisting of item 7a, exploring whether respondents are subscribed to one or more printed journals;
- Variable 7.2, consisting of item 7b, exploring whether respondents are researchers themselves;
- Variable 7.3, consisting of item 7c, exploring whether respondents are authors themselves.

Furthermore, two items out of three (i.e. 7.2 and 7.3) lack variance, since all respondents answered \(N o\), which makes them constant variables.

\section*{Scale analysis 8}

The 5 items making up Scale 8 of the ISL Questionnaire ("Knowledge of the recently published studies in the field of language education...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .606, barely higher than the recommended value of . 6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. <.001), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of two components with eigenvalues higher than 1 , which explain respectively \(57,4 \%\) and \(34,9 \%\) of the variance, for a cumulative total of \(92,3 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the third component, but its eigenvalue is way below 1 (Figure number), while the parallel analysis results identify two components with eigenvalues higher than the corresponding criteria values of the data matrix (5 variables x 10 respondents) randomly generated by the software (Table number). It was therefore decided to keep both components to explain a larger percentage of the variance.

To facilitate the interpretation of the two components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which both components have quite high factorial weights (all higher than .3). Almost all the items weigh solely on one component, usually with very high values (Table number). There appears to be a minor positive correlation between the two components (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into two separate subscales, thus highlighting the presence of two underlying dimensions.

The two subscales identified are the following:
- subscale 8.1 (Cronbach's alpha \(=.950\) ), consisting of the items referring primarily to the first component (i.e. 8a, 8b and 8e);
- subscale 8.2 (Cronbach's alpha \(=.934\) ), consisting of the items referring to the second component (i.e. 8 c and 8 d );

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our two continuous variables. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. When it comes to the recently published studies in the field of language education, our first variable appears to identify each respondent's degree of knowledge on the matter, while the second one pinpoints the concrete participation of their school in supporting their teachers' training in this field.

As for the first variable identified by the total of subscale 8.1 (TOT subscale 8.1: Max \(=16\); Average = 9,9; Stdev = 3,7; \(\mathrm{N}=10\) ), the Kolmogorov-Smirnov test of normality shows a
significance value of .200. Observing the Q-Q plot (Figure number) it can be said that the distribution is not exactly normal.

As for the variable identified by the total of subscale 8.2 (TOT Subscale 8.2: \(\mathrm{Max}=12\); Average = 7,7; Stdev = 2,5; \(\mathrm{N}=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of less than \(\mathbf{. 2 0 0}\). Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is not normal and lacks variance.

To try to solve these problematic aspects, both variables were transformed mathematically through the square root transformation, and new variables were obtained. Although more normal, observing the Q-Q plot (Figure) and the Boxplot (Figure) it can reasonably be said that neither distribution is normal. The original variables and not the transformed ones will thus be taken into consideration for further statistical analyses, and non-parametric techniques will have to be contemplated.

\section*{Scale analysis 9}

The 5 items making up Scale 9 of the ISL Questionnaire ("Regarding the relationship between the results obtained by language education studies and the approaches proposed by the school system...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .587, a little lower than the recommended value of . 6 (Kaiser, 1970, 1974), which is normal with few cases; finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .005), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of only one component with eigenvalue higher than 1 , while a second component shows eigenvalue very close to one: they explain respectively \(48,3 \%\) and \(40,5 \%\) of the variance, for a cumulative total of \(88,8 \%\). The screeplot clearly shows an elbow after the second component and a very marked elbow after the third one (Figure number), while the parallel analysis, performed with an online Parallel Analysis Engine, identifies two components with eigenvalues higher than the corresponding
criteria value of the data matrix ( 5 variables \(\times 10\) respondents) randomly generated by the software (Table number).

To facilitate the interpretation of the two components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which both components have quite high factorial weights (all higher than .3). Most items only weigh on one component, usually with very high values. (Table number). There appears to be a minor negative correlation between the two components (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into two separate subscales, thus highlighting the presence of two underlying dimensions.

The two subscales identified are the following:
- subscale 9.1 (Cronbach's alpha \(=.826\) ), consisting of the items referring primarily to the first component (i.e. 9c, 9d and 9e);
- subscale 9.2 (Cronbach's alpha \(=.926\) ), consisting of the items referring to the second component (i.e. 9a and 9b);

Given the higher value of the alpha coefficient for each of the two subscales (while for the entire scale 9 it measured .701) and the good Korlmogorov-Smirnov value (reported below), as well as he high percentage of the variance explained, it was decided to proceed by keeping the two subscales despite the KMO value being somewhat lower than recommended.

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our two continuous variables. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. Regarding the relationship between the results obtained by language education studies and the approaches proposed by the school system, the second variable shows how much, according to EFL teachers, said approaches and objectives are in step with the most recent studies in the field of language education. The first one appears to evaluate the relationship between the two worlds, especially focussing on the impact research studies have on the approaches carried out in everyday school reality.

As for the first variable identified by the total of subscale 9.1 (TOT subscale 9.1: Max = 16; Average \(=11,7 ;\) Stdev \(=2,9 ; N=10\) ), the Kolmogorov-Smirnov test of normality shows a
significance value of over .200. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution is not exactly normal.

As for the variable identified by the total of subscale 9.2 (TOT Subscale 9.2: \(\mathrm{Max}=10\); Average \(=\) 8,3; Stdev = 1,2; \(N=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of .010. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it appears the distribution cannot be considered normal.

To try to solve this problematic aspect, both variables were transformed mathematically through the reflect and square root and the square root transformation, respectively, and new variables were obtained. The first variable, would classify as normal post-transformation, were it not for some data lacking on the right, making the tail asymmetrical. As for the second one, although more normal, observing the \(\mathrm{Q}-\mathrm{Q}\) plot (Figure) and the Boxplot (Figure) it can reasonably be said that the distribution is still not normal. The original variables and not the transformed ones will thus be taken into consideration for further statistical analyses, and nonparametric techniques will have to be contemplated.

\section*{Scale analysis 10}

The answer options available to the 6 items making up Scale 10 of the ISL Questionnaire ("My school...") are neither scaled nor sortable ones, making them nominal qualitative variables. As with other similar questions (i.e. questions 1), we did not proceed by carrying out a principal components analysis or by checking the normality of the distribution since both procedures work for quantitative variables only. Rather, a frequency distribution analysis was opted for instead (figure number). However, given that one of the objectives of this preliminary analysis was to reduce the amount of data in view of subsequent statistical analyses, it was decided to try and proceed with a sum. As for question 10 of the EFL Questionnaire, every Yes was then recoded as 1 , and every No was then recoded as 0 . As for the I don't know enough about it option, we were pondering on what value to assign to them. Their presence is undoubtedly relevant, but in order to establish whether the school was able to promote a research-related approach it does not provide us with new information. They would most likely have to be encoded with a value meant to differentiate them, and then, probably, be excluded from the analysis altogether because of it. It was therefore decided to consider them at the level of descriptive statistics (the entire report can be consulted in APPENDIX number) but not inferential statistics. Their value was therefore considered null. The scores were then added up
(being 6 variables, the value could range from a minimum of 0 to a maximum of 6). The result is an ordinal count variable, which explores the ability of the schools to integrate digital, multimodal and multicultural approaches in their everyday life, and promoting research.

The following variable was identified:
- Variable 10.1, consisting of the sum of all the items (i.e. 10a, 10b, 10c, 10d, 10e and 10f).

As for the variable identified by the total of subscale 10.1, (TOT subscale 10.1: Max = 6; Average \(=4,3 ;\) Stdev \(=1,1 ; N=10\) ), subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected, the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

To try to solve this problematic aspect, the variable was transformed mathematically through the square root transformation, and a new variable was obtained. Observing the \(\mathrm{Q}-\mathrm{Q}\) plot (Figures) and the histogram (Figures) it can reasonably be said that the distribution is still not normal (figure numbers), as the Kolmogorov-Smirnov test of normality also maintains. The original variable and not the transformed one will thus be taken into consideration for further statistical analyses, and non-parametric techniques will have to be contemplated.

\section*{Scale analysis 11}

The 10 items making up Scale 11 of the EFL Questionnaire ("I come in contact with these terms...") were more complex to translate into code, as they stemmed from a question where it was allowed to tick all the options that applied, and there were four for each item. The respondents were then able to indicate whether they came in contact with the selected terminology during teacher training, in class, when reading research studies, or never. This involved creating codes not only for each different response options, but also for all their possible combinations. The items were then subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: the SPSS FACTOR procedure was run with principal components analysis (PCA) as the extraction method, requesting the Kaiser-

Mayer-Olkin (KMO) measure of sample adequacy and Bartlett test of sphericity, but neither of these measures was printed. A footnote to the correlation matrix stated that "This matrix is not positive definite." Many different reasons can cause this to happen: for example, if there are more (or as many) variables in the analysis than there are cases, like in the present situation, then the correlation matrix will have linear dependencies and be NPD. Had we run any factor extraction method other than PCA or unweighted least squares (ULS), an NPD matrix would have caused the procedure to stop without further analysis. This was not the case, and we were still able to see how many components the PCA suggested extracting. However, since, in this case, the extraction of different components would not have facilitated the interpretation of the data, as we are not dealing with a scale, but rather a control grid, we realised it would have been more correct to treat the items as nominal qualitative variables. However, given that one of the objectives of this preliminary analysis was to reduce the amount of data in view of subsequent statistical analyses, it was decided to recode the data and proceed with a sum, just like for question 11 of the EFL Questionnaire. The procedure was the same: the first step was to clean up the data: some respondents, in fact, had selected Never along with other options. It can be assumed that the intention was to signal poor contact with the terms in question, but statistically the two answers are conflicting, so those specific Never were eliminated. All the others were instead coded as 0 . The next step was to evaluate the other answer options (During teacher training, In class, When reading research studies) based on how many were selected ( 1,2 or 3 ) by the respondents without specifying which ones, since this is deducible from the descriptive statistics reported in APPENDIX number. It is therefore a matter of considering how many areas of contact with terminology there are, rather than focussing on which ones. The scores were then added up (being 10 variables, the value could range from a minimum of 0 to a maximum of 30 ). The result is a ordinal count variable, which indicates how many opportunities for contact the respondents have with the terminology linked to a broader definition of Literacy (which therefore includes various aspects, from multimodality to the digital sphere).

The following variable was identified:
- Subscale 11.1, consisting of the sum of all the items (i.e. 11a, 11b, 11c, 11d, 11e, 11f, \(11 g, 11 h, 11 i\), and 11I).

As for the variable identified by the total of subscale 11.1, (TOT subscale 11.1: Max = 20; Average \(=11,6 ;\) Stdev \(=6,4 ; N=10\) ), subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected, the Kolmogorov-Smirnov test of normality shows a significance of over .200. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

To try to solve this problematic aspect, the variable was transformed mathematically through the reflect and square root transformation, and a new variable was obtained. Although more normal, observing the Q-Q plots (Figures) and the histograms (Figures) it can reasonably be said that the distribution is still not normal, even though the Kolmogorv-Smirnov value of significance seems to imply otherwise. The original variable and not the transformed one will thus be taken into consideration for further statistical analyses, and non-parametric techniques will have to be contemplated.

\section*{Question analysis 12}

Question 12, consisting of item 12a ("Please provide your definition of 'Literacy'..."), is an open question, which, as can be inferred from the item itself, asked respondents to briefly explain their idea of Literacy. Their answers were analysed by searching for head nouns so that they could then be grouped into different categories. A numerical code was then associated with each category in order to eventually proceed with the statistical analysis. Five categories were identified, which are neither scaled nor sortable ones, making it a nominal qualitative variable. As with other similar questions (i.e. questions 1 and others), we did not proceed by carrying out a principal components analysis or by checking the normality of the distribution, since both work for quantitative variables only. Rather, a frequency distribution analysis was opted for instead (figure number). As the present variable, identified by the total of subscale 12.1 ( \(\mathrm{Max}=\) 3; Median = 2; Mode = 1, or Comprehension ; \(\mathrm{N}=10\) ), is a qualitative variable, it requires the use of non-parametric tests for any further statistical analyses.

\section*{Scale analysis 13}

The 14 items making up Scale 13 of the EFL Questionnaire ("The following areas were covered during my undergraduate/postgraduate education and/or professional training...") were subjected to a preliminary principal components analysis, using the SPSS software. The
purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: the SPSS FACTOR procedure was run with principal components analysis (PCA) as the extraction method, requesting the Kaiser-Mayer-Olkin (KMO) measure of sample adequacy and Bartlett's test of sphericity, but neither of these measures was printed. A footnote to the correlation matrix stated that "This matrix is not positive definite." Many different reasons can cause this to happen: for example, if there are more items in the analysis than there are cases, like in the present situation, then the correlation matrix will have linear dependencies and be NPD. Had we run any factor extraction method other than PCA or unweighted least squares (ULS), an NPD matrix would have caused the procedure to stop without further analysis. This was not the case, and we were still able to see how many components the PCA suggested extracting.

The principal components analysis revealed the presence of three components with eigenvalues higher than 1, which explain \(62,3 \%, 15,5 \%\) and \(8 \%\) of the variance, for a cumulative total of \(85,8 \%\) of the variance. The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, provide us with conflicting results. In particular, the screeplot shows a very marked elbow after the first two components, and a second one after the third (Figure number) all with eigenvalues above 1, while the parallel analysis results identify only one component with eigenvalue significantly higher than the corresponding criteria value of the data matrix ( 14 variables x 10 respondents) randomly generated by the software (Table number). A second extraction was tried, by asking SPSS to only extract one component, and the component matrix provided us with very high values for each variable; also, the Cronbach's coefficient for the entire scale was extremely high (.946). This, combined with the impossibility of obtaining the Kaiser-Mayer-Olkin measure of sample adequacy and Bartlett's test of sphericity, as well as the procedure followed with the EFL Questionnaire, led to the decision to proceed by summing up the items and create a new ordinal count variable to explain the entire Scale 13, thus avoiding the loss of a high percentage of our data.

The following subscale was identified:
- Subscale 13.1, consisting of all the items (i.e. 13a, 13b, 13c, 13d, 13e, 13f, 13g, 13h, 13i, \(131,13 m, 13 n, 13 o\) and \(13 p\) ).

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which evaluates the preparation that teachers believe they have received during their education and/or professional training, was then subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. This variable is identified by the total of subscale 13.1 (TOT subscale 13.1: \(\operatorname{Max}=75\); Average \(=53,6 ;\) Stdev \(=12,8 ; \mathrm{N}=10\) ). The Kolmogorov-Smirnov test of normality shows a significance value of over .200. Observing the histogram (Figure number) and the \(\mathrm{Q}-\mathrm{Q}\) plot (Figure number) it can be said that the distribution cannot be considered normal. To try and solve these problematic aspects, the variable was transformed mathematically through the square root transformation, and a new variable was obtained. Observing the Q-Q Plot (Figure) and the Boxplot (Figures) it can reasonably be said that the distribution is still not completely normal, and therefore is not suitable for the adoption of parametric techniques. The original variable and not the transformed one will thus be taken into consideration for further analyses, and since it is not suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 14}

The 11 items making up Scale 14 of the EFL Questionnaire ("The concept of Literacy...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: the SPSS FACTOR procedure was run with principal components analysis (PCA) as the extraction method, requesting the Kaiser-Mayer-Olkin (KMO) measure of sample adequacy and Bartlett's test of sphericity, but neither of these measures was printed. A footnote to the correlation matrix stated that "This matrix is not positive definite." Many different reasons can cause this to happen: for example, if there are more items in the analysis than there are cases, like in the present situation, then the correlation matrix will have linear dependencies and be NPD. Had we run any factor extraction method other than PCA or unweighted least squares (ULS), an NPD matrix would have caused the procedure to stop
without further analysis. This was not the case, and we were still able to see how many components the PCA suggested extracting.

The principal components analysis revealed the presence of two components with eigenvalues higher than 1 : they explain respectively \(66,2 \%\) and \(10,9 \%\) of the variance, for a cumulative total of \(77,1 \%\), but the factor extraction only suggest keeping the first one. The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, provide us with conflicting results. In particular, the screeplot clearly shows a very marked elbow after the second component (Figure number), while the parallel analysis results identify one component with eigenvalue higher than the corresponding criteria values of the data matrix ( 11 variables \(\times 10\) respondents) randomly generated by the software (Table number). However, keeping only one component greatly reduces the explanation of the variance. A sum, and therefore an ordinal count variable, would allow to save the entire set of data; furthermore, the Cronbach's coefficient for the entire scale was extremely high (.935). This, combined with the impossibility of obtaining the Kaiser-Mayer-Olkin measure of sample adequacy and Bartlett's test of sphericity, led to the decision to proceed by summing up the items and create a new variable to explain the entire Scale 14, thus avoiding the loss of a high percentage of our data.

The following subscale was identified:
- subscale 14.1, consisting of the sum of all the items (i.e. \(14 a, 14 b, 14 c, 14 d, 14 e, 14 f\), \(14 \mathrm{~g}, 14 \mathrm{~h}, 14 \mathrm{i}, 14 \mathrm{l}\) and 14 m );

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which considers the concept of literacy as a plural, multimodal and multifaceted aspect of Second Language teaching and learning, was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. This variable is identified by the total of subscale 14.1 (TOT subscale 14.1: Max \(=66\); Average \(=54,8 ; \operatorname{Stdev}=6,3 ; N=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of over .200. Observing the histogram (Figure number) and the Boxplot (Figure number) it can be said that the distribution is not normal, even if the the Kolmogorov-Smirnov value seems to indicate otherwise. The distribution actually indicates a fair degree of homogeneity and lack of variance, and no mathematical transformation appears
to bring an improvement. Due to the lack of normality, therefore, this variable is not suitable for the adoption of parametric techniques and the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 15}

The 12 items making up Scale 15 of the EFL Questionnaire ("When in class, to convey meaning I resort to...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: the SPSS FACTOR procedure was run with principal components analysis (PCA) as the extraction method, requesting the Kaiser-Mayer-Olkin (KMO) measure of sample adequacy and Bartlett's test of sphericity, but neither of these measures was printed. A footnote to the correlation matrix stated that "This matrix is not positive definite." Many different reasons can cause this to happen: for example, if there are more items in the analysis than there are cases, like in the present situation, then the correlation matrix will have linear dependencies and be NPD. Had we run any factor extraction method other than PCA or unweighted least squares (ULS), an NPD matrix would have caused the procedure to stop without further analysis. This was not the case, and we were still able to see how many components the PCA suggested extracting.

The principal components analysis revealed the presence of four components with eigenvalues higher than 1, which explain respectively \(37,3 \%, 21,5 \%, 16,5 \%\) and \(9,9 \%\) of the variance, for a cumulative total of \(85,2 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, do not confirm this analysis. In particular, the screeplot shows no marked elbow (Figure number), even though the first four components rank with eigenvalues above 1, while the parallel analysis results identify three components with eigenvalues higher than the corresponding criterion values of the data matrix ( 12 variables \(\times 10\) respondents) randomly generated by the software (Table number). It was initially decided to keep three components instead of four, as it had been previously done with the corresponding scale of the EFL Questionnaire.

To facilitate the interpretation of the three components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which all three components have quite high factorial weights (all higher than .3). Most of the items, however,
weigh on only one component with very high values. (Table number). There appears to be a minimal positive correlation between components 2 and 3 , and a minimal negative correlation between component 1 and components 2 and 3 (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into three separate subscales, thus highlighting the presence of three underlying dimensions. This choice is supported by the high value of Cronbach's alpha for all three subscales, and by the fact that a large percentage of the variance is explained \((75,3 \%)\), even with the extraction of three components instead of four, and, finally, by the fact that the same number of components was extracted for the corresponding question of the EFL Questionnaire. To exclude further possibilities, the scales that would have emerged if we had emulated the distribution suggested by the EFL Questionnaire were analysed, but their Cronbach coeffiecient turned out to be lower (. 742 and .872 ), and in one case even negative (-.100), which would have involved the recoding of one or more items. This is why, despite the impossibility of assessing the Kaiser-Mayer-Olkin measure of sample adequacy and Bartlett's test of sphericity, it was decided to proceed according to the second PCA extraction.

The three subscales identified are the following:
- subscale 15.1 (Cronbach's alpha \(=.856\) ), consisting of the items referring primarily to the first component (i.e. 15a, 15c, 15d and 15e);
- subscale 15.2 (Cronbach's alpha \(=.883\) ), consisting of the items referring to the second component (i.e. \(15 \mathrm{f}, 15 \mathrm{~g}, 15 \mathrm{~h}\) and 15i);
- subscale 15.3 (Cronbach's alpha \(=.781\) ), consisting of the items referring to the third component (i.e. 15 b, \(151,15 \mathrm{~m}\) and 15 n );

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our three continuous variables. The first variable measures the use of more traditional meaning transmission tools in the language classroom, like texts, audios, images and videos; the second one considers the use of different aspects related to paralanguage, and the third focuses on the use of digital and multimodal tools. Each variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As for the first variable identified by the total of subscale 15.1 (TOT subscale 15.1: Max \(=24\); Average \(=20,7\); Stdev \(=1,9 ; N=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of
.063. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can reasonably be said that the distribution can be considered relatively normal.

As for the variable identified by the total of subscale 15.2 (TOT Subscale 15.2: Max \(=23\); Average \(=16,2 ; \operatorname{Stdev}=4,4 ; \mathrm{N}=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of over .200. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it appears obvious that the distribution cannot be considered normal. To try to solve these problematic aspects, the variable was transformed mathematically through the reflect and square root transformation, and a new variable was obtained. Although more normal, observing the Q-Q plots (Figures) and Boxplot (Figures) it can reasonably be said that the distribution is still not normal, and the original variable will then be taken into consideration for further statistical analyses.

As regards the variable identified by the total of subscale 15.3 (TOT Subscale 15.3: \(\mathrm{Max}=22\); Average \(=19,2 ;\) Stdev \(=1,7 ; \mathrm{N}=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of over .200. Observing the histogram (Figure number) and the Boxplot (Figure number) it can be said that the distribution can be considered normal.

Everything considered, it seems that the second variable may not be suitable for the use of parametric techniques and the adoption of the corresponding non-parametric ones will have to be contemplated, while the first and third variable may be subjected to the use of parametric techniques.

\section*{Question analysis 16}

Question 16, consisting of item 16a ("Please provide your definition of 'Digital Literacy'..."), is an open question, which, as can be inferred from the item itself, asked respondents to briefly explain their idea of Digital Literacy. Their answers were analysed by searching for head nouns so that they could then be grouped into different categories. A numerical code was then associated with each category in order to eventually proceed with the statistical analysis. Four categories were identified, which are neither scaled nor sortable ones, making it a nominal qualitative variable. As with other similar questions (i.e. questions 1 and others), we did not proceed by carrying out a principal components analysis or by checking the normality of the distribution, since both work for quantitative variables only. Rather, a frequency distribution analysis was opted for instead (figure number). As for the variable identified by the total of

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subscale 16.1 ( \(\operatorname{Max}=5\); Median = 2; \(\operatorname{Mode}=2\), or ICT skills; \(\mathrm{N}=10\) ), being a qualitative variable it requires the use of non-parametric tests for any further statistical analyses.

\section*{Scale analysis 17}

The 18 items making up Scale 17 of the ISL Questionnaire ("My degree of competence in using the following tools is...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: the SPSS FACTOR procedure was run with principal components analysis (PCA) as the extraction method, requesting the Kaiser-MayerOlkin (KMO) measure of sample adequacy and Bartlett's test of sphericity, but neither of these measures was printed. A footnote to the correlation matrix stated that "This matrix is not positive definite." Many different reasons can cause this to happen: for example, if there are more items in the analysis than there are cases, like in the present situation, then the correlation matrix will have linear dependencies and be NPD. Had we run any factor extraction method other than PCA or unweighted least squares (ULS), an NPD matrix would have caused the procedure to stop without further analysis. This was not the case, and we were still able to see how many components the PCA suggested extracting.

The principal components analysis revealed the presence of five components with eigenvalues higher than 1, but suggested only keeping four, which explain respectively \(51 \%, 17,2 \%, 14,2 \%\) and \(7,9 \%\) of the variance, for a cumulative total of \(90,3 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, provide us with conflicting results. In particular, the screeplot clearly shows a very marked elbow after the second component and a less pronounced one after the third (Figure number), but the first four components all rank with eigenvalues above 1 ; as for the parallel analysis results, they identify four components with eigenvalues higher than the corresponding criteria values of the data matrix (18 variables x 10 respondents) randomly generated by the software (Table number). Given the impossibility of evaluating whether factor extraction was a viable solution, and given that the variables measure different technological tools but through the same lens, namely that of the competence that respondents believe they have when it comes to their use, it was decided to proceed as we did while analysing the EFL Questionnaire, which means measuring the entire scale as if it referred to a single component. This choice is supported by the high value of

Cronbach's alpha (.917) and by the fact that various items weigh with high values on two or even three components (table number). This, combined with the impossibility of obtaining the Kaiser-Mayer-Olkin measure of sample adequacy and Bartlett's test of sphericity, as well as the path followed with the EFL Questionnaire, led to the decision to proceed by summing the different items, thus creating an ordinal count variable.

The following subscale was then identified:
- subscale 17.1, consisting of the sum of all the items (i.e. \(17 a, 17 b, 17 c, 17 d, 17 e, 17 f\), 17g, 17h, 17i, 17l, 17m, 17n, 17o, 17p, 17q, 17r, 17s, 17t).

By adding up the scores of the single items of said subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable, which was then subjected to the control of the normality distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As regards the variable identified by the total of scale 17 (TOT scale 17: Max = 96; Average = 73,2; Stdev = 14,4; N = 10), the Kolmogorov-Smirnov test of normality shows a significance value of .176. Observing the histogram (Figure number) and the \(\mathrm{Q}-\mathrm{Q}\) plot (Figure number) it can be said that the distribution cannot be considered normal. The variable was transformed mathematically through the reflect and square root transformation to try and solve these problematic aspects, and a new variable was obtained. Observing the Q-Q plot (Figures) as well as the histogram (Figures) and the Boxplot (Figures), it can be said that the distribution still cannot be considered normal, and therefore is not suitable for the adoption of parametric techniques. The original variable and not the transformed one will thus be taken into consideration for further analyses, and since it is not suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 18}

The 18 items making up Scale 18 of the ISL Questionnaire ("Degree of usefulness of the following tools in foreign language teaching and learning...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: the SPSS FACTOR procedure was run with principal components analysis (PCA) as the extraction
method, requesting the Kaiser-Mayer-Olkin (KMO) measure of sample adequacy and Bartlett's test of sphericity, but neither of these measures was printed. A footnote to the correlation matrix stated that "This matrix is not positive definite." Many different reasons can cause this to happen: for example, if there are more items in the analysis than there are cases, like in the present situation, then the correlation matrix will have linear dependencies and be NPD. Had we run any factor extraction method other than PCA or unweighted least squares (ULS), an NPD matrix would have caused the procedure to stop without further analysis. This was not the case, and we were still able to see how many components the PCA suggested extracting.

The principal components analysis revealed the presence of five components with eigenvalues higher than 1 , which explain respectively \(31,6 \%, 22,3 \%, 16 \%, 11,9 \%\) and \(7,7 \%\) of the variance, for a cumulative total of \(89,5 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, provide us with conflicting results. In particular, the screeplot shows a relatively marked elbow after the sixth component (Figure number), but the first five components rank with eigenvalues above 1; as for the parallel analysis results, they identify four components with eigenvalues higher than the corresponding criterion values of the data matrix (18 variables x 10 respondents) randomly generated by the software (Table number). Given the impossibility of evaluating whether factor extraction was a viable solution, and given that the variables measure different technological tools but through the same lens, namely the level of usefulness of specific ICT tools according to the respondents, it was decided to proceed as we did while analysing the EFL Questionnaire, which means measuring the entire scale as if it referred to a single component. This choice is supported by the good value of Cronbach's alpha (.758) and by the fact that various items weigh with high values on two or even three components (table number) This, combined with the impossibility of obtaining the Kaiser-Mayer-Olkin measure of sample adequacy and the Bartlett test of sphericity, as well as the path followed with the EFL Questionnaire, led to the decision to proceed by summing the different items, thus creating an ordinal count variable.

The following subscale was then identified:
- subscale 18.1, consisting of the sum of all the items (i.e. \(18 a, 18 b, 18 c, 18 d, 18 e, 18 f\), 18g, 18h, 18i, 18l, 18m, 18n, 18o, 18p, 18q, 18r, 18s, 18t).

By adding up the scores of the single items of said subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable, which was then subjected to the control of the normality distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As regards the variable identified by the total of scale 18 (TOT scale 18: \(\mathrm{Max}=90\); Average \(=77,8 ; \operatorname{Stdev}=9,8 ; \mathrm{N}=10\) ), the KolmogorovSmirnov test of normality shows a significance value of .200. Observing the histogram (Figure number) and the \(\mathrm{Q}-\mathrm{Q}\) plot (Figure number) it can reasonably be said that the distribution cannot be considered normal. The variable was transformed mathematically through the reflect and square root transformation to try and solve these problematic aspects, and a new variable was obtained. Observing the Q-Q plot (Figures) as well as the histogram (Figures) and the Boxplot (Figures), it can be said that the distribution still cannot be considered normal, and therefore is not suitable for the adoption of parametric techniques. The original variable and not the transformed one will thus be taken into consideration for further analyses, and since it is not suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 19}

The 18 items making up Scale 19 of the ISL Questionnaire ("I resort to these tools in class...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: the SPSS FACTOR procedure was run with principal components analysis (PCA) as the extraction method, requesting the Kaiser-Mayer-Olkin (KMO) measure of sample adequacy and Bartlett's test of sphericity, but neither of these measures was printed. A footnote to the correlation matrix stated that "This matrix is not positive definite." Many different reasons can cause this to happen: for example, if there are more items in the analysis than there are cases, like in the present situation, then the correlation matrix will have linear dependencies and be NPD. Had we run any factor extraction method other than PCA or unweighted least squares (ULS), an NPD matrix would have caused the procedure to stop without further analysis. This was not the case, and we were still able to see how many components the PCA suggested extracting.

The principal components analysis revealed the presence of five components with eigenvalues higher than 1 , which explain respectively \(41,5 \%, 22,4 \%, 12,1 \%, 9,1 \%\) and \(6,2 \%\) of the variance, for a cumulative total of \(91,3 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, provide us with conflicting results. In particular, the screeplot shows a relatively marked elbow after the third component (Figure number), but the first five components rank with eigenvalues above 1 . The parallel analysis results identify only two components with eigenvalues higher than the corresponding criteria values of the data matrix (18 variables \(\times 10\) respondents) randomly generated by the software (Table number). Given the impossibility of evaluating whether factor extraction was a viable solution, and given that the variables measure different technological tools but through the same lens, namely how frequently specific ICT tools are used in class according to EFL teachers, it was decided to proceed as we did while analysing the EFL Questionnaire, which means measuring the entire scale as if it referred to a single component. This choice is supported by the high value of Cronbach's alpha (.865) and by the fact that various items weigh with high values on two or even three components (table number). This, combined with the impossibility of obtaining the Kaiser-Mayer-Olkin measure of sample adequacy and the Bartlett test of sphericity, as well as the path followed with the EFL Questionnaire, led to the decision to proceed by summing the different items, thus creating an ordinal count variable.

The following subscale was then identified:
- subscale 19.1, consisting of the sum of all the items (i.e. 19a, 19b, 19c, 19d, 19e, 19f, 19g, 19h, 19i, 19l, 19m, 19n, 19o, 19p, 19q, 19r, 19s, 19t).

By adding up the scores of the single items of said subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable, which was then subjected to the control of the normality distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As regards the variable identified by the total of scale 19 (TOT scale 19: Max = 82; Average = 55,5; Stdev = 11,6; \(\mathrm{N}=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of .200. Observing the histogram (Figure number) and the \(\mathrm{Q}-\mathrm{Q}\) plot (Figure number) it can be said that the distribution cannot be considered normal. The variable was transformed mathematically through the square root transformation to try and solve these problematic aspects, and a new variable was obtained. Observing the Q-Q plot (Figures) as well as the histogram (Figures) and

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the Boxplot (Figures), it can be said that the distribution still cannot be considered normal, and therefore is not suitable for the adoption of parametric techniques. The original variable and not the transformed one will thus be taken into consideration for further analyses, and since it is not suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 20}

The 10 items making up Scale 20 of the ISL Questionnaire ("I believe that the use of technology facilitates foreign language learning at the level of students'...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: the SPSS FACTOR procedure was run with principal components analysis (PCA) as the extraction method, requesting the Kaiser-Mayer-Olkin (KMO) measure of sample adequacy and Bartlett's test of sphericity, but neither of these measures was printed. A footnote to the correlation matrix stated that "This matrix is not positive definite." Many different reasons can cause this to happen: for example, if there are more items in the analysis than there are cases, like in the present situation, then the correlation matrix will have linear dependencies and be NPD. Had we run any factor extraction method other than PCA or unweighted least squares (ULS), an NPD matrix would have caused the procedure to stop without further analysis. This was not the case, and we were still able to see how many components the PCA suggested extracting.

The principal components analysis revealed the presence of two components with eigenvalues higher than 1, which explain \(54,4 \%\) and \(28,1 \%\) of the variance, for a cumulative total of \(82,5 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the third component (Figure number), but only the first two rank with eigenvalues above 1; as for the parallel analysis results, they identify two components with eigenvalues significantly higher than the corresponding criteria value of the data matrix ( 10 variables \(\times 10\) respondents) randomly generated by the software (Table number).

It was therefore decided to try and keep both component to explain the entire Scale 20. To facilitate the interpretation of the two components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which both
components have quite high factorial weights (all higher than .3). Most items weigh on both components with very high values. (Table number). There is a minimal positive correlation between the two components (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into two separate subscales, thus highlighting the presence of two underlying dimensions.

The following subscales were identified:
- Subscale 20.1 (Cronbach's alpha \(=.941\) ), consisting of the items referring to the first component (i.e. 20d, 20f, 20g, 20h, 20i and 20I);
- Subscale 20.2 (Cronbach's alpha = .906), consisting of the items referring to the second component (i.e. 20a, 20b, 20c and 20e).

Before proceeding by adding up the scores of the single items of each subscale, we also analysed the sum of the items, as per EFL Questionnaire. The alpha coefficient value of the whole scale, despite being high, is lower than those of the two subscales previously mentioned (.872). Despite the impossibility of obtaining the Kaiser-Mayer-Olkin measure of sample adequacy and Bartlett's test of sphericity, this is what led to the decision to proceed and keep the two components extracted by the PCA, together with the fact that they explain a very good percentage of the variance.

By adding up the scores of the single items of each subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variables. Said variables evaluate how much ISL teachers believe technology can be a facilitator for students when it comes to more active and passive aspects of Second Language learning (subscale 20.1 and 20.2, respectively). Both were then subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected.

As for the variable identified by the total of subscale 20.1 (TOT subscale 20.1: Max = 32; Average \(=28,4 ;\) Stdev \(=4 ; \mathrm{N}=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of .056. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

As for the variable identified by the total of subscale 20.2 (TOT subscale 20.2: Max = 24; Average \(=18,7\); Stdev \(=2,6 ; \mathrm{N}=10\) ), the Kolmogorov-Smirnov test of normality shows a
significance value of .176. Observing the Boxplot (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal. Both appear to lack variance. To try and solve these problematic aspects, both variables were transformed mathematically through the reflect and inverse and the square root transformation, respectively, and two new variables were obtained. Observing the Q-Q plots (Figures) as well as the histograms (Figures) and the Boxplots (Figures), it can reasonably be said that the two distributions still cannot be considered normal. The original variables and not the transformed ones will thus be taken into consideration for further analyses, and since they are not suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 21}

The 7 items making up Scale 21 of the EFL Questionnaire ("Technology...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: the SPSS FACTOR procedure was run with principal components analysis (PCA) as the extraction method, requesting the Kaiser-Mayer-Olkin (KMO) measure of sample adequacy and Bartlett's test of sphericity (Bartlett, 1954), but neither of these measures was printed. A footnote to the correlation matrix stated that "This matrix is not positive definite", due to a lack of variance. Had we run any factor extraction method other than PCA or unweighted least squares (ULS), an NPD matrix would have caused the procedure to stop without further analysis. This was not the case, and we were still able to see how many components the PCA suggested extracting.

The principal components analysis revealed the presence of two components with eigenvalues higher than 1 , which explain \(67,6 \%\) and \(19,8 \%\) of the variance, respectively, for a cumulative total of \(87,4 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, provide us with conflicting results. In particular, the screeplot shows two elbows between the second and the third component (Figure number), with the first two components ranking with eigenvalues above 1, while the parallel analysis results identify only one component with eigenvalue significantly higher than the corresponding criteria value of the data matrix ( 7 variables \(\times 10\) respondents) randomly generated by the software (Table number). It was therefore decided to initially keep only one component to explain the entire

Scale 21. The decision to keep only one component makes it impossible to perform any form of rotation.

The following subscale was identified:
- Subscale 21.1 (Cronbach's alpha = .874), consisting of all the items (i.e. 21a, 21b, 21c, 21d, 21e, 21f and 21g).

This new variable considers the usefulness of using technology in an EFL environment. However, the component matrix indicates an element whose value is lower than 0.3 ; the item in question (21e), which considers the possibility that technology is something students can generally approach better than their teachers, could therefore be interesting to evaluate on its own. For this reason, a second analysis of the main components was carried out, instructing the software to extract two components, as initially suggested by the PCA, regardless of the Parallel Analysis results. To facilitate the interpretation of the two components, the oblique rotation (Direct Oblimin) was performed. The rotated solution revealed the presence of a structure in which both components have quite high factorial weights (all higher than .3). Most items weigh on both components with very high values. (Table number). There is a minimal positive correlation between the two components (Table number). According to the results of this preliminary analysis, we decided to try to break down the scale into two separate subscales, thus highlighting the presence of two underlying dimensions. Since this mirrors what emerged from the EFL Questionnaire, we decided that the extraction of two subscales could be validated, despite the impossibility of obtaining the Kaiser-Mayer-Olkin (KMO) measure of sample adequacy and Bartlett's test of sphericity.

The following subscales were then identified:
- Subscale 21.1 (Cronbach's alpha = .944), consisting of the items referring to the first component (i.e. 21a, 21b, 21c, 21d, 21f and 21g);
- Subscale 21.2, consisting of the item referring to the second component (i.e. 21e).

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which measures how useful and well integrated ICTs are in an ISL learning environment, was then subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected.

As for the first variable identified by the total of subscale 21.1 (TOT subscale 21.1 : Max \(=36\); Average \(=33,7\); Stdev \(=2,7 ; N=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of .009. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

As for the second variable identified by the total of subscale 21.2 (TOT subscale 21.2: Max = 6; Average \(=5,2\); Stdev \(=0,8 ; N=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of .091. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal. To try to solve these problematic aspects, both variables were transformed mathematically through the reflect and logarithm transformation, and new variables were obtained. Observing the Q-Q plots (Figures), the histograms (figures) and the Boxplots (Figures) it can reasonably be said that the two distributions are still not normal. The original variables and not the transformed ones will thus be taken into consideration for further analyses, and since they are not suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 22}

The 8 items making up Scale 22 of the EFL Questionnaire ("Reasons that might have hindered the use of technology so far...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; however, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .339, lower than the recommended value of .6 (Kaiser, 1970, 1974), which is frequent with a low number of cases; finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. <.001), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of three components with eigenvalues higher or equal to 1 , which explain respectively \(49,2 \%, 19,5 \%\) and \(17,4 \%\) of the variance, for a cumulative total of \(86,1 \%\). The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, seem to be confirming this analysis. In particular, the screeplot clearly shows a very marked elbow after the second component (Figure number ..),
and a less pronounced one after the third, but both rank above 1 , while the parallel analysis results identify three components with eigenvalues higher than the corresponding criterion values of the data matrix ( 8 variables x 10 respondents) randomly generated by the software (Table number).

The three subscales identified are the following:
- subscale 22.1 (Cronbach's alpha \(=.908\) ), consisting of the items referring primarily to the first component (i.e. 22a, 22b and 22c);
- subscale 22.2 (Cronbach's alpha \(=.800\) ), consisting of the items referring to the second component (i.e. 22d, 22g and 22h);
- subscale 22.3 (Cronbach's alpha \(=.631\) ), consisting of the items referring to the third component (i.e. 22e and 22f);

Given the very low KMO value and the low number of observations, despite Bartlett's sphericity test reaching statistical significance and the high percentage of the variance explained, this was not perceived as a viable options. In any case, since we still thought it appropriate to try to resize the scale dimensions and avoid analysing each item individually, it was decided to resort to another expedient.

At first it was hypothesised, as it was done for other scales, that the small number of observations may have influenced the results of the factor analysis, which could have been different with a higher number of cases. Therefore, being the EFL and ISL Questionnaires identical in substance, and having the EFL Questionnaire obtained a high number of responses, it was hypothesised that the same distribution of items and factors could be the best solution, and we therefore proceeded in this direction, thus basing our choice on a previous experiment, formulated in the same way as well as statistically convincing. However, the subscales suggested by the EFL PCA provided us with a value of the alpha coefficient low enough (. 761 for items 22a, 22c and 22d, but only .198 for items 22e, 22f, 22g and 22h; item 22b was analysed on its own) to make us reconsider our options.

This led to the decision to proceed by summing up the values of the different items, thus creating an ordinal count variable analysing to what extent the use of technology might have been hindered by different factors. This would allow us to reduce the data volume without losing any while following the directions provided by the programme.

The following subscale was then identified:
- subscale 22.1, consisting of the the sum of all the items (i.e. 22a, 22b, 22c, 22d, 22e, \(22 f, 22 g\) and \(22 h\) );

It was, however, necessary to recode item 22d ("My school's wifi network is not sufficient to support intensive use of said tools"). Its negative formulation resulted in a negative value of the alpha coefficient (-.942), which made it impossible to consider the reliability of subscale 22.2. The item was then reworded ("My school's wifi network manages to support intensive use of said tools") and its scores reconverted accordingly.

The resulting variable was subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As for the first variable identified by the total of subscale 22.1 (TOT subscale 22.1: \(\mathrm{Max}=36\); Average \(=26,8 ;\) Stdev \(=3,9 ; \mathrm{N}=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of over .200. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

To try to solve these problematic aspects, the first variable was transformed mathematically through the logarithm transformation, and a new variable was obtained. Observing the \(\mathrm{Q}-\mathrm{Q}\) plot (Figures), the Boxplot (Figures) and the histogram (Figures), it can reasonably be said that the distribution is still not normal. The original variable and not the transformed one will thus be taken into consideration for further analyses, and since it is not suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.

\section*{Scale analysis 23}

The 5 items making up Scale 23 of the EFL Questionnaire ("In light of the health emergency developed in 2020, which forced upper secondary schools to hold most of their lessons through different distance learning modalities...") are dichotomous, as they require a Yes/No answer. Being neither orderable nor quantifiable, this makes the items in question nominal qualitative variables. It is therefore not possible to treat them as a scale, thus performing a principal components analysis, nor to check the normality of the distribution. Rather, a frequency distribution analysis was opted for at first (figure number), and in that case it would have been necessary to resort to non-parametric tests for any further statistical analyses.

At first, the following variables were identified:
- Variable 23.1, consisting of item 23a, exploring whether the respondents' technological preparation proved sufficient to properly manage distance learning;
- Variable 23.2, consisting of item 23b, exploring whether the technological means provided by the respondents' school proved sufficient to properly manage distance learning;
- Variable 23.3, consisting of item 23c, exploring whether the technological preparation of the students proved sufficient for them to properly manage distance learning;
- Variable 23.4, consisting of item 23d, exploring whether schools helped to provide a smooth transition;
- Variable 23.5, consisting of item 23e, exploring whether schools helped to provide the appropriate instructions and/or training.

However, since one of the objectives of this preliminary analysis was to reduce the amount of data in view of subsequent statistical analyses, it was decided to try and proceed with a sum, just like for question 23 of the EFL Questionnaire. The procedure was the same: every Yes was recoded 1 , and every No was recoded 0 . The scores were then added up (being 5 variables, the value could range from a minimum of 0 to a maximum of 5). The result is an ordinal count variable, which indicates how well the transition from on-site to distance learning that happened in the spring of 2020 was managed by upper secondary schools as a whole, thus including teaching staff and students.

The following variable was identified:
- Variable 23.1, consisting of the sum of all the items (i.e. 23a, 23b, 23c, 23d, and 23e).

As for the variable identified by the total of subscale 23.1, (TOT subscale 23.1: Max = 5; Average \(=3,7 ; \operatorname{Stdev}=.8 ; N=10\) ), subjected to the control of the normality of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected, the Kolmogorov-Smirnov test of normality shows a significance value lower than .001. Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered normal.

To try to solve this problematic aspect, the variable was transformed mathematically through the reverse and square root transformation, and a new variable was obtained. Observing the

Q-Q plot (Figures) and the histogram (Figures) it can reasonably be said that the distribution is still not normal (figure numbers), as the Kolmogorov-Smirnov test of normality also maintains. The original variable and not the transformed ones will thus be taken into consideration for further statistical analyses, and non-parametric techniques will have to be contemplated.

\section*{Scale analysis 24}

The 4 items making up Scale 24 of the ISL Questionnaire ("Distance learning...") were subjected to a preliminary principal components analysis, using the SPSS software. The purpose of this analysis is to understand what the main dimensions underlying the data collected through this scale are. Before carrying out the analysis, the suitability of the data collected was checked: a careful inspection of the correlation matrix revealed the presence of many coefficients equal to .4 and higher; in addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .710, higher than the recommended value of .6 (Kaiser, 1970, 1974); finally, Bartlett's sphericity test (Bartlett, 1954) reached statistical significance (Sig. .002), thus allowing us to carry out the analysis (Table number).

The principal components analysis revealed the presence of one component with eigenvalue higher than 1 , which by itself explains \(73,8 \%\) of the variance. The screeplot and parallel analysis, performed with an online Parallel Analysis Engine, confirm this analysis. In particular, the screeplot clearly shows a very marked elbow after the first two components, the second one measuring less than one (Figure number), while the parallel analysis results identify only one component with eigenvalue significantly higher than the corresponding criteria value of the data matrix ( 4 variables x 10 respondents) randomly generated from the software (Table number). It was therefore decided to keep only one component to explain the entire Scale 24. The decision to keep only one component makes it impossible to perform any form of rotation.

The following subscale was identified:
- Subscale 24.1 (Cronbach's alpha = .881), consisting of all the items (i.e. 24a, 24b, 24c and 24d).

By adding up the scores of the single items of this subscale, we computed the relative totals, which, as we will see shortly, represent our new continuous variable. Said variable, which measures the validity of distance learning, was then subjected to the control of the normality
of the distribution in order to verify that the parameters for applying the parametric statistical techniques are respected. As for the first variable identified by the total of subscale 24.1 (TOT subscale 24.1: Max = 23; Average = 19,7; Stdev = 2,5; \(N=10\) ), the Kolmogorov-Smirnov test of normality shows a significance value of .200 . Observing the histogram (Figure number) and the Q-Q plot (Figure number) it can be said that the distribution cannot be considered completely normal. To try and solve these problematic aspects, the variable was transformed mathematically through the reflect and square root transformation, and a new variable was obtained. Observing the Boxplot (Figure) as well as the histogram (Figure), it can reasonably be said that the distribution still cannot be considered normal. The original variable and not the transformed one will thus be taken into consideration for further analyses, and, since it is not suitable for the adoption of parametric techniques, the corresponding non-parametric ones will have to be contemplated instead.
\begin{tabular}{lccc|}
\hline Type of upper secondary school & \(\mathbf{N}^{\circ}\) & \% \\
\hline Liceo Classico & 39 & 8.9 \\
Liceo Scientifico & 134 & 30.45 \\
Liceo Linguistico & 68 & 15.45 \\
Liceo delle Scienze Umane & 37 & 8.4 \\
Liceo Artistico & 11 & 2.5 \\
Liceo Musicale e Coreutico & & 5 & 1.1 \\
& Subtotal & 294 & 66.8 \\
Istituto Tecnico Economico & & 57 & 13 \\
Istituto Tecnico Tecnologico & & 45 & 10.2 \\
Istituto Professionale & Subtotal & 146 & 10 \\
& Total & 440 & 100 \\
\hline
\end{tabular}

Table A5.1, EFL Questionnaire, question 1.
\begin{tabular}{lcc|}
\hline \begin{tabular}{l} 
EFL Teaching \\
experience
\end{tabular} & \(\mathbf{N}^{\circ}\) & \(\mathbf{\%}\) \\
\hline Less than one year & 10 & 2.3 \\
1-5 years & 39 & 8.9 \\
6-10 years & 53 & 12 \\
11-20 years & 115 & 26.1 \\
21-30 years & 132 & 30 \\
\(30+\) years & 91 & 20.7 \\
& Total & 440 \\
\hline
\end{tabular}

Table A5.2, EFL Questionnaire, question 2.
\begin{tabular}{lcc|}
\hline Age range & \(\mathbf{N}^{\circ}\) & \% \\
\hline Under 25 & 12 & 2.7 \\
\(26-30\) years & 13 & 3 \\
\(31-40\) years & 51 & 11.6 \\
\(41-50\) years & 90 & 20.5 \\
\(51-60\) years & 210 & 47.7 \\
60+ years & 59 & 13.4 \\
Prefer not say & Total & 440 \\
\hline
\end{tabular}

Table A5.3, EFL Questionnaire, question 3.
\begin{tabular}{lllllclll|}
\hline \begin{tabular}{l} 
EFL specific learning objectives \\
awareness
\end{tabular} & Yes & \% & No & \% & \begin{tabular}{c} 
I don't \\
know...
\end{tabular} & \% & Tot & \% \\
\hline \begin{tabular}{l} 
I have read the national guidelines \\
relating to the specific LO for EFL
\end{tabular} & 394 & 89.6 & 12 & 2.7 & 34 & 7.7 & 440 & 100 \\
\begin{tabular}{l} 
I am aware of the specific learning \\
objectives for EFL
\end{tabular} & 421 & 95.7 & 2 & 0.4 & 17 & 3.9 & 440 & 100 \\
\hline
\end{tabular}

Table A5.4, EFL Questionnaire, question 4.
\begin{tabular}{lcccccccc|}
\hline EFL specific learning objectives for & \multicolumn{7}{c|}{ Frequency scale - Very often to never } \\
upper secondary schools & \(\mathbf{6}\) & \(\mathbf{5}\) & \(\mathbf{4}\) & \(\mathbf{3}\) & \(\mathbf{2}\) & \(\mathbf{1}\) & Total \\
\hline I attend staff meetings to discuss the & 150 & 115 & 105 & 51 & 14 & 5 & 440 \\
established learning objectives & \(34.1 \%\) & \(26.1 \%\) & \(23.9 \%\) & \(11.6 \%\) & \(3.2 \%\) & \(1.1 \%\) & \(100 \%\) \\
I revise the best approaches for the & 175 & 154 & 70 & 36 & 4 & 1 & 440 \\
students to meet said LO & \(39.8 \%\) & \(35 \%\) & \(15.9 \%\) & \(8.2 \%\) & \(0.9 \%\) & \(0.2 \%\) & \(100 \%\) \\
I discuss the selection of instructional & 74 & 138 & 141 & 53 & 29 & 5 & 440 \\
media & \(16.8 \%\) & \(31.4 \%\) & \(32.1 \%\) & \(12 \%\) & \(6.6 \%\) & \(1.1 \%\) & \(100 \%\) \\
I decide the selection of instructional & 132 & 162 & 107 & 24 & 10 & 5 & 440 \\
media & \(30 \%\) & \(36.8 \%\) & \(24.3 \%\) & \(5.5 \%\) & \(2.3 \%\) & \(1.1 \%\) & \(100 \%\) \\
I develop (part of) a school curriculum & 158 & 134 & 90 & 30 & 21 & 7 & 440 \\
& \(35.9 \%\) & \(30.4 \%\) & \(20.5 \%\) & \(6.8 \%\) & \(4.8 \%\) & \(1.6 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A5.5, EFL Questionnaire, question 5.

EFL - English as a Foreign Language
FL - Foreign Language
FLL - Foreign Language Learning

ICT - Information and Communication Technology
LE - Language Education
LO - Learning Objectives
\begin{tabular}{lcccccccc|}
\hline The established specific learning & \multicolumn{7}{c|}{ Agreement scale - Strongly Agree to Strongly Disagree \({ }^{1}\)} \\
objectives & SD & A & PA & PD & D & SD & DK & Total \\
\hline ...are suitable for the curriculum & 44 & 207 & 147 & 22 & 8 & 3 & 9 & 440 \\
proposed by the upper secondary & \(10 \%\) & \(47 \%\) & \(33.4 \%\) & \(5 \%\) & \(1.8 \%\) & \(0.7 \%\) & \(2.1 \%\) & \(100 \%\) \\
school I teach in & & & & & & & & \\
...are suitable for a multicultural & 37 & 195 & 156 & 32 & 12 & 0 & 8 & 440 \\
learning environment & \(8.4 \%\) & \(44.3 \%\) & \(35.5 \%\) & \(7.3 \%\) & \(2.7 \%\) & \(0 \%\) & \(1.8 \%\) & \(100 \%\) \\
...are suitable for a digital & 32 & 175 & 163 & 42 & 17 & 2 & 9 & 440 \\
learning environment & \(7.3 \%\) & \(39.8 \%\) & \(37 \%\) & \(9.5 \%\) & \(3.9 \%\) & \(0.4 \%\) & \(2.1 \%\) & \(100 \%\) \\
...are suitable for a multimodal & 28 & 156 & 161 & 53 & 24 & 2 & 16 & 440 \\
learning environment & \(6.4 \%\) & \(35.5 \%\) & \(36.6 \%\) & \(12 \%\) & \(5.5 \%\) & \(0.4 \%\) & \(3.6 \%\) & \(100 \%\) \\
...are suitable to promote lifelong & 43 & 161 & 147 & 49 & 21 & 5 & 14 & 440 \\
learning & \(9.8 \%\) & \(36.6 \%\) & \(33.4 \%\) & \(11.1 \%\) & \(4.8 \%\) & \(1.1 \%\) & \(3.2 \%\) & \(100 \%\) \\
...should be concretely & 118 & 228 & 66 & 15 & 5 & 0 & 8 & \(440 *\) \\
implemented in class & \(26.8 \%\) & \(51.8 \%\) & \(15 \%\) & \(3.4 \%\) & \(1.1 \%\) & \(0 \%\) & \(1.8 \%\) & \(100 \%\) \\
...should be an integral part of & 138 & 223 & 58 & 10 & 3 & 2 & 6 & 440 \\
teacher training & \(31.3 \%\) & \(50.7 \%\) & \(13.2 \%\) & \(2.3 \%\) & \(0.7 \%\) & \(0.4 \%\) & \(1.4 \%\) & \(100 \%\) \\
...should be updated & 141 & 148 & 93 & 17 & 23 & 5 & 13 & 440 \\
& \(32.1 \%\) & \(33.6 \%\) & \(21.1 \%\) & \(3.9 \%\) & \(5.2 \%\) & \(1.1 \%\) & \(3 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A5.6, EFL Questionnaire, question 6.
\begin{tabular}{lcccccc|}
\hline Familiarity with research & Yes & \% & No & \% & Total & \% \\
\hline I am a subscriber to one or more printed journals & 114 & 25.9 & 326 & 74.1 & 440 & 100 \\
I am a researcher myself & 78 & 17.7 & 362 & 82.3 & 440 & 100 \\
I am an author myself & 33 & 7.5 & 407 & 92.5 & 440 & 100 \\
\hline
\end{tabular}

Table A5.7, EFL Questionnaire, question 7.
\begin{tabular}{lcccccccc|}
\hline Knowledge of the recently published & \multicolumn{7}{c|}{ Frequency scale - Very often to never } \\
research in the field & \(\mathbf{6}\) & \(\mathbf{5}\) & \(\mathbf{4}\) & \(\mathbf{3}\) & \(\mathbf{2}\) & \(\mathbf{1}\) & Total \\
\hline I receive updates in the field of & 94 & 108 & 115 & 53 & 36 & 34 & 440 \\
language education & \(21.4 \%\) & \(24.6 \%\) & \(26.1 \%\) & \(12 \%\) & \(8.2 \%\) & \(7.7 \%\) & \(100 \%\) \\
I read updated research in the field of & 58 & 128 & 130 & 67 & 33 & 24 & 440 \\
language education & \(13.2 \%\) & \(29.1 \%\) & \(29.5 \%\) & \(15.2 \%\) & \(7.5 \%\) & \(5.5 \%\) & \(100 \%\) \\
My school encourages teachers to & 42 & 109 & 109 & 82 & 57 & 41 & 440 \\
look for updates in our field & \(9.5 \%\) & \(24.8 \%\) & \(24.8 \%\) & \(18.6 \%\) & \(13 \%\) & \(9.3 \%\) & \(100 \%\) \\
My school provides teachers with & 19 & 71 & 106 & 91 & 74 & 79 & 440 \\
updated resources & \(4.3 \%\) & \(16.2 \%\) & \(24.1 \%\) & \(20.7 \%\) & \(16.8 \%\) & \(17.9 \%\) & \(100 \%\) \\
I independently consult websites and & 204 & 132 & 48 & 25 & 22 & 9 & 440 \\
online resources related to language & \(46.3 \%\) & \(30 \%\) & \(10.9 \%\) & \(5.7 \%\) & \(5 \%\) & \(2.1 \%\) & \(100 \%\) \\
education & & & & & & & \\
\hline
\end{tabular}

Table A5.8, EFL Questionnaire, question 8.
\({ }^{1}\) Answer options for agreement scales are:
Strongly Agree (SA) Partially Disagree (PD)
Agree (A)
Partially Agree (PA)
Disagree (D)
Sometimes the option "I don't know enough about it" (DK) is added.

\section*{APPENDIX 5 - EFL Questionnaire data}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Relationship between research and school approaches} & \multicolumn{8}{|c|}{Agreement scale - Strongly Agree to Strongly Disagree} \\
\hline & SA & A & PA & PD & D & SD & DK & Tot \\
\hline The specific LO established for FLL are in step with the most recent studies in the field of LE & \[
\begin{gathered}
15 \\
3.4 \%
\end{gathered}
\] & \[
\begin{aligned}
& 154 \\
& 35 \%
\end{aligned}
\] & \[
\begin{gathered}
191 \\
43.4 \%
\end{gathered}
\] & \[
\begin{aligned}
& \hline 22 \\
& 5 \%
\end{aligned}
\] & \[
\begin{gathered}
9 \\
2.1 \%
\end{gathered}
\] & \[
\begin{gathered}
8 \\
1.8 \%
\end{gathered}
\] & \[
\begin{gathered}
\hline 41 \\
9.3 \%
\end{gathered}
\] & \[
\begin{gathered}
\hline 440 \\
100 \%
\end{gathered}
\] \\
\hline The approaches proposed for FLL are in step with the most recent studies in the field of LE & \[
\begin{gathered}
17 \\
3.9 \%
\end{gathered}
\] & \[
\begin{gathered}
160 \\
36.4 \%
\end{gathered}
\] & \[
\begin{gathered}
180 \\
40.9 \%
\end{gathered}
\] & \[
\begin{gathered}
30 \\
6.8 \%
\end{gathered}
\] & \[
\begin{gathered}
11 \\
2.5 \%
\end{gathered}
\] & \[
\begin{gathered}
2 \\
0.4 \%
\end{gathered}
\] & \[
\begin{gathered}
40 \\
9.1 \%
\end{gathered}
\] & \[
\begin{gathered}
440 \\
100 \%
\end{gathered}
\] \\
\hline The school curricula are updated on the basis of the results obtained from studies in the LE field & \[
\begin{gathered}
9 \\
2.1 \%
\end{gathered}
\] & \[
\begin{aligned}
& 101 \\
& 23 \%
\end{aligned}
\] & \[
\begin{aligned}
& 163 \\
& 37 \%
\end{aligned}
\] & \[
\begin{gathered}
73 \\
16.6 \%
\end{gathered}
\] & \[
\begin{gathered}
40 \\
9.1 \%
\end{gathered}
\] & \[
\begin{gathered}
23 \\
5.2 \%
\end{gathered}
\] & \[
\begin{aligned}
& 31 \\
& 7 \%
\end{aligned}
\] & \[
\begin{gathered}
440 \\
100 \%
\end{gathered}
\] \\
\hline The specific LO are updated on the basis of the results obtained from studies in the LE field & \[
\begin{gathered}
9 \\
2.1 \%
\end{gathered}
\] & \[
\begin{gathered}
117 \\
26.6 \%
\end{gathered}
\] & \[
\begin{gathered}
155 \\
35.2 \%
\end{gathered}
\] & \[
\begin{gathered}
63 \\
14.3 \%
\end{gathered}
\] & \[
\begin{gathered}
40 \\
9.1 \%
\end{gathered}
\] & \[
\begin{gathered}
23 \\
5.2 \%
\end{gathered}
\] & \[
\begin{gathered}
33 \\
7.5 \%
\end{gathered}
\] & \[
\begin{gathered}
440 \\
100 \%
\end{gathered}
\] \\
\hline Most research studies fail to take into account many factors involved in everyday school reality & \[
\begin{gathered}
129 \\
29.3 \%
\end{gathered}
\] & \[
\begin{gathered}
142 \\
32.3 \%
\end{gathered}
\] & \[
\begin{gathered}
99 \\
22.5 \%
\end{gathered}
\] & \[
\begin{aligned}
& 31 \\
& 7 \%
\end{aligned}
\] & \[
\begin{gathered}
15 \\
3.4 \%
\end{gathered}
\] & \[
\begin{gathered}
6 \\
1.4 \%
\end{gathered}
\] & \[
\begin{gathered}
18 \\
4.1 \%
\end{gathered}
\] & \[
\begin{gathered}
440 \\
100 \%
\end{gathered}
\] \\
\hline
\end{tabular}

Table A5.9, EFL Questionnaire, question 9.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline My school & Yes & \% & No & \% & \begin{tabular}{l}
I don't \\
know...
\end{tabular} & \% & Total & \% \\
\hline ...promotes digital approaches & 403 & 91.6 & 30 & 6.8 & 7 & 1.6 & 440 & 100 \\
\hline ...promotes multimodal approaches & 343 & 78 & 56 & 12.7 & 41 & 9.3 & 440 & 100 \\
\hline ...promotes multicultural approaches & 311 & 70.7 & 88 & 20 & 41 & 9.3 & 440 & 100 \\
\hline ...provides training opportunities that allow teachers to stay up to date & 280 & 63.6 & 135 & 30.7 & 25 & 5.7 & 440 & 100 \\
\hline ...invites teachers to do research & 140 & 31.8 & 227 & 51.6 & 73 & 16.6 & 440 & 100 \\
\hline ...provides teachers with tools and means to do research & 109 & 24.8 & 254 & 57.7 & 77 & 17.5 & 440 & 100 \\
\hline
\end{tabular}

Table A5.10, EFL Questionnaire, question 10.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Contact with the following terms} & \multicolumn{2}{|l|}{Research studies} & \multicolumn{2}{|r|}{In class} & \multicolumn{2}{|r|}{Teacher Training} & \multicolumn{2}{|c|}{Never} \\
\hline & \(\mathrm{N}^{\circ}\) & \% & \(\mathrm{N}^{\circ}\) & \% & \({ }^{\circ}\) & \% & \({ }^{\circ}\) & \% \\
\hline Literacy & 271 & 61.6 & 125 & 28.4 & 216 & 49.1 & 11 & 2.5 \\
\hline Digital Literacy & 238 & 54.1 & 132 & 30 & 241 & 54.8 & 19 & 4.3 \\
\hline Mode & 169 & 38.4 & 92 & 20.1 & 186 & 42.3 & 100 & 22.7 \\
\hline Medium & 188 & 42.7 & 124 & 28.2 & 214 & 48.6 & 66 & 15 \\
\hline Multimodality & 187 & 42.5 & 103 & 23.4 & 209 & 47.5 & 83 & 18.9 \\
\hline Multimodal Text & 177 & 40.2 & 112 & 25.5 & 187 & 42.5 & 100 & 22.7 \\
\hline Learning styles & 241 & 54.8 & 180 & 40.9 & 271 & 61.6 & 7 & 1.6 \\
\hline Learning modalities & 222 & 50.5 & 144 & 32.7 & 241 & 54.8 & 30 & 6.8 \\
\hline Multiliteracies & 199 & 45.2 & 65 & 14.8 & 157 & 35.7 & 124 & 28.2 \\
\hline New Literacies & 205 & 46.6 & 60 & 13.6 & 162 & 36.8 & 121 & 27.5 \\
\hline
\end{tabular}

Table A5.11, EFL Questionnaire, question 11.

APPENDIX 5 - EFL Questionnaire data
\begin{tabular}{lcc|}
\hline Literacy definitions - Categories & \(\mathbf{N}^{\circ}\) & \% \\
\hline Empty set & 8 & 1.8 \\
One word & 24 & 5.5 \\
Comprehension & 20 & 4.5 \\
Ability to read and write & 99 & 22.5 \\
Competence in a specific area & 61 & 13.9 \\
Ability plus competence & 20 & 4.5 \\
Four skills & 22 & 5 \\
Language skills & 46 & 10.5 \\
Communication and interaction & 37 & 8.4 \\
(Language) education & 43 & 9.8 \\
Social skills & 16 & 3.6 \\
\hline Personal growth \& lifelong learning & 22 & 5 \\
\hline Complex analysis & 22 & 5 \\
\hline
\end{tabular}

Table A5.12, EFL Questionnaire, question 12.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Areas covered during formal education and/or training} & \multicolumn{7}{|c|}{Opinion scale - Fully covered to not at all} \\
\hline & 6 & 5 & 4 & 3 & 2 & 1 & Tot \\
\hline \multirow[t]{2}{*}{Knowledge of the curriculum} & 143 & 120 & 84 & 35 & 24 & 34 & 440 \\
\hline & 32.5\% & 27.3\% & 19.1\% & 8\% & 5.4\% & 7.7\% & 100\% \\
\hline \multirow[t]{2}{*}{Content and performance standards in my main subject field(s)} & 129 & 157 & 85 & 35 & 13 & 21 & 440* \\
\hline & 29.3\% & 35.7\% & 19.3\% & 8\% & 3\% & 4.8\% & 100\% \\
\hline \multirow[t]{2}{*}{ICT skills for teaching} & 61 & 115 & 109 & 51 & 45 & 59 & 440 \\
\hline & 13.9\% & 26.1\% & 24.8\% & 11.6\% & 10.2\% & 13.4\% & 100\% \\
\hline \multirow[t]{2}{*}{Pedagogical competencies in teaching my subject field(s)} & 122 & 136 & 90 & 49 & 23 & 20 & 440 \\
\hline & 27.7\% & 30.9\% & 20.5\% & 11.1\% & 5.2\% & 4.6\% & 100\% \\
\hline \multirow[t]{2}{*}{Educational Psychology} & 69 & 141 & 91 & 62 & 37 & 40 & 440 \\
\hline & 15.7\% & 32\% & 20.7\% & 14.1\% & 8.4\% & 9.1\% & 100\% \\
\hline \multirow[t]{2}{*}{Studies and theories related to my subject field(s)} & 149 & 159 & 79 & 38 & 10 & 5 & 440 \\
\hline & 33.9\% & 36.1\% & 18\% & 8.6\% & 2.3\% & 1.1\% & 100\% \\
\hline \multirow[t]{2}{*}{Teaching students with special learning needs} & 78 & 131 & 87 & 48 & 42 & 54 & 440 \\
\hline & 17.7\% & 29.8\% & 19.8\% & 10.9\% & 9.5\% & 12.3\% & 100\% \\
\hline \multirow[t]{2}{*}{Teaching in a multicultural or multilingual setting} & 67 & 113 & 105 & 64 & 35 & 56 & 440 \\
\hline & 15.2\% & 25.7\% & 23.9\% & 14.5\% & 8\% & 12.7\% & 100\% \\
\hline \multirow[t]{2}{*}{Communicating with people from different cultures or countries} & 97 & 122 & 98 & 57 & 30 & 36 & 440 \\
\hline & 22\% & 27.7\% & 22.3\% & 13\% & 6.8\% & 8.2\% & 100\% \\
\hline \multirow[t]{2}{*}{Teaching cross-curricular skills} & 93 & 130 & 94 & 54 & 29 & 40 & 440 \\
\hline & 21.1\% & 29.6\% & 21.3\% & 12.3\% & 6.6\% & 9.1\% & 100\% \\
\hline \multirow[t]{2}{*}{Student assessment practices} & 98 & 149 & 88 & 51 & 23 & 31 & 440 \\
\hline & 22.3\% & 33.9\% & 20\% & 11.6\% & 5.2\% & 7\% & 100\% \\
\hline \multirow[t]{2}{*}{School management and administration} & 26 & 71 & 103 & 65 & 56 & 119 & 440 \\
\hline & 5.9\% & 16.1\% & 23.4\% & 14.8\% & 12.7\% & 27.1\% & 100\% \\
\hline \multirow[t]{2}{*}{Literacy} & 81 & 132 & 94 & 66 & 34 & 33 & 440 \\
\hline & 18.4\% & 30\% & 21.4\% & 15\% & 7.7\% & 7.5\% & 100\% \\
\hline \multirow[t]{2}{*}{New Literacies} & 57 & 116 & 89 & 74 & 40 & 64 & 440 \\
\hline & 13\% & 26.3\% & 20.2\% & 16.8\% & 9.1\% & 14.6\% & 100\% \\
\hline
\end{tabular}

Table A5.13, EFL Questionnaire, question 13.

\section*{APPENDIX 5 - EFL Questionnaire data}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{The concept of Literacy} & \multicolumn{7}{|r|}{Agreement scale - Strongly Agree to Strongly Disagree} \\
\hline & SA & A & PA & PD & D & SD & Tot \\
\hline \multirow[t]{2}{*}{...has changed significantly over the last few decades} & 167 & 214 & 48 & 5 & 6 & 0 & 440 \\
\hline & 38\% & 48.6\% & 10.9\% & 1.1\% & 1.4\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...enables students to achieve their goals} & 116 & 222 & 84 & 9 & 9 & 0 & 440 \\
\hline & 26.4\% & 50.5\% & 19.1\% & 2\% & 2\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...enables students to develop their knowledge} & 131 & 229 & 67 & 5 & 7 & 1 & 440 \\
\hline & 29.8\% & 52.1\% & 15.2\% & 1.1\% & 1.6\% & 0.2\% & 100\% \\
\hline \multirow[t]{2}{*}{...enables students to develop their potential} & 137 & 214 & 72 & 8 & 8 & 1 & 440 \\
\hline & 31.1\% & 48.7\% & 16.4\% & 1.8\% & 1.8\% & 0.2\% & 100\% \\
\hline \multirow[t]{2}{*}{...is something teachers should focus their attention on when teaching EFL} & 168 & 214 & 49 & 4 & 5 & 0 & 440 \\
\hline & 38.2\% & 48.7\% & 11.1\% & 0.9\% & 1.1\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...is something teachers should make sure their students are familiar with} & 152 & 199 & 69 & 11 & 9 & 0 & 440 \\
\hline & 34.6\% & 45.2\% & 15.7\% & 2.5\% & 2\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...is a plural concept} & 174 & 193 & 53 & 10 & 6 & 4 & 440 \\
\hline & 39.5\% & 43.9\% & 12\% & 2.3\% & 1.4\% & 0.9\% & 100\% \\
\hline \multirow[t]{2}{*}{...is a multimodal concept} & 160 & 186 & 73 & 7 & 10 & 4 & 440 \\
\hline & 36.3\% & 42.3\% & 16.6\% & 1.6\% & 2.3\% & 0.9\% & 100\% \\
\hline \multirow[t]{2}{*}{...involves multiple skills} & 229 & 179 & 25 & 1 & 3 & 3 & 440 \\
\hline & 52*\% & 40.7\% & 5.7\% & 0.2\% & 0.7\% & 0.7\% & 100\% \\
\hline \multirow[t]{2}{*}{...involves a continuum of learning} & 235 & 173 & 24 & 4 & 2 & 2 & 440* \\
\hline & 53.4\% & 39.3\% & 5.5\% & 0.9\% & 0.4\% & 0.4\% & 100\% \\
\hline ...is taken into consideration by the specific & 61 & 185 & 125 & 39 & 20 & 10 & 440 \\
\hline LO established for FL education in upper secondary schools & 13.9\% & 42\% & 28.4\% & 8.9\% & 4.5\% & 2.3\% & 100\% \\
\hline
\end{tabular}

Table A5.14, EFL Questionnaire, question 14.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{When in class. to convey meaning I resort to} & \multicolumn{7}{|c|}{Agreement scale - Strongly Agree to Strongly Disagree} \\
\hline & SA & A & PA & PD & D & SD & Tot \\
\hline \multirow[t]{2}{*}{...the use of printed texts} & 218 & 120 & 70 & 19 & 11 & 2 & 440 \\
\hline & 49.6\% & 27.3\% & 15.9\% & 4.3\% & 2.5\% & 0.4\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of texts in digital format} & 198 & 164 & 62 & 13 & 3 & 0 & 440* \\
\hline & 45\% & 37.3\% & 14.1\% & 3\% & 0.7\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of various types of images} & 216 & 158 & 51 & 13 & 0 & 2 & 440 \\
\hline & 49.1\% & 35.9\% & 11.6\% & 3\% & 0\% & 0.4\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of videos} & 160 & 197 & 62 & 19 & 2 & 0 & 440 \\
\hline & 36.4\% & 44.8\% & 14.1\% & 4.3\% & 0.4\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of audios} & 183 & 194 & 49 & 12 & 2 & 0 & 440* \\
\hline & 41.6\% & 44.1\% & 11.1\% & 2.7\% & 0.4\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of facial expressions and body language} & 244 & 112 & 58 & 17 & 6 & 3 & 440 \\
\hline & 55.4\% & 25.4\% & 13.2\% & 3.9\% & 1.4\% & 0.7\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of proxemics} & 128 & 151 & 96 & 27 & 21 & 17 & 440 \\
\hline & 29.1\% & 34.3\% & 21.8\% & 6.1\% & 4.8\% & 3.9\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of paralanguage} & 144 & 157 & 91 & 24 & 12 & 12 & 440 \\
\hline & 32.7\% & 35.7\% & 20.7\% & 5.5\% & 2.7\% & 2.7\% & 100\% \\
\hline \multirow[t]{2}{*}{...interacting with objects} & 78 & 156 & 129 & 45 & 20 & 12 & 440 \\
\hline & 17.7\% & 35.5\% & 29.3\% & 10.3\% & 4.5\% & 2.7\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of different means in one lesson} & 157 & 172 & 79 & 22 & 6 & 4 & 440* \\
\hline & 35.7\% & 39.1\% & 18\% & 5\% & 1.4\% & 0.9\% & 100\% \\
\hline \multirow[t]{2}{*}{...the combination of two or more means at once} & 164 & 177 & 69 & 19 & 8 & 3 & 440 \\
\hline & 37.3\% & 40.2\% & 15.7\% & 4.3\% & \[
1.8 \%
\] & 0.7\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of multimodal texts} & 100 & 173 & 103 & 28 & 19 & 17 & 440 \\
\hline & 22.7\% & 39.3\% & 23.4\% & 6.4\% & 4.3\% & 3.9\% & 100\% \\
\hline
\end{tabular}

Table A5.15, EFL Questionnaire, question 15.

\section*{APPENDIX 5 - EFL Questionnaire data}
\begin{tabular}{lcc|}
\hline Digital Literacy definitions - Categories & \(\mathbf{N}^{\circ}\) & \(\%\) \\
\hline Empty set & 15 & 3.4 \\
One word & 15 & 3.4 \\
Familiarity with digital devices & 118 & 26.8 \\
Media competence & 20 & 4.5 \\
ICT competence & 33 & 7.5 \\
\hline Retrieving information & 23 & 5.2 \\
Sharing information and communicating & 38 & 8.6 \\
Retrieving and sharing information & 38 & 8.6 \\
Ability to decipher digital texts & 28 & 6.4 \\
\hline Digital skills for education & 47 & 10.7 \\
\hline Personal growth, goal-orientedness & 26 & 5.9 \\
Complex analysis & 39 & 8.9 \\
\hline
\end{tabular}

Table A5.16, EFL Questionnaire, question 16.
\begin{tabular}{lcccccccc|}
\hline Competence using the following tools & \multicolumn{7}{c}{ Attitude scale - Excellent to scarce } \\
& \(\mathbf{6}\) & \(\mathbf{5}\) & \(\mathbf{4}\) & \(\mathbf{3}\) & \(\mathbf{2}\) & \(\mathbf{1}\) & Tot \\
\hline Word processing applications (e.g. MS & 196 & 179 & 51 & 10 & 4 & 0 & 440 \\
Word) & \(44.5 \%\) & \(40.7 \%\) & \(11.6 \%\) & \(2.3 \%\) & \(0.9 \%\) & \(0 \%\) & \(100 \%\) \\
Spreadsheet applications (e.g. MS Excel) & 40 & 105 & 129 & 73 & 50 & 43 & 440 \\
& \(9.1 \%\) & \(23.9 \%\) & \(29.3 \%\) & \(16.6 \%\) & \(11.3 \%\) & \(9.8 \%\) & \(100 \%\) \\
Database applications (e.g. MS Access) & 19 & 68 & 118 & 74 & 65 & 96 & 440 \\
& \(4.3 \%\) & \(15.5 \%\) & \(26.8 \%\) & \(16.8 \%\) & \(14.8 \%\) & \(21.8 \%\) & \(100 \%\) \\
Presentation applications (e.g. MS & 170 & 156 & 68 & 29 & 12 & 5 & 440 \\
PowerPoint) & \(38.6 \%\) & \(35.5 \%\) & \(15.5 \%\) & \(6.6 \%\) & \(2.7 \%\) & \(1.1 \%\) & \(100 \%\) \\
Communication applications (e.g. Skype) & 182 & 173 & 53 & 18 & 7 & 7 & 440 \\
& \(41.4 \%\) & \(39.3 \%\) & \(12 \%\) & \(4.1 \%\) & \(1.6 \%\) & \(1.6 \%\) & \(100 \%\) \\
Learning management Systems (e.g. & 73 & 142 & 102 & 44 & 36 & 43 & \(440 *\) \\
Moodle) & \(16.6 \%\) & \(32.3 \%\) & \(23.2 \%\) & \(10 \%\) & \(8.2 \%\) & \(9.8 \%\) & \(100 \%\) \\
Virtual worlds (e.g. Second Life) & 9 & 53 & 79 & 71 & 64 & 164 & 440 \\
Social networking services (e.g. Facebook) & \(2.1 \%\) & \(13 \%\) & \(18 \%\) & \(16.1 \%\) & \(14.5 \%\) & \(37.3 \%\) & \(100 \%\) \\
& \(29.55 \%\) & \(29.55 \%\) & \(13.8 \%\) & \(6.6 \%\) & \(8.6 \%\) & 89 & 440 \\
Blogs (e.g. Blogger) & 49 & 102 & 99 & 62 & 60 & 68 & \(100 \%\) \\
& \(11.1 \%\) & \(23.2 \%\) & \(22.5 \%\) & \(14.1 \%\) & \(13.6 \%\) & \(15.5 \%\) & \(100 \%\) \\
Wikis (e.g. PBwork) & 35 & 78 & 92 & 68 & 63 & 104 & 440 \\
Podcasts (e.g. Apple Podcasts) & \(8 \%\) & \(17.7 \%\) & \(20.9 \%\) & \(15.5 \%\) & \(14.3 \%\) & \(23.6 \%\) & \(100 \%\) \\
& 52 & 93 & 93 & 67 & 53 & 82 & 440 \\
File sharing sites (e.g. Dropbox) & \(11.8 \%\) & \(21.15 \%\) & \(21.15 \%\) & \(15.2 \%\) & \(12 \%\) & \(18.7 \%\) & \(100 \%\) \\
& 143 & 139 & 67 & 32 & 37 & 22 & 440 \\
Photo sharing sites (e.g. Picasa) & \(32.5 \%\) & \(31.6 \%\) & \(15.2 \%\) & \(7.3 \%\) & \(8.4 \%\) & \(5 \%\) & \(100 \%\) \\
& 82 & 101 & 82 & 60 & 53 & 62 & 440 \\
Video sharing sites (e.g. YouTube) & \(18.65 \%\) & \(23 \%\) & \(18.65 \%\) & \(13.6 \%\) & \(12 \%\) & \(14.1 \%\) & \(100 \%\) \\
& 163 & 152 & 57 & 35 & 21 & 12 & 440 \\
Web design applications (e.g. & \(37 \%\) & \(34.5 \%\) & \(13 \%\) & \(8 \%\) & \(4.8 \%\) & \(2.7 \%\) & \(100 \%\) \\
Dreamweaver) & 12 & 45 & 86 & 62 & 69 & 166 & 440 \\
Web search engines (e.g. Google) & \(2.7 \%\) & \(10.2 \%\) & \(19.6 \%\) & \(14.1 \%\) & \(15.7 \%\) & \(37.7 \%\) & \(100 \%\) \\
& 288 & 118 & 18 & 8 & 6 & 2 & 440 \\
Dictionary apps (e.g. Dictionary.com) & \(65.5 \%\) & \(26.8 \%\) & \(4.1 \%\) & \(1.8 \%\) & \(1.4 \%\) & \(0.4 \%\) & \(100 \%\) \\
& 264 & 129 & 29 & 11 & 7 & 0 & 440 \\
Language exchange apps (e.g. Tandem) & \(60 \%\) & \(29.3 \%\) & \(6.6 \%\) & \(2.5 \%\) & \(1.6 \%\) & \(0 \%\) & \(100 \%\) \\
& 46 & 73 & 104 & 58 & 55 & 104 & 440 \\
\hline & \(10.5 \%\) & \(16.6 \%\) & \(23.6 \%\) & \(13.2 \%\) & \(12.5 \%\) & \(23.6 \%\) & \(100 \%\) \\
\hline & & & & & & & \\
\hline
\end{tabular}

Table A5.17, EFL Questionnaire, question 17.

\section*{APPENDIX 5 - EFL Questionnaire data}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Degree of usefulness of the following tools} & \multicolumn{7}{|c|}{Opinion scale - Useful to not at all} \\
\hline & 6 & 5 & 4 & 3 & 2 & 1 & Tot \\
\hline Word processing applications (e.g. MS & 272 & 105 & 46 & 12 & 2 & 3 & 440 \\
\hline Word) & 61.8\% & 23.9\% & 10.5\% & 2.7\% & 0.4\% & 0.7\% & 100\% \\
\hline \multirow[t]{2}{*}{Spreadsheet applications (e.g. MS Excel)} & 55 & 89 & 107 & 74 & 77 & 38 & 440 \\
\hline & 12.5\% & 20.2\% & 24.3\% & 16.8\% & 17.5\% & 8.67\% & 100\% \\
\hline \multirow[t]{2}{*}{Database applications (e.g. MS Access)} & 35 & 74 & 106 & 72 & 92 & 61 & 440 \\
\hline & 8\% & 16.8\% & 24.1\% & 16.3\% & 20.9\% & 13.9\% & 100\% \\
\hline Presentation applications (e.g. MS & 302 & 97 & 31 & 6 & 3 & 1 & 440 \\
\hline PowerPoint) & 68.6\% & 22\% & 7.1\% & 1.4\% & 0.7\% & 0.2\% & 100\% \\
\hline \multirow[t]{2}{*}{Communication applications (e.g. Skype)} & 224 & 111 & 59 & 19 & 18 & 9 & 440 \\
\hline & 50.9\% & 25.2\% & 13.4\% & 4.3\% & 4.1\% & 2.1\% & 100\% \\
\hline Learning management Systems (e.g. & 133 & 119 & 92 & 45 & \[
31
\] & \[
20
\] & 440 \\
\hline Moodle) & 30.2\% & 27\% & 20.9\% & \[
10.2 \%
\] & \[
7.1 \%
\] & \[
4.6 \%
\] & 100\% \\
\hline \multirow[t]{2}{*}{Virtual worlds (e.g. Second Life)} & 33 & 66 & 98 & 84 & 84 & 75 & 440 \\
\hline & 7.5\% & 15\% & 22.3\% & 19.1\% & 19.1\% & 17\% & 100\% \\
\hline \multirow[t]{2}{*}{Social networking services (e.g. Facebook)} & 84 & 83 & 93 & 70 & 67 & 43 & 440 \\
\hline & 19.1\% & 18.9\% & 21.1\% & 15.9\% & 15.2\% & 9.8\% & 100\% \\
\hline \multirow[t]{2}{*}{Blogs (e.g. Blogger)} & 83 & 121 & 100 & 59 & 46 & 31 & 440 \\
\hline & 18.9\% & 27.5\% & 22.7\% & 13.4\% & 10.4\% & 7.1\% & 100\% \\
\hline \multirow[t]{2}{*}{Wikis (e.g. PBwork)} & 63 & 96 & 109 & 56 & 63 & 53 & 440* \\
\hline & 14.3\% & 21.8\% & 24.8\% & 12.7\% & 14.3\% & 12\% & 100\% \\
\hline \multirow[t]{2}{*}{Podcasts (e.g. Apple Podcasts)} & \[
114
\] & \[
118
\] & \[
84
\] & 45 & 41 & \[
38
\] & \[
440
\] \\
\hline & \[
25.9 \%
\] & 26.8\% & 19.1\% & \[
10.2 \%
\] & \[
9.3 \%
\] & \[
8.7 \%
\] & \[
100 \%
\] \\
\hline \multirow[t]{2}{*}{File sharing sites (e.g. Dropbox)} & 168 & 126 & 69 & 35 & 24 & 18 & 440 \\
\hline & 38.2\% & 28.6\% & 15.7\% & 8\% & 5.4\% & 4.1\% & 100\% \\
\hline \multirow[t]{2}{*}{Photo sharing sites (e.g. Picasa)} & 76 & 114 & 92 & 56 & 56 & 46 & 440 \\
\hline & 17.3\% & 25.9\% & 20.9\% & 12.7\% & 12.7\% & 10.5\% & 100\% \\
\hline \multirow[t]{2}{*}{Video sharing sites (e.g. YouTube)} & \[
250
\] & \[
123
\] & \[
40
\] & \[
14
\] & \[
7
\] & \[
6
\] & \[
440^{*}
\] \\
\hline & \[
56.8 \%
\] & 28\% & \[
9.1 \%
\] & \[
3.2 \%
\] & 1.6\% & \[
1.4 \%
\] & 100\% \\
\hline Web design applications (e.g. & 37 & 73 & 101 & 76 & 79 & 74 & 440* \\
\hline Dreamweaver) & 8.4\% & 16.6\% & 23\% & 17.3\% & 18\% & 16.8\% & 100\% \\
\hline \multirow[t]{2}{*}{Web search engines (e.g. Google)} & 315 & 91 & 21 & 7 & 1 & 5 & 440 \\
\hline & 71.6\% & 20.7\% & 4.8\% & 1.6\% & 0.2\% & 1.1\% & 100\% \\
\hline \multirow[t]{2}{*}{Dictionary apps (e.g. Dictionary.com)} & 307 & 104 & 16 & 5 & 3 & 5 & 440 \\
\hline & 69.8\% & 23.65\% & 3.65\% & 1.1\% & 0.7\% & 1.1\% & 100\% \\
\hline \multirow[t]{2}{*}{Language exchange apps (e.g. Tandem)} & 120 & 116 & 89 & 45 & 31 & 39 & 440 \\
\hline & 27.3\% & 26.3\% & 20.2\% & 10.2\% & 7.1\% & 8.9\% & 100\% \\
\hline
\end{tabular}

Table A5.18, EFL Questionnaire, question 18.
\begin{tabular}{lcccccccc|}
\hline Actual use in class of the following tools & \(\mathbf{6}\) & \(\mathbf{5}\) & \(\mathbf{4}\) & \(\mathbf{3}\) & \(\mathbf{2}\) & \(\mathbf{1}\) & Tot \\
& & Frequency scale - Very often to never \\
\hline Word processing applications (e.g. MS & 186 & 161 & 58 & 19 & 8 & 8 & 440 \\
Word) & \(42.3 \%\) & \(36.6 \%\) & \(13.2 \%\) & \(4.3 \%\) & \(1.8 \%\) & \(1.8 \%\) & \(100 \%\) \\
Spreadsheet applications (e.g. MS Excel) & 23 & 53 & 80 & 56 & 67 & 161 & \(440^{*}\) \\
& \(5.2 \%\) & \(12 \%\) & \(18.2 \%\) & \(12.7 \%\) & \(15.2 \%\) & \(36.6 \%\) & \(100 \%\) \\
Database applications (e.g. MS Access) & 17 & 41 & 66 & 57 & 57 & 202 & \(440^{*}\) \\
& \(3.9 \%\) & \(9.3 \%\) & \(15 \%\) & \(13 \%\) & \(13 \%\) & \(45.9 \%\) & \(100 \%\) \\
Presentation applications (e.g. MS & 170 & 169 & 65 & 21 & 6 & 9 & \(440^{*}\) \\
PowerPoint) & \(38.6 \%\) & \(38.4 \%\) & \(14.8 \%\) & \(4.8 \%\) & \(1.4 \%\) & \(2.1 \%\) & \(100 \%\) \\
Communication applications (e.g. Skype) & 147 & 95 & 56 & 43 & 30 & 69 & 440 \\
& \(33.4 \%\) & \(21.6 \%\) & \(12.7 \%\) & \(9.8 \%\) & \(6.8 \%\) & \(15.7 \%\) & \(100 \%\) \\
Learning management Systems (e.g. & 75 & 95 & 74 & 45 & 41 & 110 & \(440^{*}\) \\
Moodle) & \(17 \%\) & \(21.6 \%\) & \(16.8 \%\) & \(10.2 \%\) & \(9.3 \%\) & \(25 \%\) & \(100 \%\) \\
Virtual worlds (e.g. Second Life) & 10 & 30 & 47 & 50 & 54 & 249 & 440 \\
& \(2.3 \%\) & \(6.8 \%\) & \(10.7 \%\) & \(11.3 \%\) & \(12.3 \%\) & \(56.6 \%\) & \(100 \%\) \\
Social networking services (e.g. Facebook) & 27 & 40 & 83 & 63 & 52 & 175 & 440 \\
& \(6.1 \%\) & \(9.1 \%\) & \(18.9 \%\) & \(14.3 \%\) & \(11.8 \%\) & \(39.8 \%\) & \(100 \%\) \\
Blogs (e.g. Blogger) & 20 & 50 & 92 & 66 & 74 & 138 & 440 \\
& \(4.5 \%\) & \(11.4 \%\) & \(20.9 \%\) & \(15 \%\) & \(16.8 \%\) & \(31.4 \%\) & \(100 \%\)
\end{tabular}

\section*{APPENDIX 5 - EFL Questionnaire data}
\begin{tabular}{lccccccc|} 
& 16 & 51 & 89 & 56 & 50 & 178 & 440 \\
Wikis (e.g. PBwork) & \(3.6 \%\) & \(11.6 \%\) & \(20.2 \%\) & \(12.7 \%\) & \(11.4 \%\) & \(40.5 \%\) & \(100 \%\) \\
& 28 & 76 & 89 & 60 & 55 & 132 & 440 \\
Podcasts (e.g. Apple Podcasts) & \(6.4 \%\) & \(17.3 \%\) & \(20.2 \%\) & \(13.6 \%\) & \(12.5 \%\) & \(30 \%\) & \(100 \%\) \\
File sharing sites (e.g. Dropbox) & 106 & 124 & 69 & 54 & 26 & 61 & 440 \\
& \(24.1 \%\) & \(28.2 \%\) & \(15.7 \%\) & \(12.3 \%\) & \(5.9 \%\) & \(13.8 \%\) & \(100 \%\) \\
Photo sharing sites (e.g. Picasa) & 47 & 58 & 75 & 51 & 54 & 155 & 440 \\
& \(10.7 \%\) & \(13.2 \%\) & \(17 \%\) & \(11.6 \%\) & \(12.3 \%\) & \(35.2 \%\) & \(100 \%\) \\
Video sharing sites (e.g. YouTube) & 168 & 170 & 58 & 24 & 11 & 9 & 440 \\
& \(38.2 \%\) & \(38.6 \%\) & \(13.2 \%\) & \(5.4 \%\) & \(2.5 \%\) & \(2.1 \%\) & \(100 \%\) \\
Web design applications (e.g. & 13 & 19 & 63 & 45 & 61 & 239 & 440 \\
Dreamweaver) & \(3 \%\) & \(4.3 \%\) & \(14.3 \%\) & \(10.2 \%\) & \(13.9 \%\) & \(54.3 \%\) & \(100 \%\) \\
Web search engines (e.g. Google) & 239 & 129 & 44 & 11 & 5 & 12 & \(440^{*}\) \\
& \(54.3 \%\) & \(29.3 \%\) & \(10 \%\) & \(2.5 \%\) & \(1.1 \%\) & \(2.7 \%\) & \(100 \%\) \\
Dictionary apps (e.g. Dictionary.com) & 197 & 133 & 69 & 17 & 13 & 11 & \(440 *\) \\
& \(44.8 \%\) & \(30.2 \%\) & \(15.7 \%\) & \(3.9 \%\) & \(3 \%\) & \(2.5 \%\) & \(100 \%\) \\
& 23 & 43 & 62 & 46 & 63 & 203 & 440 \\
Language exchange apps (e.g. Tandem) & \(5.2 \%\) & \(9.8 \%\) & \(14.1 \%\) & \(10.5 \%\) & \(14.3 \%\) & \(46.1 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A5.19, EFL Questionnaire, question 19.
\begin{tabular}{lccccccc|}
\hline T he use of technology facilitates foreign & \multicolumn{7}{c|}{ Agreement scale - Strongly Agree to Strongly Disagree } \\
language learning when it comes to & SA & A & PA & PD & D & SD & Tot \\
\hline Interest & 232 & 165 & 35 & 6 & 0 & 2 & 440 \\
& \(52.7 \%\) & \(37.5 \%\) & \(8 \%\) & \(1.4 \%\) & \(0 \%\) & \(0.4 \%\) & \(100 \%\) \\
Attention & 173 & 155 & 91 & 16 & 3 & 2 & 440 \\
& \(39.3 \%\) & \(35.2 \%\) & \(20.7 \%\) & \(3.7 \%\) & \(0.7 \%\) & \(0.4 \%\) & \(100 \%\) \\
Motivation & 182 & 175 & 68 & 9 & 4 & 2 & 440 \\
& \(41.4 \%\) & \(39.8 \%\) & \(15.4 \%\) & \(2.1 \%\) & \(0.9 \%\) & \(0.4 \%\) & \(100 \%\) \\
Participation & 185 & 147 & 86 & 15 & 5 & 2 & 440 \\
& \(42.1 \%\) & \(33.4 \%\) & \(19.6 \%\) & \(3.4 \%\) & \(1.1 \%\) & \(0.4 \%\) & \(100 \%\) \\
Retention of information & 100 & 135 & 146 & 40 & 14 & 5 & 440 \\
& \(22.7 \%\) & \(30.7 \%\) & \(33.2 \%\) & \(9.1 \%\) & \(3.2 \%\) & \(1.1 \%\) & \(100 \%\) \\
Relationship with the teacher & 87 & 144 & 141 & 51 & 11 & 6 & 440 \\
& \(19.8 \%\) & \(32.7 \%\) & \(32 \%\) & \(11.6 \%\) & \(2.5 \%\) & \(1.4 \%\) & \(100 \%\) \\
Relationship with peers & 103 & 158 & 113 & 43 & 17 & 6 & \(440 *\) \\
& \(23.4 \%\) & \(35.9 \%\) & \(25.7 \%\) & \(9.8 \%\) & \(3.9 \%\) & \(1.4 \%\) & \(100 \%\) \\
Literacy & 122 & 192 & 105 & 16 & 2 & 3 & 440 \\
& \(27.7 \%\) & \(43.7 \%\) & \(23.9 \%\) & \(3.6 \%\) & \(0.4 \%\) & \(0.7 \%\) & \(100 \%\) \\
Agency & 64 & 156 & 158 & 31 & 20 & 11 & 440 \\
& \(14.5 \%\) & \(35.5 \%\) & \(35.9 \%\) & \(7.1 \%\) & \(4.5 \%\) & \(2.5 \%\) & \(100 \%\) \\
Performance & 99 & 187 & 121 & 23 & 5 & 5 & \(440 *\) \\
& \(22.5 \%\) & \(42.5 \%\) & \(27.5 \%\) & \(5.2 \%\) & \(1.1 \%\) & \(1.1 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A5.20, EFL Questionnaire, question 20.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Technology} & \multicolumn{7}{|c|}{Agreement scale - Strongly Agree to Strongly Disagree} \\
\hline & SA & A & PA & PD & D & SD & Tot \\
\hline Is very useful when it comes to FL & 211 & 177 & 49 & 1 & 0 & 2 & 440 \\
\hline teaching & 48\% & 40.25\% & 11.15\% & 0.2\% & 0\% & 0.4\% & 100\% \\
\hline Is very useful when it comes to FLL & 197 & 180 & 58 & 3 & 0 & 2 & 440 \\
\hline & 44.8\% & 40.9\% & 13.2\% & 0.7\% & 0\% & 0.4\% & 100\% \\
\hline ...and the use of technological tools in LL & 195 & 210 & 31 & 2 & 1 & 1 & 440* \\
\hline can help develop digital literacies & 44.3\% & 47.7\% & 7.1\% & 0.4\% & 0.2\% & 0.2\% & 100\% \\
\hline ... and the use of technological tools in LL & 167 & 194 & 65 & 8 & 3 & 3 & 440* \\
\hline can help develop multimodality & 38\% & 44.1\% & 14.8\% & 1.8\% & 0.7\% & 0.7\% & 100\% \\
\hline ...is something students can generally & 157 & 127 & 112 & 23 & 14 & 7 & 440 \\
\hline approach better than their teachers & 35.7\% & 28.9\% & 25.4\% & 5.2\% & 3.2\% & 1.6\% & 100\% \\
\hline ...is something the specific LO established & 188 & 189 & 52 & 6 & 1 & 4 & 440 \\
\hline for FL education in upper secondary schools should take into consideration & 42.7\% & 43\% & 11.8\% & 1.4\% & 0.2\% & 0.9\% & 100\% \\
\hline ...should be implemented in FL teaching & 195 & 169 & 62 & 8 & 1 & 5 & 440* \\
\hline & 44.3\% & 38.4\% & 14.1\% & 1.8\% & 0.2\% & 1.1\% & 100\% \\
\hline
\end{tabular}

Table A5.21, EFL Questionnaire, question 21.

\section*{APPENDIX 5 - EFL Questionnaire data}
\begin{tabular}{lcccccccc|}
\hline Reasons that might have hindered the & \multicolumn{8}{c|}{ Agreement scale - Strongly Agree to Strongly Disagree } \\
use of technology so far & SA & A & PA & PD & D & SD & Tot \\
\hline My school lacks the appropriate & 51 & 95 & 114 & 48 & 100 & 32 & 440 \\
technological tools & \(11.6 \%\) & \(21.6 \%\) & \(25.9 \%\) & \(10.9 \%\) & \(22.7 \%\) & \(7.3 \%\) & \(100 \%\) \\
My school fails to promote the use of & 31 & 41 & 102 & 75 & 142 & 49 & 440 \\
technological tools & \(7.1 \%\) & \(9.3 \%\) & \(23.2 \%\) & \(17 \%\) & \(32.3 \%\) & \(11.1 \%\) & \(100 \%\) \\
The tools provided by my school are & 52 & 58 & 116 & 63 & 107 & 44 & 440 \\
obsolete & \(11.8 \%\) & \(13.2 \%\) & \(26.4 \%\) & \(14.3 \%\) & \(24.3 \%\) & \(10 \%\) & \(100 \%\) \\
My school's wifi network is not sufficient & 95 & 92 & 100 & 44 & 77 & 32 & 440 \\
to support intensive use of said tools & \(21.6 \%\) & \(20.9 \%\) & \(22.7 \%\) & \(10 \%\) & \(17.5 \%\) & \(7.3 \%\) & \(100 \%\) \\
The time available is not sufficient to & 96 & 121 & 107 & 46 & 53 & 17 & 440 \\
introduce new tools and activities & \(21.8 \%\) & \(27.5 \%\) & \(24.3 \%\) & \(10.5 \%\) & \(12 \%\) & \(3.9 \%\) & \(100 \%\) \\
My digital skills are not sufficient to & 32 & 69 & 106 & 72 & 101 & 60 & 440 \\
regularly approach language teaching & \(7.3 \%\) & \(15.7 \%\) & \(24.1 \%\) & \(16.3 \%\) & \(23 \%\) & \(13.6 \%\) & \(100 \%\) \\
through technological tools & & & & & & & 43 & \(440 *\) \\
The students' digital skills are not & 7 & 76 & 127 & 96 & 91 & 43 \\
sufficient to properly approach digital & \(1.6 \%\) & \(17.3 \%\) & \(28.9 \%\) & \(21.8 \%\) & \(20.7 \%\) & \(9.8 \%\) & \(100 \%\) \\
language learning & & & & & & & \\
The students lack the appropriate & 32 & 80 & 140 & 85 & 76 & 27 & 440 \\
technological tools & \(7.3 \%\) & \(18.2 \%\) & \(31.8 \%\) & \(19.3 \%\) & \(17.3 \%\) & \(6.1 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A5.22, EFL Questionnaire, question 22.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{In light of the health emergency developed in 2020, which forced upper secondary schools to hold most of their lessons through different distance learning modalities} & \multicolumn{2}{|c|}{Yes} & \multicolumn{2}{|c|}{No} & \multicolumn{2}{|c|}{Total} \\
\hline & \(\mathrm{N}^{\circ}\) & \% & \(\mathrm{N}^{\circ}\) & \% & \(\mathrm{N}^{\circ}\) & \% \\
\hline ...my technological preparation proved sufficient to properly manage distance learning & 406 & 92.3 & 34 & 7.7 & 440 & 100 \\
\hline ...the technological means provided by my school proved sufficient to properly manage distance learning & 335 & 76.1 & 105 & 23.9 & 440 & 100 \\
\hline ...the technological preparation of the students proved sufficient for them to properly manage distance learning & 307 & 69.8 & 133 & 30.2 & 440 & 100 \\
\hline ...my school helped to provide a smooth transition & 359 & 81.6 & 81 & 18.4 & 440 & 100 \\
\hline ...my school helped to provide the appropriate instructions and/or training & 346 & 78.6 & 94 & 21.4 & 440 & 100 \\
\hline
\end{tabular}

Table A5.23, EFL Questionnaire, question 23.
\begin{tabular}{lcccccccc|}
\hline Distance Learning & \multicolumn{6}{c|}{ Agrement scale - Strongly Agree to Strongly Disagree } \\
& SA & A & PA & PD & D & SD & Tot \\
\hline ...proved a valid alternative to in-situ & 60 & 105 & 155 & 42 & 44 & 34 & 440 \\
lessons & \(13.7 \%\) & \(23.9 \%\) & \(35.2 \%\) & \(9.5 \%\) & \(10 \%\) & \(7.7 \%\) & \(100 \%\) \\
..has helped to emphasise the & 136 & 195 & 83 & 18 & 3 & 5 & 440 \\
importance of greater technological & \(30.9 \%\) & \(44.3 \%\) & \(18.9 \%\) & \(4.1 \%\) & \(0.7 \%\) & \(1.1 \%\) & \(100 \%\) \\
\begin{tabular}{l} 
preparation for schools
\end{tabular} & & & & & & & \\
\begin{tabular}{l}
..has helped to emphasise the \\
importance of greater technological \\
preparation for teachers
\end{tabular} & 170 & 185 & 67 & 12 & 2 & 4 & 440 \\
\begin{tabular}{l}
..has helped to emphasise the \\
importance of greater technological \\
preparation for students
\end{tabular} & \(38.7 \%\) & \(42.1 \%\) & \(15.2 \%\) & \(2.7 \%\) & \(0.4 \%\) & \(0.9 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A5.24, EFL Questionnaire, question 24.

Please note: in very few case, indicated by an asterisk, the sum of the percentages does not reach the exact \(100 \%\), but stands at \(99.9 \%\) or \(100.1 \%\). This happens because most of the percentages have been approximated, down or up. One option would have been to adapt the involved percentages, but, by doing so, the tables as a whole would not have been consistent.

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Figures related to Question 1 of the EFL Questionnaire


Figure A6.1, Frequency graph (Total Question 1, EFL Questionnaire)
Figures related to Question 2 of the EFL Questionnaire


Figure A6.2, Frequency graph (Total Question 2, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Figures related to Question 3 of the EFL Questionnaire


Figure A6.3, Frequency graph (Total Question 3, EFL Questionnaire)
Figures and Tables related to Scale 4 of the EFL Questionnaire


Figure A6.4.1, Frequency graph for items 4a and 4b, EFL Questionnaire

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.4.1, KMO indicator and Bartlett's sphericity test (Scale 4, EFL Questionnaire)
Test di KMO e Bartiett
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura di Kaisor-Meyer-Ohin di adeguatorar del tamplonamento} & ,500 \\
\hline \multirow[t]{3}{*}{Tost della sfancità di Bartart} & Appioss. Chi-quadiato & 133,079 \\
\hline & g1 & 1 \\
\hline & Sign. & c,001 \\
\hline
\end{tabular}

Figures and Tables related to Scale 5 of the EFL Questionnaire

Table A6.5.1, KMO indicator and Bartlett's sphericity test (Scale 5, EFL Questionnaire)

Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura ditais of Mepor-Oikin dl adaguztouma dal camplonarnento} & . 771 \\
\hline \multirow[t]{3}{*}{Tast dalia sfanictac Bratist} & Appross. Chi-quadrato & 555,855 \\
\hline & gi & 10 \\
\hline & Sign & < 0001 \\
\hline
\end{tabular}

Table A6.5.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 5, EFL Questionnaire)


Figure A6.5.1, Screeplot (Scale 5, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.5.3, Model and structure matrices obtained from the analysis of the main components of Scale 5 of the EFL Teacher Questionnaire
\begin{tabular}{l|c|}
\hline & Pattern Matrix \\
\hline & Component \\
\hline a. I attend staff meetings to discuss the established learning objectives & \(\mathbf{7 9 9}\) \\
b. I revise the best approaches for the students to meet said learning objectives & \(\mathbf{, 7 7 8}\) \\
c. I discuss the selection of instructional media & \(\mathbf{7 3 1}\) \\
d. I decide the selection of instructional media & \(\mathbf{, 6 7 6}\) \\
e. I develop (part of) a school curriculum & \(\mathbf{, 6 2 2}\) \\
\hline
\end{tabular}


Figure A6.5.2, Histogram (Total subscale 5.1, EFL Questionnaire)


Figure A6.5.4, \(\mathrm{Q}-\mathrm{Q}\) Plot (Total subscale 5.1, EFL Questionnaire)


Figure A65.6, Boxplot (Total subscale 5.1, EFL Questionnaire)


Figure A6.5.3, Post-transformation Histogram (Total subscale 5.1, EFL Questionnaire)


Figure A6.5.5, Post-transformation Q-Q Plot (Total subscale 5.1, EFL Questionnaire)


Figure A65.7, Post-transformation Boxplot (Total subscale 5.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Figures and Tables related to Scale 6 of the EFL Questionnaire

Table A6.6.1, KMO indicator and Bartlett's sphericity test (Scale 6, EFL Questionnaire)

Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline ralsura dr Kaiser-May campionamento. & diadeguatocca del & , 846 \\
\hline \multirow[t]{3}{*}{Test della sfericiti dl Barist!} & Appruss Chirquadrato & 1427,966 \\
\hline & gl & 28 \\
\hline & Sion, & <,001 \\
\hline
\end{tabular}

Table A6.6.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 6, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{3 , 8 8 0}\) & 1,198 \\
2 & \(\mathbf{1 , 1 9 0}\) & 1,127 \\
3 &, 828 & \(\mathbf{1 , 0 7 5}\) \\
\hline
\end{tabular}


Figure A6.6.1, Screeplot (Scale 6, EFL Questionnaire)
Table A6.6.3, Correlation matrix between components (Scale 6, EFL Questionnaire)

\section*{Matrice di correlazione dei} componenti
\begin{tabular}{l|l|l} 
Componente & 1 & \multicolumn{1}{l}{2} \\
\hline 1 & 1,000 & 194 \\
\hline 2 & 194 & 1,000 \\
\hline
\end{tabular}

Ketodo diestazione Analisi dei
componemtiptincipali
Metado di rotarione: Oblimin con
nurmalizzazione Kaiser.

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.6.4, Model and structure matrices obtained from the analysis of the main components of Scale 6 of the EFL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Pattern Matrix} & \multicolumn{2}{|l|}{Structure Matrix} \\
\hline & \multicolumn{2}{|l|}{Component} & \multicolumn{2}{|l|}{Component} \\
\hline & 1 & 2 & 1 & 2 \\
\hline a. ...are suitable for the curriculum proposed by the upper secondary & ,651 & & ,667 & \\
\hline b. ...are suitable for a multicultural learning environment & ,824 & & ,806 & \\
\hline c. ...are suitable for a digital learning environment & ,862 & & ,850 & \\
\hline d. ...are suitable for a multimodal learning environment & ,833 & & ,824 & \\
\hline e. ...are suitable to promote lifelong learning & ,815 & & ,816 & \\
\hline f. ...should be concretely implemented in class & 442 & ,579 & , 554 & ,665 \\
\hline g. ...should be an integral part of teacher training & 459 & ,567 & 569 & ,656 \\
\hline h. ...should be updated & & ,799 & & ,749 \\
\hline
\end{tabular}


Figure A6.6.2, Histogram (Total subscale 6.1, EFL Questionnaire)


Figure A6.6.4, Q-Q Plot (Total subscale 6.1, EFL Questionnaire)


Figure A6.6.3, Post-transformation Histogram (Total subscale 6.1, EFL Questionnaire)


Figure A6.6.5, Post-transformation Q-Q Plot (Total subscale 6.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.6.6, Boxplot (Total subscale 6.1, EFL Questionnaire)


Figure A6.6.8, Histogram (Total subscale 6.2, EFL Questionnaire)


Figure A6.6.10, Q-Q Plot (Total subscale 6.2, EFL Questionnaire)


Figure A6.6.12, Boxplot (Total subscale 6.2, EFL Questionnaire)


Figure A6.6.7, Post-transformation Boxplot (Total subscale 6.1, EFL Questionnaire)


Figure A6.6.9, Post-transformation Histogram (Total subscale 6.2, EFL Questionnaire)


Figure A6.6.11, Post-transformation Q-Q Plot (Total subscale 6.2, EFL Questionnaire)


Figure A6.6.13, Post-transformation Boxplot (Total subscale 6.2, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Figures related to Scale 7 of the EFL Questionnaire


Figure A67, Frequency graph for items 7a, 7b and 7c, EFL Questionnaire
Figures and Tables related to Scale 8 of the EFL Questionnaire
Table A6.8.1, KMO indicator and Bartlett's sphericity test (Scale 8, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura di Kaser-Beyer-Olisin-cl adegustarza del camplónamento} & 718 \\
\hline \multirow[t]{3}{*}{Test dela sferltitád! Bartioti} & Appras5. Oht-quadiato & 1007,552 \\
\hline & d & 10 \\
\hline & Sign. & \(<001\) \\
\hline
\end{tabular}

Table A6.8.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 8, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{2 , 9 0 8}\) & 1,132 \\
2 & \(\mathbf{1 , 0 9 5}\) & 1,054 \\
3 &, 494 &, 999 \\
\hline
\end{tabular}

Table A6.8.3, Correlation matrix between components (Scale 8, EFL Questionnaire)

\section*{Matrice di eorrelazione dei} componenti
\begin{tabular}{|c|c|c|}
\hline Componente & 1 & 2 \\
\hline 1 & 7,000 & 405 \\
\hline 2 & 406 & 1,000 \\
\hline Metodo dil estr somponemi pr Metodo di rota normalzazion & \begin{tabular}{l}
ne Anal ali. \\
e: Oblim aisel.
\end{tabular} & \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Grafico scree


Figure A6.8.1, Screeplot (Scale 8, EFL Questionnaire)
Table A6.8.4, Model and structure matrices obtained from the analysis of the main components of Scale 8 of the EFL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Pattern Matrix} & \multicolumn{2}{|l|}{Structure Matrix} \\
\hline & \multicolumn{2}{|l|}{Component} & \multicolumn{2}{|l|}{Component} \\
\hline & 1 & 2 & 1 & 2 \\
\hline a. I receive updates in the field of language education & ,806 & & ,851 & ,437 \\
\hline b. I read updated research in the field of language education & ,851 & & ,900 & ,467 \\
\hline c. My school encourages teachers to look for updates in our field & & ,925 & ,389 & ,931 \\
\hline d. My school provides teachers with updated resources & & ,929 & ,389 & ,933 \\
\hline e. I independently consult websites and online resources related to language education (e.g. Google Scholar, Google Books, ResearchGate....) & ,888 & & ,832 & \\
\hline
\end{tabular}


Figure A6.8.2, Histogram (Total subscale 8.1, EFL Questionnaire)


Figure A6.8.3, Post-transformation Histogram (Total subscale 8.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.8.4, Q-Q Plot (Total subscale 8.1, EFL Questionnaire)


Figure A6.8.6, Boxplot (Total subscale 8.1, EFL Questionnaire)


Figure A6.8.8, Histogram (Total subscale 8.2, EFL Questionnaire)


Figure A6.8.10, Q-Q Plot (Total subscale 8.2, EFL Questionnaire)


Figure A6.8.5, Post-transformation Q-Q Plot (Total subscale 8.1, EFL Questionnaire)


Figure A6.8.7, Post-transformation Boxplot (Total subscale 8.1, EFL Questionnaire)


Figure A6.8.9, Post-transformation Histogram (Total subscale 8.2, EFL Questionnaire)


Figure A6.8.11, Post-transformation Q-Q Plot (Total subscale 8.2, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.8.12, Boxplot (Total subscale 8.2, EFL Questionnaire)


Figure A6.8.13, Post-transformation Boxplot (Total subscale 8.2, EFL Questionnaire)

Figures and Tables related to Scale 9 of the EFL Questionnaire
Table A6.9.1, KMO indicator and Bartlett's sphericity test (Scale 9, EFL Questionnaire)

\section*{Test di KMO e Bartlett}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Bisura di Kaiser-heyer-Olkitt di adegualeras del campionamento.} & ,683 \\
\hline \multirow[t]{3}{*}{Test fela spericita di Bamett} & Appross. Cht quadrato & 1045,835 \\
\hline & 91 & 10 \\
\hline & Sign. & - 0001 \\
\hline
\end{tabular}

Table A6.9.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 9, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{2 , 7 9 1}\) & 1,132 \\
2 &, 982 & \(\mathbf{1 , 0 5 4}\) \\
3 &, 797 & \(\mathbf{9 9 9}\) \\
\hline
\end{tabular}

Grafico acree


Figure A6.9.1, Screeplot (Scale 9, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.9.3, Correlation matrix between components (Scale 9, EFL Questionnaire)

\section*{Matrice di correlazione dei}
componenti
\begin{tabular}{c|c|c} 
Componsmit & 1 & \multicolumn{1}{l}{2} \\
\hline 1 & 1,000 &, 114 \\
\hline 2 &, 114 & 1,000 \\
\hline
\end{tabular}

Metodo di estrazione: Analisi del
combonenti printipali
Metodo di rotazione Oblimin CDn
normalzzazione Kaiser.

Table A6.9.4, Model and structure matrices obtained from the analysis of the main components of Scale 9 of the EFL Teacher Questionnaire


Figure A6.9.3, Post-transformation Histogram (Total subscale 9.1, EFL Questionnaire)


Figure A6.9.5, Post-transformation Q-Q Plot (Total subscale 9.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.9.6, Boxplot (Total subscale 9.1, EFL Questionnaire)


Figure A6.9.8, Histogram (Total subscale 9.2, EFL Questionnaire)


Figure A6.9.10, Q-Q Plot (Total subscale 9.2, EFL Questionnaire)


Figure A6.9.12, Boxplot (Total subscale 9.2, EFL Questionnaire)


Figure A6.9.7, Post-transformation Boxplot (Total subscale 9.1, EFL Questionnaire)


Figure A6.9.9, Post-transformation Histogram (Total subscale 9.2, EFL Questionnaire)


Figure A6.9.11, Post-transformation Q-Q Plot (Total subscale 9.2, EFL Questionnaire)


Figure A6.9.13, Post-transformation Boxplot (Total subscale 9.2, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Figures and Tables related to Scale 10 of the EFL Questionnaire


Figure A6.10.1, Frequency graph for items 10a, 10b, 10c, 10d, 10e and 10f, EFL Questionnaire


Figure A6.10.2, Histogram (Total scale 10.1, EFL Questionnaire)


Figure A6.10.3, Post-transformation Histogram (Total scale 10.1, EFL Questionnaire)


Figure A6.10.4, Q-Q Plot (Total scale 10.1, EFL Questionnaire)

Figure A6.10.5, Post-transformation Q-Q Plot (Total scale 10.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.10.6, Boxplot (Total scale 10.1, EFL Questionnaire)


Figure A6.10.7, Post-transformation Boxplot (Total scale 10.1, EFL Questionnaire)

Figures and Tables related to Scale 11 of the EFL Questionnaire
Table A6.11.1, KMO indicator and Bartlett's sphericity test (Scale 11, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Misura di Kaiser-Kaper campionamento. & di adeguaterza del & . 872 \\
\hline \multirow[t]{3}{*}{Test della sfericita di Barter} & Appross Chbquadrato & 2528,137 \\
\hline & al & 45 \\
\hline & Sign. & , 000 \\
\hline
\end{tabular}

Table A6.11.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 11, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{5 , 2 7 5}\) & 1,243 \\
2 & 1,014 & \(\mathbf{1 , 1 6 9}\) \\
3 &, 981 & \(\mathbf{1 , 1 1 1}\) \\
\hline
\end{tabular}


Figure A6.11.1, Histogram (Total subscale 11.1, EFL Questionnaire)


Figure A6.11.2, Post-transformation Histogram (Total subscale 11.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.11.3, Q-Q Plot (Total subscale 11.1, EFL Questionnaire)


Figure A6.11.5, Boxplot (Total subscale 11.1, EFL Questionnaire)


Figure A6.11.4, Post-transformation Q-Q Plot (Total subscale 11.1, EFL Questionnaire)


Figure A6.11.6, Post-transformation Boxplot (Total subscale 11.1, EFL Questionnaire)

Figures related to Question 12 of the EFL Questionnaire


Figure A6.12, Frequency graph (Total Question 12, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Figures and Tables related to Scale 13 of the EFL Questionnaire

Table A6.13.1, KMO indicator and Bartlett's sphericity test (Scale 13, EFL Questionnaire)

Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Thisura di Kaiser-Mever-Difon di adeguatezza del campionamerto.} & , 822 \\
\hline \multirow[t]{3}{*}{Test della sfericila in Barliett} & Appross. Chl-quadrato & 4252,001 \\
\hline & 91 & 91 \\
\hline & Sign & , 010 \\
\hline
\end{tabular}

Table A6.13.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 13, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & 7,815 & 1,314 \\
2 &, 999 & 1,237 \\
\hline
\end{tabular}


Figure A6.13.1, Screeplot (Scale 13, EFL Questionnaire)
Table A6.13.3, Model and structure matrices obtained from the analysis of the main components of Scale 13 of the EFL Teacher Questionnaire
\begin{tabular}{lc|}
\hline & Pattern Matrix \\
\hline & Component \\
\hline a. Knowledge of the curriculum & \(\mathbf{7 4 6}\) \\
b. Content and performance standards in my main subject field(s) & \(\mathbf{7 5 1}\) \\
c. ICT (information and communication technology) skills for teaching & \(\mathbf{7 0 6}\) \\
d. Pedagogical competencies in teaching my subject field(s) & \(\mathbf{7 6 0}\) \\
e. Educational Psychology & \(\mathbf{7 4 0}\) \\
f. Studies and theories related to my subject field(s) & \(\mathbf{5 7 2}\) \\
g. Teaching students with special learning needs & \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.13.2, Histogram (Total subscale 13.1, EFL Questionnaire)


Figure A6.13.4, Q-Q Plot (Total subscale 13.1, EFL Questionnaire)


Figure A6.13.6, Boxplot (Total subscale 13.1, EFL Questionnaire)

Figure A6.13.3, Post-transformation Histogram (Total subscale 13.1, EFL Questionnaire)


Figure A6.13.5, Post-transformation Q-Q Plot (Total subscale 13.1, EFL Questionnaire)


Figure A6.13.7, Post-transformation Boxplot (Total subscale 13.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Figures and Tables related to Scale 14 of the EFL Questionnaire

Table A6.14.1, KMO indicator and Bartlett's sphericity test (Scale 14, EFL Questionnaire)

Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline Misura di Ealser-heypor tamploramento. & It adeguatscea sa! & 878 \\
\hline \multirow[t]{3}{*}{Test della sfericita di Bartath} & Appross Ch-quagrato & 3238,856 \\
\hline & a) & 55 \\
\hline & Sign & 000 \\
\hline
\end{tabular}

Table A6.14.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 14, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & 5,682 & \(\mathbf{1 , 2 5 6}\) \\
2 & 1,424 & \(\mathbf{1 , 1 8 8}\) \\
3 &, 832 & 1,129 \\
\hline
\end{tabular}


Figure A6.14.1, Screeplot (Scale 14, EFL Questionnaire)

Table A6.14.3, Correlation matrix between components (Scale 14, EFL Questionnaire)

\section*{Matrice di correlazione dei componenti}
\begin{tabular}{l|l|l} 
Componente & 1 & 2 \\
\hline 1 & 1,000 &,- 551 \\
\hline 2 &,- 551 & 1,000 \\
\hline
\end{tabular}

Metodo di estrazione: Analisi dei componenti principali.
Metodo di rotazione: Oblimin con normalizzazione Kaiser.

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.14.4, Model and structure matrices obtained from the analysis of the main components of Scale 14 of the EFL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Pattern Matrix} & \multicolumn{2}{|l|}{Structure Matrix} \\
\hline & \multicolumn{2}{|l|}{Component} & \multicolumn{2}{|l|}{Component} \\
\hline & 1 & 2 & 1 & 2 \\
\hline a. ...has changed significantly over the last few decades & & .-356 & ,382 & -,458 \\
\hline b. ...enables students to achieve their goals & & -,965 & ,452 & -921 \\
\hline c. ...enables students to develop their knowledge & & -,989 & ,448 & -,935 \\
\hline d. ...enables students to develop their potential & & -,944 & ,474 & -,918 \\
\hline e. ...is something teachers should focus their attention on when teaching EFL & ,504 & -,412 & 731 & -,689 \\
\hline f. ...is something teachers should make sure their students are familiar with & ,425 & -.434 & 664 & -,668 \\
\hline g. ...is a plural concept & ,800 & & ,798 & -,437 \\
\hline h. ...is a multimodal concept & ,811 & & ,837 & -,494 \\
\hline i. ...involves multiple skills & ,936 & & ,904 & -,458 \\
\hline I. ...involves a continuum of learning & ,853 & & ,825 & -,420 \\
\hline m. ...is taken into consideration by the specific learning objectives established for foreign language education in upper secondary schools & & -,347 & 379 & ,-451 \\
\hline
\end{tabular}


Figure A6.14.2, Histogram (Total subscale 14.1, EFL
Questionnaire)


Figure A6.14.4, Q-Q Plot (Total subscale 14.1, EFL Questionnaire)


Figure A6.14.3, Post-transformation Histogram (Total subscale 14.1, EFL Questionnaire)


Figure A6.14.5, Post-transformation Q-Q Plot (Total subscale 14.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.14.6, Boxplot (Total subscale 14.1, EFL Questionnaire)


Figure A6.14.8, Histogram (Total subscale 14.2, EFL Questionnaire)


Figure A6.14.10, Q-Q Plot (Total subscale 14.2, EFL Questionnaire)


Figure A6.14.12, Boxplot (Total subscale 14.2, EFL Questionnaire)


Figure A6.14.7, Post-transformation Boxplot (Total subscale 14.1, EFL Questionnaire)


Figure A6.14.9, Post-transformation Histogram (Total subscale 14.2, EFL Questionnaire)


Figure A6.14.11, Post-transformation Q-Q Plot (Total subscale 14.2, EFL Questionnaire)


Figure A6.14.13, Post-transformation Boxplot (Total subscale 14.2, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.14.14, Histogram (Total subscale 14.3, EFL Questionnaire)


Figure A6.14.16, Q-Q Plot (Total subscale 14.3, EFL Questionnaire)


Figure A6.14.18, Boxplot (Total subscale 14.3, EFL Questionnaire)


Figure A6.14.15, Post-transformation Histogram (Total subscale 14.3, EFL Questionnaire)


Figure A6.14.17, Post-transformation Q-Q Plot (Total subscale 14.3, EFL Questionnaire)


Figure A6.14.19, Post-transformation Boxplot (Total subscale 14.3, EFL Questionnaire)

Figures and Tables related to Scale 15 of the EFL Questionnaire
Table A6.15.1, KMO indicator and Bartlett's sphericity test (Scale 15, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura dikaiser-Mager-Obin di atfogualema itc| tarnplonamonto} & , 898 \\
\hline \multirow[t]{3}{*}{Test della staniche di Barian} & Approse Chrquadrato & 2225,565 \\
\hline & \(g 1\) & 66 \\
\hline & 5127 & , 000 \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.15.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 15, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{4 , 7 9 2}\) & 1,272 \\
2 & \(\mathbf{1 , 7 7 9}\) & 1,203 \\
3 & 1,147 & \(\mathbf{1 , 1 5 2}\) \\
4 &, 877 & \(\mathbf{1 , 0 9 9}\) \\
\hline
\end{tabular}

Grafico scree


Figure A6.15.1, Screeplot (Scale 15, EFL Questionnaire)
Table A6.15.3, Model and structure matrices obtained from the analysis of the main components of Scale 15 of the EFL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{3}{|r|}{Pattern Matrix} & \multicolumn{3}{|l|}{Structure Matrix} \\
\hline & \multicolumn{3}{|c|}{Component} & \multicolumn{3}{|c|}{Component} \\
\hline & 1 & 2 & 3 & 1 & 2 & 3 \\
\hline a. ...the use of printed texts & & & ,777 & & & ,740 \\
\hline b. ...the use of texts in digital format & \(\underline{370}\) & & ,589 & \(\underline{507}\) & & ,672 \\
\hline c. ...the use of various types of images (e.g. illustrations, graphs...) & ,566 & & , 343 & ,654 & & ,469 \\
\hline d. ...the use of videos & ,685 & & , 349 & ,726 & & \(\underline{499}\) \\
\hline e. ...the use of audios (e.g. recordings, podcasts, songs...) & ,599 & & , 370 & ,637 & & ,501 \\
\hline f. ...the use of facial expressions and body language & & -,848 & & ,305 & -,850 & \\
\hline g. ...the use of proxemics & & -,856 & & ,347 & -,876 & \\
\hline h. ...the use of paralanguage & & -,877 & & ,350 & -,892 & \\
\hline i. ...interacting with objects (e.g. games, technological devices...) & ,652 & & & ,715 & -,485 & \\
\hline I. ...the use of different tools in one lesson & ,758 & & & ,741 & -,333 & \\
\hline m . ...the combination of two or more tools at once (e.g. multimedia presentations) & ,825 & & & ,819 & -,324 & \\
\hline n . ...the use of multimodal texts & ,748 & & & ,764 & -,380 & \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.15.4, Correlation matrix between components (Scale 15, EFL Questionnaire)
Matrice di cerrelazione dei componenti
\begin{tabular}{|c|c|c|c|}
\hline Compenente & 1 & 2 & 3 \\
\hline 1 & 1,000 & -333 & . 222 \\
\hline 2 & -, 393 & 1,000 & -,017 \\
\hline 3 & . 223 & -017 & 1,000 \\
\hline
\end{tabular}


Figure A6.15.2, Histogram (Total subscale 15.1, EFL Questionnaire)


Figure A6.15.3, Post-transformation Histogram (Total subscale 15.1, EFL Questionnaire)


Figure A6.15.5, Post-transformation Q-Q Plot (Total subscale 15.1, EFL Questionnaire)


Figure A6.15.7, Post-transformation Boxplot (Total subscale 15.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.15.8, Histogram (Total subscale 15.2, EFL Questionnaire)


Figure A6.15.10, Q-Q Plot (Total subscale 15.2, EFL Questionnaire)


Figure A6.15.12, Boxplot (Total subscale 15.2, EFL Questionnaire)


Figure A6.15.14, Histogram (Total subscale 15.3, EFL Questionnaire)


Figure A6.15.9, Post-transformation Histogram (Total subscale 15.2, EFL Questionnaire)


Figure A6.15.11, Post-transformation Q-Q Plot (Total subscale 15.2, EFL Questionnaire)


Figure A6.15.13, Post-transformation Boxplot (Total subscale 15.2, EFL Questionnaire)


Figure A6.15.15, Post-transformation Histogram (Total subscale 15.3, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.15.16, Q-Q Plot (Total subscale 15.3, EFL Questionnaire)


Figure A6.15.18, Boxplot (Total subscale 15.3, EFL Questionnaire)

Figure A6.15.17, Post-transformation Q-Q Plot (Total subscale 15.3, EFL Questionnaire)


Figure A6.15.19, Post-transformation Boxplot (Total subscale 15.3, EFL Questionnaire)

Figures related to Question 16 of the EFL Questionnaire


Figure A6.16, Frequency graph (Total Question 16, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Figures and Tables related to Scale 17 of the EFL Questionnaire
Table A6.17.1, KMO indicator and Bartlett's sphericity test (Scale 17, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Misura di Katsar-Mist= samelonamants. & di soeguateria del & . 223 \\
\hline \multirow[t]{3}{*}{Test ditia sfaticta it BarfetI} & Apprese. Chi-quadrale & 4399,568 \\
\hline & a) & 153 \\
\hline & pann & ,000 \\
\hline
\end{tabular}

Table A6.17.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 17, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & 7,893 & \(\mathbf{1 , 3 7 0}\) \\
2 & 2,023 & \(\mathbf{1 , 2 9 8}\) \\
3 & 1,309 & \(\mathbf{1 , 2 4 5}\) \\
4 &, 988 & 1,198 \\
\hline
\end{tabular}


Figure A6.17.1, Screeplot (Scale 17, EFL Questionnaire)
Table A6.17.3, Correlation matrix between components (Scale 17, EFL Questionnaire)

\section*{Matrice di correlazione dei}

\section*{componenti}
\begin{tabular}{|c|c|c|c|}
\hline Componerta & 1 & 2 & 3 \\
\hline 1. & 1.000 & +229 & 472 \\
\hline 2 & 229 & 1,000 & .171 \\
\hline 3 & 474 & . 171 & 1,ODD \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.17.4, Model and structure matrices obtained from the analysis of the main components of Scale 17 of the EFL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{3}{|r|}{Pattern Matrix} & \multicolumn{3}{|l|}{Structure Matrix} \\
\hline & \multicolumn{3}{|c|}{Component} & \multicolumn{3}{|c|}{Component} \\
\hline & 1 & 2 & 3 & 1 & 2 & 3 \\
\hline a. Word processing applications (e.g., MSWord) & & -,423 & ,721 & & ,505 & ,705 \\
\hline b. Spreadsheet applications(e.g., MS Excel) & & & ,821 & ,427 & & ,831 \\
\hline c. Database applications (e.g., MS Access) & ,416 & -,344 & ,559 & ,603 & & ,697 \\
\hline d. Presentation applications(e.g., MS PowerPoint) & & ,305 & ,655 & ,438 & ,431 & ,735 \\
\hline e. Communication applications (e.g., Skype) & & ,442 & ,317 & ,489 & ,551 & ,506 \\
\hline f. Learning management systems (e.g., Moodle) & , 315 & & ,474 & , 544 & & ,626 \\
\hline g. Virtual worlds (e.g., SecondLife) & ,743 & -,311 & & ,759 & & ,482 \\
\hline h. Social networking services(e.g., Facebook) & ,629 & ,305 & & ,638 & ,427 & \\
\hline i. Blogs (e.g., Blogger) & ,804 & & & ,813 & & ,373 \\
\hline I. Wikis (e.g., PBworks) & ,812 & & & ,794 & & ,343 \\
\hline m. Podcasts (e.g., ApplePodcasts) & ,664 & & & ,736 & ,340 & ,413 \\
\hline n . File sharing sites (e.g., Dropbox) & ,403 & \(\underline{439}\) & & ,632 & , 578 & ,536 \\
\hline o. Photo sharing sites (e.g., Picasa) & ,725 & & & ,785 & ,417 & ,392 \\
\hline p. Video sharing sites (e.g., YouTube) & ,538 & \(\underline{472}\) & & ,617 & ,584 & \\
\hline q. Web design applications(e.g., Dreamweaver) & ,740 & & & ,782 & & ,517 \\
\hline r. Web search engines (e.g., Google) & & ,744 & & & ,771 & \\
\hline s. Dictionary apps (e.g., Dictionary.com) & & ,723 & & ,331 & ,769 & ,300 \\
\hline t. Language exchange app(e.g, Tandem) & ,733 & & & ,753 & & ,434 \\
\hline
\end{tabular}


Figure A6.17.2, Histogram (Total subscale 17.1, EFL Questionnaire)


Figure A6.17.3, Q-Q Plot (Total subscale 17.1, EFL Questionnaire)


Figure A6.17.4, Boxplot (Total subscale 17.1, EFL Questionnaire)


Figure A6.17.5, Histogram (Total subscale 17.2, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.17.6, Q-Q Plot (Total subscale 17.2, EFL Questionnaire)


Figure A6.17.8, Histogram (Total subscale 17.3, EFL Questionnaire)


Figure A6.17.10, Boxplot (Total subscale 17.3, EFL Questionnaire)


Figure A6.17.12, Post-transformation Histogram (Total scale 17, EFL Questionnaire)


Figure A6.17.7, Boxplot (Total subscale 17.2, EFL Questionnaire)


Figure A6.17.9, Q-Q Plot (Total subscale 17.3, EFL Questionnaire)


Figure A6.17.11, Histogram (Total scale 17, EFL Questionnaire)


Figure A6.17.13, Q-Q Plot (Total scale 17, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.17.14, Post-transformation Q-Q Plot (Total scale 17, EFL Questionnaire)


Figure A6.17.16, Post-transformation Boxplot (Total scale 17, EFL Questionnaire)

Figures and Tables related to Scale 18 of the EFL Questionnaire
Table A6.18.1, KMO indicator and Bartlett's sphericity test (Scale 18, EFL Questionnaire)

\section*{Test di KMO e Bartlett}
\begin{tabular}{ll|r}
\hline \begin{tabular}{l} 
Misura di Kaiser-Meyer-Olkin di adeguatezza del \\
campionamento.
\end{tabular} & ,921 \\
\hline \begin{tabular}{l} 
Test della sfericità di \\
Bartlett
\end{tabular} & Appross. Chi-quadrato & 4129,550 \\
\cline { 2 - 3 } & gl & 153 \\
\cline { 2 - 3 } & Sign. &, 000 \\
\hline
\end{tabular}

Table A6.18.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 18, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{7 , 4 2 2}\) & 1,370 \\
2 & \(\mathbf{2 , 2 0 4}\) & 1,298 \\
3 & \(\mathbf{1 , 4 0 5}\) & 1,245 \\
4 &, 820 & \(\mathbf{1 , 1 9 8}\) \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

\section*{Grafico scree}


Figure A6.18.1, Screeplot (Scale 18, EFL Questionnaire)
Table A6.18.3, Model and structure matrices obtained from the analysis of the main components of Scale 18 of the EFL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{3}{|c|}{Pattern Matrix} & \multicolumn{3}{|l|}{Structure Matrix} \\
\hline & \multicolumn{3}{|c|}{Component} & \multicolumn{3}{|c|}{Component} \\
\hline & 1 & 2 & 3 & 1 & 2 & 3 \\
\hline a. Word processing applications (e.g., MSWord) & & ,598 & ,490 & & ,579 & ,498 \\
\hline b. Spreadsheet applications(e.g., MS Excel) & & & ,855 & ,351 & & ,887 \\
\hline c. Database applications (e.g., MS Access) & ,350 & & ,724 & ,502 & & ,806 \\
\hline d. Presentation applications(e.g., MS PowerPoint) & & ,727 & & ,307 & ,746 & \\
\hline e. Communication applications (e.g., Skype) & ,460 & , 392 & & ,575 & ,546 & \\
\hline f. Learning management systems (e.g., Moodle) & ,408 & & & ,556 & ,410 & ,365 \\
\hline g. Virtual worlds (e.g., SecondLife) & ,803 & & & ,775 & & ,394 \\
\hline h. Social networking services(e.g., Facebook) & ,761 & & & ,767 & & \\
\hline i. Blogs (e.g., Blogger) & ,850 & & & ,853 & ,371 & \\
\hline I. Wikis (e.g., PBworks) & ,808 & & & ,818 & ,305 & \\
\hline m. Podcasts (e.g., ApplePodcasts) & ,799 & & & ,791 & ,367 & \\
\hline n. File sharing sites (e.g., Dropbox) & ,410 & ,456 & & , 579 & ,604 & \\
\hline o. Photo sharing sites (e.g., Picasa) & ,611 & & & ,731 & ,411 & ,402 \\
\hline p. Video sharing sites (e.g., YouTube) & ,328 & ,605 & & ,504 & ,706 & \\
\hline q. Web design applications(e.g., Dreamweaver) & ,687 & & ,316 & ,753 & & ,497 \\
\hline r. Web search engines (e.g., Google) & & ,817 & & & ,806 & \\
\hline s. Dictionary apps (e.g., Dictionary.com) & & ,762 & & ,324 & ,780 & \\
\hline t. Language exchange app(e.g, Tandem) & ,684 & & & ,691 & & \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.18.4, Correlation matrix between components (Scale 18, EFL Questionnaire)
Matrice di correlazione dei
componenti
\begin{tabular}{|c|c|c|c|}
\hline componente & 1 & 2 & 3 \\
\hline 1 & 1,100 & 356 & 272 \\
\hline 2 & , 356 & 1,000 & . 105 \\
\hline 3 & ,272 & , 105 & 1,000 \\
\hline
\end{tabular}



Figure A6.18.2, Histogram (Total subscale 18.1, EFL Questionnaire)


Figure A6.18.4, Boxplot (Total subscale 18.1, EFL Questionnaire)


Figure A6.18.6, Q-Q Plot (Total subscale 18.2, EFL Questionnaire)

Figure A6.18.3, Q-Q Plot (Total subscale 18.1, EFL Questionnaire)


Figure A6.18.5, Histogram (Total subscale 18.2, EFL Questionnaire)


Figure A6.18.7, Boxplot (Total subscale 18.2, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.18.8, Histogram (Total subscale 18.3, EFL Questionnaire)


Figure A6.18.10, Boxplot (Total subscale 18.3, EFL Questionnaire)


Figure A6.18.12, Post-transformation Histogram (Total scale 18, EFL Questionnaire)


Figure A6.18.9, Q-Q Plot (Total subscale 18.3, EFL Questionnaire)


Figure A6.18.11, Histogram (Total scale 18, EFL Questionnaire)


Figure A6.18.13, Q-Q Plot (Total scale 18, EFL Questionnaire)


Figure A6.18.14, Post-transformation Q-Q Plot (Total scale 18, EFL Questionnaire)

Figure A6.18.15, Boxplot (Total scale 18, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.18.16, Post-transformation Boxplot (Total scale 18, EFL Questionnaire)

Figures and Tables related to Scale 19 of the EFL Questionnaire
Table A6.19.1, KMO indicator and Bartlett's sphericity test (Scale 19, EFL Questionnaire)
Test di KMO e Bartlett
\begin{tabular}{lll}
\hline \begin{tabular}{l} 
Misura di Kaiser-Meyer-Olkin di adeguatezza del \\
campionamento.
\end{tabular} & & ,923 \\
\hline Test della sfericità di Bartlett & Appross. Chi-quadrato & 3961,925 \\
\cline { 2 - 3 } & gl & 153 \\
\cline { 2 - 3 } & Sign. &, 000 \\
\hline
\end{tabular}

Table A6.19.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 19, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{7 , 4 9 4}\) & 1,370 \\
2 & \(\mathbf{1 , 9 7 1}\) & 1,298 \\
3 & 1,046 & \(\mathbf{1 , 2 4 5}\) \\
4 &, 958 & \(\mathbf{1 , 1 9 8}\) \\
\hline
\end{tabular}


Figure A6.19.1, Screeplot (Scale 19, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.19.3, Correlation matrix between components (Scale 19, EFL Questionnaire)

> Matrice di correlazione dei
> componenti
\begin{tabular}{l|c|c|c} 
Componarts & 1 & 2 & 3 \\
\hline 1 & 1,000 & 200 &, 400 \\
\hline 2 & 290 & 1,000 & 376 \\
\hline 3 & 460 & 370 & 1,000 \\
\hline
\end{tabular}

Table A6.19.4, Model and structure matrices obtained from the analysis of the main components of Scale 19 of the EFL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{3}{|r|}{Pattern Matrix} & \multicolumn{3}{|l|}{Structure Matrix} \\
\hline & \multicolumn{3}{|c|}{Component} & \multicolumn{3}{|c|}{Component} \\
\hline & 1 & 2 & 3 & 1 & 2 & 3 \\
\hline a. Word processing applications (e.g., MSWord) & & & ,500 & & ,390 & ,544 \\
\hline b. Spreadsheet applications(e.g., MS Excel) & ,691 & & & ,703 & & ,351 \\
\hline c. Database applications (e.g., MS Access) & ,834 & & & ,817 & & ,368 \\
\hline d. Presentation applications(e.g., MS PowerPoint) & & ,424 & , 354 & ,317 & ,566 & \(\underline{528}\) \\
\hline e. Communication applications (e.g., Skype) & & & ,826 & ,365 & & ,804 \\
\hline f. Learning management systems (e.g., Moodle) & & & ,701 & ,488 & & ,731 \\
\hline g. Virtual worlds (e.g., SecondLife) & ,885 & & & ,858 & & ,375 \\
\hline h. Social networking services(e.g., Facebook) & ,735 & & & ,743 & & ,330 \\
\hline i. Blogs (e.g., Blogger) & ,697 & & & ,762 & ,331 & ,437 \\
\hline I. Wikis (e.g., PBworks) & ,761 & & & ,774 & & ,377 \\
\hline m. Podcasts (e.g., ApplePodcasts) & ,564 & & & ,694 & ,330 & ,522 \\
\hline n. File sharing sites (e.g., Dropbox) & & & ,518 & ,444 & ,448 & ,664 \\
\hline o. Photo sharing sites (e.g., Picasa) & ,644 & & & ,730 & ,412 & ,431 \\
\hline p. Video sharing sites (e.g., YouTube) & & ,624 & & ,330 & ,706 & \\
\hline q. Web design applications(e.g., Dreamweaver) & ,884 & & & ,861 & & ,367 \\
\hline r. Web search engines (e.g., Google) & & ,851 & & & ,820 & \\
\hline s. Dictionary apps (e.g., Dictionary.com) & & ,760 & & & ,772 & \\
\hline t. Language exchange app(e.g, Tandem) & ,852 & & & ,802 & & \\
\hline
\end{tabular}


Figure A6.19.2, Histogram (Total subscale 19.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.19.4, Boxplot (Total subscale 19.1, EFL Questionnaire)


Figure A6.19.6, Q-Q Plot (Total subscale 19.2, EFL Questionnaire)


Figure A6.19.8, Histogram (Total subscale 19.3, EFL Questionnaire)


Figure A6.19.10, Boxplot (Total subscale 19.3, EFL Questionnaire)


Figure A6.19.5, Histogram (Total subscale 19.2, EFL Questionnaire)


Figure A6.19.7, Boxplot (Total subscale 19.2, EFL Questionnaire)


Figure A6.19.9, Q-Q Plot (Total subscale 19.3, EFL Questionnaire)


Figure A6.19.11, Histogram (Total scale 19, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.19.12, Post-transformation Histogram (Total scale 19, EFL Questionnaire)


Figure A6.19.14, Post-transformation Q-Q Plot (Total scale 19, EFL Questionnaire)



Figure A6.19.13, Q-Q Plot (Total scale 19, EFL Questionnaire)


Figure A6.19.15, Boxplot (Total scale 19, EFL Questionnaire)

Figure A6.19.16, Post-transformation Boxplot (Total scale 19, EFL Questionnaire)

Figures and Tables related to Scale 20 of the EFL Questionnaire

Table A6.20.1, KMO indicator and Bartlett's sphericity test (Scale 20, EFL Questionnaire)

Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura di Kaser-Mayer-0lidin-el adegustama del camploramento} & . 920 \\
\hline \multirow[t]{3}{*}{Test dela sferltita d! Bartioti} & Appros5 . Oht-quadiato & 3131,195 \\
\hline & d & 45 \\
\hline & Sign. & 1000 \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.20.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 20, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{6 , 2 2 5}\) & 1,243 \\
2 & 1,000 & \(\mathbf{1 , 1 6 7}\) \\
\hline
\end{tabular}


Figure A6.20.1, Screeplot (Figures and Tables related to Scale 20, EFL Questionnaire)

Table A6.20.3, Model and structure matrices obtained from the analysis of the main components of Scale 20 of the EFL Teacher Questionnaire
\begin{tabular}{lc|}
\hline & Pattern Matrix \\
\hline & Component \\
\hline a. Interest &, 737 \\
b. Attention &, 787 \\
c. Motivation &, 816 \\
d. Participation &, 831 \\
e. Retention of information &, 785 \\
f. Relationship with the teacher &, 825 \\
g. Relationship with peers &, 737 \\
h. Literacy &, 802 \\
i. Agency &, 739 \\
l. Performance &, 823 \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.20.2, Histogram (Total subscale 20.1, EFL Questionnaire)


Figure A6.20.4, Q-Q Plot (Total subscale 20.1, EFL Questionnaire)


Figure A6.20.6, Boxplot (Total subscale 20.1, EFL Questionnaire)


Figure A6.20.3, Post-transformation Histogram (Total subscale 20.1, EFL Questionnaire)


Figure A6.20.5, Post-transformation Q-Q Plot (Total subscale 20.1, EFL Questionnaire)


Figure A6.20.7, Post-transformation Boxplot (Total subscale 20.1, EFL Questionnaire)

Figures and Tables related to Scale 21 of the EFL Questionnaire
Table A6.21.1, KMO indicator and Bartlett's sphericity test (Scale 21, EFL Questionnaire)
Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura di Kaiser-heyer-Olkin di adeguatezza del Gampionamento.} & 343 \\
\hline \multirow[t]{3}{*}{Test ciella sfaricila di Eartlet.} & Appross CN-quadrato & 2132,228 \\
\hline & al & 21 \\
\hline & Sian. & 000 \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.21.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 21, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{4 , 3 7 8}\) & 1,179 \\
2 &, 943 & \(\mathbf{1 , 1 0 6}\) \\
\hline
\end{tabular}


Figure A6.21.1, Screeplot (Scale 21, EFL Questionnaire)

Table A6.21.3, Model and structure matrices obtained from the analysis of the main components of Scale 21 of the EFL Teacher Questionnaire
\begin{tabular}{l|c|c|c|}
\hline & Pattern Matrix & Structure Matrix \\
\hline & Component & Component \\
\hline & 1 & 2 & 1 \\
\hline \begin{tabular}{l} 
a. ...is very useful when it comes to foreign language teaching \\
b. ...is very useful when it comes to foreign language learning \\
c. ..and the use of technological tools in language learning can help \\
develop digital literacies \\
d. ...and the use of technological tools in language learning can help \\
develop multimodality \\
e. ...is something students can generally approach better than their \\
teachers \\
f. ...is something the specific learning objectives established for foreign \\
language education in upper secondary schools should take into \\
consideration \\
g. ...should be implemented in foreign language teaching
\end{tabular} &, \(\mathbf{2 1 6}\) &, 883 \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

\section*{Matrice di correlazione dei componenti}
\begin{tabular}{lr|r} 
Componente & \multicolumn{1}{l}{1} & \multicolumn{1}{c}{2} \\
\hline 1 & 1,000 &, 258 \\
\hline 2 &, 258 & 1,000 \\
\hline
\end{tabular}

Metodo di estrazione: Analisi dei componenti principali.
Metodo di rotazione: Oblimin con normalizzazione Kaiser.

Table A6.21.4, Correlation matrix between components (Scale 21, EFL Questionnaire)


Figure A6.21.2, Histogram (Total subscale 21.1, EFL Questionnaire)


Figure A6.21.4, Q-Q Plot (Total subscale 21.1, EFL Questionnaire)


Figure A6.21.6, Boxplot (Total subscale 21.1, EFL Questionnaire)


Figure A6.21.3, Post-transformation Histogram (Total subscale 21.1, EFL Questionnaire)


Figure A6.21.5, Post-transformation Q-Q Plot (Total subscale 21.1, EFL Questionnaire)


Figure A6.21.7, Post-transformation Boxplot (Total subscale 21.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.21.8, Histogram (Total subscale 21.2, EFL Questionnaire)


Figure A6.21.10, Q-Q Plot (Total subscale 21.2, EFL Questionnaire)


Figure A6.21.12, Boxplot (Total subscale 21.2, EFL Questionnaire)


Figure A6.21.9, Post-transformation Histogram (Total subscale 21.2, EFL Questionnaire)


Figure A6.21.11, Post-transformation Q-Q Plot (Total subscale 21.2, EFL Questionnaire)


Figure A6.21.13, Post-transformation Boxplot (Total subscale 21.2, EFL Questionnaire)

Figures and Tables related to Scale 22 of the EFL Questionnaire
Table A6.22.1, KMO indicator and Bartlett's sphericity test (Scale 22, EFL Questionnaire)
Test di KMO e Bartiett
\begin{tabular}{|c|c|c|}
\hline Msum al Kalser-Meya campionamendo & di adeguatama del & ,797 \\
\hline \multirow[t]{3}{*}{Test dellastericita di Bartett} & Appross Ch-quadrato & 1485,012 \\
\hline & \(g{ }^{\text {g }}\) & 28 \\
\hline & \(3 \lg\) & <,001 \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Table A6.22.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 22, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{3 , 7 2 9}\) & 1,198 \\
2 & \(\mathbf{1 , 1 7 9}\) & 1,127 \\
3 & 1,000 & 1,075 \\
4 &, 716 & \(\mathbf{1 , 0 1 9}\) \\
\hline
\end{tabular}

Grafico scree


Figure A6.22.1, Screeplot (Scale 22, EFL Questionnaire)

Table A6.22.3, Model and structure matrices obtained from the analysis of the main components of Scale 22 of the EFL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{3}{|c|}{Pattern Matrix} & \multicolumn{3}{|l|}{Structure Matrix} \\
\hline & \multicolumn{3}{|c|}{Component} & \multicolumn{3}{|c|}{Component} \\
\hline & 1 & 2 & 3 & 1 & 2 & 3 \\
\hline a. My school lacks the appropriate technological tools & ,905 & & & ,895 & ,392 & \\
\hline b. My school fails to promote the use of technological tools & & & ,989 & & & ,988 \\
\hline c. The tools provided by my school are obsolete & ,947 & & & ,923 & ,381 & \\
\hline d. My school's wifi network is not sufficient to support intensive use of said tools & ,829 & & & ,865 & ,456 & \\
\hline e. The time available is not sufficient to introduce new tools and activities & ,361 & ,475 & & ,584 & ,646 & \\
\hline f. My digital skills are not sufficient to regularly approach language teaching through technological tools & & ,786 & & & ,739 & \\
\hline g. The students' digital skills are not sufficient to properly approach digital language learning & & ,888 & & ,384 & ,876 & \\
\hline h. The students lack the appropriate technological tools & & ,713 & & ,489 & ,786 & \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Matrice di correlazione del component|
\begin{tabular}{|c|c|c|c|}
\hline Componente & 1 & 2 & 3 \\
\hline 1 & 1,000 & ,457 & -060 \\
\hline 2 & . 467 & 1,000 & -.062 \\
\hline 3 & -,060 & -, 052 & 1,000 \\
\hline
\end{tabular}

Figure A6.22.2, Histogram (Total subscale 22.1, EFL Questionnaire)


Figure A6.22.4, Q-Q plot (Total subscale 22.1, EFL Questionnaire)


Figure A6.22.6, Boxplot (Total subscale 22.1, EFL Questionnaire)

Table A6.22.4, Correlation matrix between components (Scale 22, EFL Questionnaire)


Figure A6.22.3, Post-transformation Histogram (Total subscale 22.1, EFL Questionnaire)


Figure A6.22.5, Post-transformation Q-Q plot (Total subscale 22.1, EFL Questionnaire)


Figure A6.22.7, Post-transformation Boxplot (Total subscale 22.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.22.8, Histogram (Total subscale 22.2, EFL Questionnaire)


Figure A6.22.10, Q-Q Plot (Total subscale 22.2, EFL Questionnaire)


Figure A6.22.12, Boxplot (Total subscale 22.2, EFL Questionnaire)


Figure A6.22.14, Histogram (Total subscale 22.3, EFL Questionnaire)


Figure A6.22.9, Post-transformation Histogram (Total subscale 22.2, EFL Questionnaire)


Figure A6.22.11, Q-Q Post-transformation Plot (Total subscale 22.2, EFL Questionnaire)


Figure A6.22.13, Post-transformation Boxplot (Total subscale 22.2, EFL Questionnaire)


Figure A6.22.15, Post-transformation Histogram (Total subscale 22.3, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.22.16, Q-Q Plot (Total subscale 22.3, EFL Questionnaire)


Figure A6.22.18, Boxplot (Total subscale 22.3, EFL Questionnaire)


Figure A6.22.17, Post-transformation Q-Q Plot (Total subscale 22.3, EFL Questionnaire)


Figure A6.22.19, Post-transformation Boxplot (Total subscale 22.3, EFL Questionnaire)

Figures and Tables related to Scale 23 of the EFL Questionnaire


Figure A6.23.1, Frequency analysis for items 23a, 23b, 23c, 23d, 23e, EFL Questionnaire

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.23.2, Histogram (Total scale 23.1, EFL Questionnaire)


Figure A6.23.4, Q-Q Plot (Total scale 23.1, EFL Questionnaire)


Figure A6.23.6, Boxplot (Total scale 23.1, EFL Questionnaire)


Figure A6.23.3, Post-transformation Histogram (Total scale 23.1, EFL Questionnaire)


Figure A6.23.5, Post-transformation Q-Q Plot (Total scale 23.1, EFL Questionnaire)


Figure A6.23.7, Post-transformation Boxplot (Total scale 23.1, EFL Questionnaire)

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.

Figures and Tables related to Scale 24 of the EFL Questionnaire
Table A6.24.1, KMO indicator and Bartlett's sphericity test (Scale 24, EFL Questionnaire)
Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura ditcaiscr-Mizyor-Dikin di adogualama tel campionarmanto.} & . 748 \\
\hline \multirow[t]{3}{*}{Tast delia storicita di Barlist} & Appross Chrquadrato & 848,311 \\
\hline & git & 6 \\
\hline & sign. & \(\therefore 001\) \\
\hline
\end{tabular}

Table A6.24.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 24, EFL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{2 , 6 9 3}\) & 1,101 \\
2 &, 735 & \(\mathbf{1 , 0 2 6}\) \\
\hline
\end{tabular}


Figure A6.24.1, Screeplot (Scale 24, EFL Questionnaire)
Table A6.24.3, Model and structure matrices obtained from the analysis of the main components of Scale 24 of the EFL Teacher Questionnaire
\begin{tabular}{l|c|}
\hline & Pattern Matrix \\
\hline & Component \\
\hline \begin{tabular}{l|c}
\hline a. ...proved to be a valid alternative to in-situ lessons &, 612 \\
b. ...has helped to emphasize the importance of greater technological preparation & ,890 \\
for schools \\
c. ...has helped to emphasize the importance of greater technological preparation \\
for teachers \\
d. ...has helped to emphasize the importance of greater technological preparation \\
for students
\end{tabular} & ,896 \\
\hline
\end{tabular}

APPENDIX 6 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the EFL Questionnaire.


Figure A6.24.2, Histogram (Total subscale 24.1, EFL Questionnaire)


Figure A6.24.4, Q-Q Plot (Total subscale 24.1, EFL Questionnaire)


Figure A6.24.6, Boxplot (Total subscale 24.1, EFL Questionnaire)


Figure A6.24.3, Post-transformation Histogram (Total subscale 24.1, EFL Questionnaire)


Figure A6.24.5, Post-transformation Q-Q Plot (Total subscale 24.1, EFL Questionnaire)


Figure A6.24.7, Post-transformation Boxplot (Total subscale 24.1, EFL Questionnaire)

Figures and tables relating to research question 2a
\begin{tabular}{lccccl|}
\hline \multicolumn{4}{c|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 5 is the same & 1 & .332 & 9,118 & Keep the null hypothesis \\
on the school categories. & 5 & & & \\
\hline The distribution of Variable 6.1 is the & 1 & .266 & 9,989 & Keep the null hypothesis \\
same on the school categories. & 6.1 & & & \\
\hline The distribution of Variable 6.2 is the & 1 & .082 & 13,980 & Keep the null hypothesis \\
same on the school categories. & 6.2 & & & Reject the null hypothesis \\
The distribution of Variable 14.3 is the & 1 & .049 & 15,564 & \\
same on the school categories. & 14.3 & & & \\
\hline
\end{tabular}

Table A7a.1, Kruskal-Wallis Test for independent samples, variable 1/5, 6.1, 6.2, 14.3



Figure A7a.1.3, Kruskal-Wallis Test for independent samples, variables 1 and 6.2
\begin{tabular}{lcccll|}
\hline & \multicolumn{2}{l}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 5 is the same on & 2 & .071 & 10,157 & Keep the null hypothesis \\
the experience categories. & 5 & & & \\
The distribution of Variable 6.1 is the same & 2 & .042 & 11,504 & Reject the null hypothesis \\
on the experience categories. & 6.1 & & & \\
The distribution of Variable 6.2 is the same & 2 & .653 & 3,304 & Keep the null hypothesis \\
on the experience categories. & 6.2 & & & Keep the null hypothesis \\
The distribution of Variable 14.3 is the same & 2 & .946 & 1,192 & \\
on the experience categories. & 14.3 & & & \\
\hline
\end{tabular}

Table A7a.2, Kruskal-Wallis Test for independent samples, variable 2/5, 6.1, 6.2, 14.3


Figure A7a.2.1, Kruskal-Wallis Test for independent samples, variables 2 and 5


Figure A7a.2.2, Kruskal-Wallis Test for independent samples, variables 2 and 6.1


Figure A7a.2.3, Kruskal-Wallis Test for independent samples, variables 2 and 6.2


Figure A7a.2.4, Kruskal-Wallis Test for independent samples, variables 2 and 14.3
\begin{tabular}{lccccl|}
\hline \multicolumn{4}{c|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 5 is the same & 3 & .355 & 7,753 & Keep the null hypothesis \\
on the age categories. & 5 & & & \\
The distribution of Variable 6.1 is the & 3 & .701 & 4,665 & Keep the null hypothesis \\
same on the age categories. & 6.1 & & \\
The distribution of Variable 6.2 is the & 3 & .077 & 12,791 & Keep the null hypothesis \\
same on the age categories. & 6.2 & & & \\
The distribution of Variable 14.3 is the & 3 & .422 & 7,063 & Keep the null hypothesis \\
same on the age categories. & 14.3 & & & \\
\hline
\end{tabular}

Table A7a.3, Kruskal-Wallis Test for independent samples, variable 3/5, 6.1, 6.2, 14.3


Figure A7a.3.1, Kruskal-Wallis Test for independent samples, variables 3 and 5


Figure A7a.3.2, Kruskal-Wallis Test for independent samples, variables 3 and 6.1


Figure A7a.3.3, Kruskal-Wallis Test for independent samples, variables 3 and 6.2


Figure A7a.3.4, Kruskal-Wallis Test for independent samples, variables 3 and 14.3
\begin{tabular}{lccccl|}
\hline \multicolumn{5}{c|}{ Kruskal-Wallis Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 5 is the same & 4.1 & .044 & 6,243 & Reject the null hypothesis \\
on the categories of variable 4.1. & 5 & & & \\
\hline The distribution of Variable 6.1 is the & 4.1 & .588 & 1,060 & Keep the null hypothesis \\
same on the categories of variable 4.1. & 6.1 & & & \\
\hline The distribution of Variable 6.2 is the & 4.1 & .826 & Keep the null hypothesis \\
same on the categories of variable 4.1. & 6.2 & & & \\
The distribution of Variable 14.3 is the & 4.1 & .328 & 2,231 & Keep the null hypothesis \\
same on the categories of variable 4.1. & 14.3 & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline The distribution of Variable 5 is the same on the categories of variable 4.2. & 4.2
5 & . 022 & 7,599 & Reject the null hypothesis \\
\hline The distribution of Variable 6.1 is the same on the categories of variable 4.2. & \[
\begin{aligned}
& 4.2 \\
& 6.1
\end{aligned}
\] & . 603 & 1,012 & Keep the null hypothesis \\
\hline The distribution of Variable 6.2 is the same on the categories of variable 4.2. & 4.2
6.2 & . 728 & ,634 & Keep the null hypothesis \\
\hline The distribution of Variable 14.3 is the same on the categories of variable 4.2. & \[
\begin{gathered}
4.2 \\
14.3
\end{gathered}
\] & . 030 & 7,036 & Reject the null hypothesis \\
\hline
\end{tabular}

Table A7a.4, Kruskal-Wallis Test for independent samples, variable 4.1 and 4.2/5, 6.1, 6.2, 14.3

APPENDIX 7 - EFL Questionnaire Inferential statistical analyses


Figure A7a.4.1, Kruskal-Wallis Test for independent samples, variables 4.1 and 5


Figure A7a.4.3, Kruskal-Wallis Test for independent samples, variables 4.1 and 6.2


Figure A7a.4.5, Kruskal-Wallis Test for independent samples, variables 4.2 and 5


Figure A7a.4.7, Kruskal-Wallis Test for independent samples, variables 4.2 and 6.2


Figure A7a.4.2, Kruskal-Wallis Test for independent samples, variables 4.1 and 6.1


Figure A7a.4.4, Kruskal-Wallis Test for independent samples, variables 4.1 and 14.3


Figure A7a.4.6, Kruskal-Wallis Test for independent samples, variables 4.2 and 6.1


Figure A7a.4.8, Kruskal-Wallis Test for independent samples, variables 4.2 and 14.3
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Mann-Whitney U Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & \(z\) & Decision \\
\hline The distribution of Variable 5 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
5
\end{gathered}
\] & . 012 & 15640,500 & -2.524 & Reject the null hypothesis \\
\hline The distribution of Variable 6.1 is the same on the Research subscriber categories. & \[
\begin{aligned}
& 7.1 \\
& 6.1
\end{aligned}
\] & . 089 & 20558,000 & 1.699 & Keep the null hypothesis \\
\hline The distribution of Variable 6.2 is the same on the Research subscriber categories. & \[
\begin{aligned}
& 7.1 \\
& 6.2
\end{aligned}
\] & . 361 & 17528,500 & -. 913 & Keep the null hypothesis \\
\hline The distribution of Variable 14.3 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
14.3
\end{gathered}
\] & . 779 & 18893,500 & \[
.281
\] & Keep the null hypothesis \\
\hline The distribution of Variable 5 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
5
\end{gathered}
\] & . 007 & 11355,500 & -2.720 & Reject the null hypothesis \\
\hline The distribution of Variable 6.1 is the same on the Researcher categories. & \[
\begin{aligned}
& 7.2 \\
& 6.1
\end{aligned}
\] & . 256 & 12967,500 & -1.135 & Keep the null hypothesis \\
\hline The distribution of Variable 6.2 is the same on the Researcher categories. & \[
\begin{aligned}
& 7.2 \\
& 6.2
\end{aligned}
\] & . 042 & 12074,500 & -2.033 & Reject the null hypothesis \\
\hline The distribution of Variable 14.3 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
14.3
\end{gathered}
\] & . 180 & 12823,000 & -1.341 & Keep the null hypothesis \\
\hline The distribution of Variable 5 is the same on the Author categories. & \[
\begin{gathered}
7.3 \\
5
\end{gathered}
\] & . 291 & 5975,500 & -1.056 & Keep the null hypothesis \\
\hline The distribution of Variable 6.1 is the same on the Author categories. & \[
\begin{aligned}
& 7.3 \\
& 6.1
\end{aligned}
\] & . 286 & 5969,500 & -1.067 & Keep the null hypothesis \\
\hline The distribution of Variable 6.2 is the same on the Author categories. & \[
\begin{aligned}
& 7.3 \\
& 6.2
\end{aligned}
\] & . 560 & 7119,500 & . 583 & Keep the null hypothesis \\
\hline The distribution of Variable 14.3 is the same on the Author categories & \[
\begin{gathered}
7.3 \\
14.3
\end{gathered}
\] & . 335 & 6073,500 & -. 964 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7a.5, Mann-Whitney U Test for independent samples, variable 7.1, 7.2 and 7.3/5, 6.1, 6.2, 14.3


Figure A7a.5.1, Mann-Whitney U Test for independent samples, variables 7.1 and 5


Figure A7a.5.3, Mann-Whitney U Test for independent samples, variables 7.1 and 6.2


Figure A7a.5.5, Mann-Whitney U Test for independent samples, variables 7.2 and 5


Figure A7a.5.2, Mann-Whitney U Test for independent samples, variables 7.1 and 6.1


Figure A7a.5.4, Mann-Whitney U Test for independent samples, variables 7.1 and 14.3


Figure A7a.5.6, Mann-Whitney U Test for independent samples, variables 7.2 and 6.1


Figure A7a.5.7, Mann-Whitney U Test for independent samples, variables 7.2 and 6.2


Figure A7a5.8, Mann-Whitney U Test for independent samples, variables 7.2 and 14.3

Figure A7a.5.9, Mann-Whitney U Test for independent samples, variables 7.3 and 5


Figure A7a.5.11, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 6.2



Figure A7a.5.10, Mann-Whitney U Test for independent samples, variables 7.3 and 6.1


Figure A7a.5.12, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 14.3

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\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Spearman's rho} \\
\hline & & 5 & 6.1 & 6.2 & 14.3 \\
\hline \multirow[t]{2}{*}{5} & Correlation coefficient & 1,000 & . 232 ** & \(190{ }^{* *}\) & \(135{ }^{* *}\) \\
\hline & Sig. (two-tailed) & & <. 001 & <. 001 & . 004 \\
\hline \multirow[t]{2}{*}{6.1} & Correlation coefficient & . \(232 * *\) & 1,000 & . \(262{ }^{* *}\) & . \(287 * *\) \\
\hline & Sig. (two-tailed) & <. 001 & & <. 001 & <. 001 \\
\hline \multirow[t]{2}{*}{6.2} & Correlation coefficient & 190** & . \(262{ }^{* *}\) & 1,000 & . \(100{ }^{*}\) \\
\hline & Sig. (two-tailed) & <. 001 & <. 001 & & . 037 \\
\hline \multirow[t]{2}{*}{14.3} & Correlation coefficient & 135** & . \(287 *\) & .100* & 1,000 \\
\hline & Sig. (two-tailed) & . 004 & <. 001 & . 037 & \\
\hline
\end{tabular}

Table A7a.6, Spearman's rank correlation coefficient, variables 5, 6.1, 6.2, 14.3
\({ }^{* *}\) The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05

Figures and tables relating to research question 2b
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Kruskal-Wallis Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 8.1 is the same on the school categories. & \[
\begin{gathered}
\hline 1 \\
8.1
\end{gathered}
\] & . 859 & 3,982 & Keep the null hypothesis \\
\hline The distribution of Variable 8.2 is the same on the school categories. & \[
\begin{gathered}
1 \\
8.2
\end{gathered}
\] & . 690 & 5,616 & Keep the null hypothesis \\
\hline The distribution of Variable 11 is the same on the school categories. & \[
\begin{gathered}
1 \\
11
\end{gathered}
\] & . 242 & 10,339 & Keep the null hypothesis \\
\hline The distribution of Variable 14.1 is the same on the school categories. & \[
\begin{gathered}
1 \\
14.1
\end{gathered}
\] & . 329 & 9,159 & Keep the null hypothesis \\
\hline The distribution of Variable 14.2 is the same on the school categories. & \[
\begin{gathered}
1 \\
14.2
\end{gathered}
\] & . 188 & 11,242 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7b.1, Kruskal-Wallis Test for independent samples, variable 1/8.1, 8.2, 11, 14.1, 14.2


Figure A7b.1.1, Kruskal-Wallis Test for independent samples, variables 1 and 8.1


Figure A7b.1.3, Kruskal-Wallis Test for independent samples, variables 1 and 11


Figure A7b.1.2, Kruskal-Wallis Test for independent samples, variables 1 and 8.2


Figure A7b.1.4, Kruskal-Wallis Test for independent samples, variables 1 and 14.1


Figure A7b.1.5, Kruskal-Wallis Test for independent samples, variables 1 and 14.2

\section*{Kruskal-Wallis Test for independent samples}
\begin{tabular}{|c|c|c|c|c|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 8.1 is the same on the experience categories. & \[
\begin{gathered}
\hline 2 \\
8.1
\end{gathered}
\] & . 245 & 6,687 & Keep the null hypothesis \\
\hline The distribution of Variable 8.2 is the same on the experience categories. & \[
\begin{gathered}
2 \\
8.2
\end{gathered}
\] & . 007 & 16,067 & Reject the null hypothesis \\
\hline The distribution of Variable 11 is the same on the experience categories. & \[
\begin{gathered}
2 \\
11
\end{gathered}
\] & . 603 & 3,634 & Keep the null hypothesis \\
\hline The distribution of Variable 14.1 is the same on the experience categories. & \[
\begin{gathered}
2 \\
14.1
\end{gathered}
\] & . 833 & 2,114 & Keep the null hypothesis \\
\hline The distribution of Variable 14.2 is the same on the experience categories. & \[
2
\]
\[
14.2
\] & . 660 & 3,261 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7b.2, Kruskal-Wallis Test for independent samples, variable 2/8.1, 8.2, 11, 14.1, 14.2


Figure A7b.2.1, Kruskal-Wallis Test for independent samples, variables 2 and 8.1


Figure A7b.2.2, Kruskal-Wallis Test for independent samples, variables 2 and 8.2


Figure A7b.2.3, Kruskal-Wallis Test for independent samples, variables 2 and 11



Figure A7b.2.4, Kruskal-Wallis Test for independent samples, variables 2 and 14.1

Figure A7b.2.5, Kruskal-Wallis Test for independent samples, variables 2 and 14.2

Kruskal-Wallis Test for independent samples
\begin{tabular}{|c|c|c|c|c|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 8.1 is the & 3 & . 002 & 22,550 & Reject the null hypothesis \\
\hline same on the age categories. & 8.1 & & & \\
\hline The distribution of Variable 8.2 is the same on the age categories. & \[
\begin{gathered}
3 \\
8.2
\end{gathered}
\] & . 134 & 11,118 & Keep the null hypothesis \\
\hline The distribution of Variable 11 is the same on the age categories. & \[
\begin{gathered}
3 \\
11
\end{gathered}
\] & . 743 & 4,314 & Keep the null hypothesis \\
\hline The distribution of Variable 14.1 is the same on the age categories. & \[
\begin{gathered}
3 \\
14.1
\end{gathered}
\] & . 619 & 5,333 & Keep the null hypothesis \\
\hline The distribution of Variable 14.2 is the same on the age categories. & \[
\begin{gathered}
3 \\
14.2
\end{gathered}
\] & . 216 & 9,547 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7b.3, Kruskal-Wallis Test for independent samples, variable 3/8.1, 8.2, 11, 14.1, 14.2


Figure A7b.3.1, Kruskal-Wallis Test for independent samples, variables 3 and 8.1


Figure A7b.3.3, Kruskal-Wallis Test for independent samples, variables 3 and 11



Figure A7b.3.2, Kruskal-Wallis Test for independent samples, variables 3 and 8.2


Figure A7b.3.4, Kruskal-Wallis Test for independent samples, variables 3 and 14.1

Figure A7b.3.5, Kruskal-Wallis Test for independent samples, variables 3 and 14.2
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Mann-Whitney U Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & z & Decision \\
\hline The distribution of Variable 8.1 is the same on the Research subscriber categories. & \[
\begin{aligned}
& \hline 7.1 \\
& 8.1
\end{aligned}
\] & <. 001 & 10031,500 & -7.354 & Reject the null hypothesis \\
\hline The distribution of Variable 8.2 is the same on the Research subscriber categories. & \[
\begin{aligned}
& 7.1 \\
& 8.2
\end{aligned}
\] & . 153 & 16924,000 & -1.428 & Keep the null hypothesis \\
\hline The distribution of Variable 11 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
11
\end{gathered}
\] & <. 001 & 12997,000 & -4.859 & Reject the null hypothesis \\
\hline The distribution of Variable 14.1 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
14.1
\end{gathered}
\] & . 037 & 16168,000 & -2.087 & Reject the null hypothesis \\
\hline The distribution of Variable 14.2 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
14.2
\end{gathered}
\] & . 273 & 17310,500 & -1.095 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 8.1 is the same on the Researcher categories. & \[
\begin{aligned}
& 7.2 \\
& 8.1
\end{aligned}
\] & <. 001 & 9748,500 & -4.311 & Reject the null hypothesis \\
\hline The distribution of Variable 8.2 is the same on the Researcher categories. & \[
\begin{aligned}
& 7.2 \\
& 8.2
\end{aligned}
\] & . 019 & 11742,500 & -2.348 & Reject the null hypothesis \\
\hline The distribution of Variable 11 is the same on the Researcher categories. & 7.2
11 & . 005 & 11318,500 & -2.794 & Reject the null hypothesis \\
\hline The distribution of Variable 14.1 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
14.1
\end{gathered}
\] & . 020 & 11772,500 & -2.326 & Reject the null hypothesis \\
\hline The distribution of Variable 14.2 is the same on the Researcher categories. & 7.2
14.2 & . 066 & 12260,500 & -1.836 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 8.1 is the same on the Author categories. & 7.3
8.1 & . 070 & 5448,500 & -1.813 & Keep the null hypothesis \\
\hline The distribution of Variable 8.2 is the same on the Author categories. & \[
\begin{aligned}
& 7.3 \\
& 8.2
\end{aligned}
\] & . 010 & 4919,500 & -2.574 & Reject the null hypothesis \\
\hline The distribution of Variable 11 is the same on the Author categories. & \[
\begin{aligned}
& 7.3 \\
& 11
\end{aligned}
\] & . 089 & 5540,500 & -1.700 & Keep the null hypothesis \\
\hline The distribution of Variable 14.1 is the same on the Author categories & \[
\begin{gathered}
7.3 \\
14.1
\end{gathered}
\] & . 288 & 5977,000 & -1.062 & Keep the null hypothesis \\
\hline The distribution of Variable 14.2 is the same on the Author categories & 7.3
14.2 & . 230 & 5877,500 & -1.201 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7b.4, Mann-Whitney U Test for independent samples, variable 7.1, 7.2 and 7.3/8.1, 8.2, 11, 14.1, 14.2

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Figure A7b.4.1, Mann-Whitney U Test for independent samples, variables 7.1 and 8.1


Figure A7b.4.3, Mann-Whitney U Test for independent samples, variables 7.1 and 11


Figure A7b.4.5, Mann-Whitney U Test for independent samples, variables 7.1 and 14.2

Figure A7b.4.2, Mann-Whitney U Test for independent samples, variables 7.1 and 8.2

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Figure A7b.4.4, Mann-Whitney U Test for independent samples, variables 7.1 and 14.1

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Figure A7b.4.6, Mann-Whitney U Test for independent samples, variables 7.2 and 8.1


Figure A7b.4.7, Mann-Whitney U Test for independent samples, variables 7.2 and 8.2


Figure A7b.4.8, Mann-Whitney U Test for independent samples, variables 7.2 and 11


Figure A7b.4.9, Mann-Whitney U Test for independent samples, variables 7.2 and 14.1


Figure A7b.4.11, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 8.1

Research researcher


Figure A7b..10, Mann-Whitney U Test for independent samples, variables 7.2 and 14.2

Research author


Figure A7b.4.12, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 8.2


Figure A7b.4.13, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 11



Figure A7b.4.14, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 14.1

Figure A7b.4.15, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 14.2
\begin{tabular}{lccccll|}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline The distribution of Variable 12 is the & 1 & .850 & 81,729 & 96 & Keep the null \\
same on the school categories. & 12 & & & & hypothesis \\
The distribution of Variable 16 is the & 1 & .311 & 102,299 & 96 & Keep the null \\
same on the school categories. & 16 & & & hypothesis \\
\hline
\end{tabular}

Table A7b.5, Chi-square Test, variable 1/12, 16
\begin{tabular}{lccccll}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline The distribution of Variable 12 is the & 2 & .151 & 71,290 & 60 & Keep the null \\
same on the experience categories. & 12 & & & hypothesis \\
The distribution of Variable 16 is the & 2 & .083 & 75,754 & 60 & Keep the null \\
same on the experience categories. & 16 & & & hypothesis \\
\hline
\end{tabular}

Table A7b.6, Chi-square Test, variable 2/12, 16


Figure A7b.5.1, Chi-square Test, variables 1 and 12


Figure A7b.5.2, Chi-square Test, variables 1 and 16


Figure A7b.6.1, Chi-square Test, variables 2 and 12

Figure A7b.6.2, Chi-square
Test, variables 2 and 16
\begin{tabular}{lccccll|}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & \(\mathbf{d f}\) & Decision \\
\hline The distribution of Variable 12 is the & 3 & .077 & 103,142 & 84 & Keep the null \\
same on the age categories. & 12 & & & & hypothesis \\
The distribution of Variable 16 is the & 3 & .024 & 111,502 & 84 & Reject the null \\
same on the age categories. & 16 & & & hypothesis \\
\hline
\end{tabular}

Table A7b.7, Chi-square Test, variable 3/12, 16


Figure A7b.7.1, Chi-square Test, variables 3 and 12


Figure A7b.7.2, Chi-square Test, variables 3 and 16
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Chi-square Test} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline The distribution of Variable 12 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
12
\end{gathered}
\] & . 333 & 13,518 & 12 & Keep the null hypothesis \\
\hline The distribution of Variable 16 is the same on the Research subscriber categories. & \[
\begin{aligned}
& 7.1 \\
& 16
\end{aligned}
\] & . 857 & 7,015 & 12 & Keep the null hypothesis \\
\hline The distribution of Variable 12 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
12
\end{gathered}
\] & . 628 & 9,862 & 12 & Keep the null hypothesis \\
\hline The distribution of Variable 16 is the same on the Researcher categories. & \[
\begin{aligned}
& 7.2 \\
& 16
\end{aligned}
\] & \[
.001^{a}
\] & \[
32,051
\] & 12 & Reject the null hypothesis \\
\hline \multicolumn{6}{|l|}{} \\
\hline
\end{tabular}
\begin{tabular}{lccccl|}
\hline The distribution of Variable 12 is the same & 7.3 & .588 & 10,319 & 12 & \begin{tabular}{l} 
Keep the null \\
hypothesis
\end{tabular} \\
on the Author categories. & 12 & & & 12 & \begin{tabular}{l} 
Keep the null \\
hypothesis
\end{tabular} \\
\hline The distribution of Variable 16 is the same & 7.3 & .246 & 14,911 & & 16
\end{tabular}

Table A7b.8, Chi-square Test, variable 7.1, 7.2, 7.3/12, 16


Figure A7b.8.1, Chi-square Test, variables 7.1 and 12
Figure A7b.8.2, Chi-square Test, variables 7.1 and 16


Figure A7b.8.3, Chi-square Test, variables 7.2 and 12


Figure A7b.8.4, Chi-square Test, variables 7.2 and 16


Figure A7b.8.5, Chi-square Test, variables 7.3 and 12


Figure A7b.8.6, Chi-square Test, variables 7.3 and 16
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{}} & \multicolumn{7}{|c|}{Spearman's rho} \\
\hline & & 8.1 & 8.2 & 11 & 12 & 14.1 & 14.2 & 16 \\
\hline \multirow[t]{2}{*}{8.1} & Correlation coefficient & 1,000 & . \(431{ }^{* *}\) & . 420 ** & . \(162{ }^{* *}\) & . 342 ** & . 260 ** & . 180 ** \\
\hline & Sig. (two-tailed) & & <. 001 & <. 001 & <. 001 & <. 001 & <. 001 & <. 001 \\
\hline \multirow[t]{2}{*}{8.2} & Correlation coefficient & . 431 ** & 1,000 & . \(268{ }^{* *}\) & . 093 & . \(195 *\) & . 260 ** & . 065 \\
\hline & Sig. (two-tailed) & <. 001 & & <. 001 & . 052 & <. 001 & <. 001 & . 172 \\
\hline \multirow[t]{2}{*}{11} & Correlation coefficient & . 420 ** & . \(268{ }^{* *}\) & 1,000 & . \(214{ }^{* *}\) & . 309 ** & .287** & . 169 ** \\
\hline & Sig. (two-tailed) & <. 001 & <. 001 & & <. 001 & <. 001 & <. 001 & <. 001 \\
\hline \multirow[t]{2}{*}{12} & Correlation coefficient & . \(162{ }^{* *}\) & . 093 & . \(214 * *\) & 1,000 & . 131 ** & . 044 & . 226 ** \\
\hline & Sig. (two-tailed) & <. 001 & . 052 & <. 001 & & . 006 & . 357 & <. 001 \\
\hline \multirow[t]{2}{*}{14.1} & Correlation coefficient & . 342 ** & . \(195 *\) & . \(309 *\) & . \(131{ }^{* *}\) & 1,000 & . \(100{ }^{*}\) & . 212 ** \\
\hline & Sig. (two-tailed) & <. 001 & <. 001 & <. 001 & . 006 & & . 037 & <. 001 \\
\hline \multirow[t]{2}{*}{14.2} & Correlation coefficient & . 260 ** & . 260 ** & . 287 ** & . 044 & . \(100{ }^{*}\) & 1,000 & . 156 ** \\
\hline & Sig. (two-tailed) & <. 001 & <. 001 & <. 001 & . 357 & . 037 & & . 001 \\
\hline \multirow[t]{2}{*}{16} & Correlation coefficient & . 180 ** & . 065 & . \(169 *\) & . 226 ** & . 212 ** & .156** & 1,000 \\
\hline & Sig. (two-tailed) & <. 001 & . 172 & <. 001 & <. 001 & <. 001 & . 001 & \\
\hline
\end{tabular}

Table A7b.9, Spearman's rank correlation coefficient, variables 8.1, 8.2, 11, 12, 14.1, 14.2, 16
\({ }^{* *}\) The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05

Figures and tables relating to research question 2c
\begin{tabular}{lccccl|}
\hline & \multicolumn{2}{c|}{ Kruskal-Wallis Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 9.1 is the & 1 & .222 & 10,649 & Keep the null hypothesis \\
same on the school categories. & 9.1 & & & \\
\hline The distribution of Variable 9.2 is the & 1 & .739 & 5,176 & Keep the null hypothesis \\
same on the school categories. & 9.2 & & & \\
The distribution of Variable 10 is the & 1 & .478 & 7,556 & Keep the null hypothesis \\
same on the school categories. & 10 & & & \\
The distribution of Variable 13 is the & 1 & .873 & 3,819 & Keep the null hypothesis \\
same on the school categories. & 13 & & & \\
\hline
\end{tabular}

Table A7c.1, Kruskal-Wallis Test for independent samples, variable 1/9.1, 9.2, 10, 13


Figure A7c.1.1, Kruskal-Wallis Test for independent samples, variables 1 and 9.1


Figure A7c.1.3, Kruskal-Wallis Test for independent samples, variables 1 and 10


Figure A7c.1.2, Kruskal-Wallis Test for independent samples, variables 1 and 9.2


Figure A7c.1.4, Kruskal-Wallis Test for independent samples, variables 1 and 13

Kruskal-Wallis Test for independent samples
\begin{tabular}{lcccl|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 9.1 is the same & 2 & .071 & 10,158 & Keep the null hypothesis \\
on the experience categories. & 9.1 & & & \\
The distribution of Variable 9.2 is the same & 2 & .321 & 5,853 & Keep the null hypothesis \\
on the experience categories. & 9.2 & & & \\
The distribution of Variable 10 is the same & 2 & .061 & 10,552 & Keep the null hypothesis \\
on the experience categories. & 10 & & & \\
The distribution of Variable 13 is the same & 2 & .087 & 9,624 & Keep the null hypothesis \\
on the experience categories. & 13 & & & \\
\hline
\end{tabular}

Table A7c.2, Kruskal-Wallis Test for independent samples, variable 2/9.1, 9.2, 10, 13


Figure A7c.2.2, Kruskal-Wallis Test for independent samples, variables 2 and 9.2


Figure A7c.2.4, Kruskal-Wallis Test for independent samples, variables 2 and 13
\begin{tabular}{lccccl|}
\hline & \multicolumn{3}{l|}{ Kruskal-Wallis Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 9.1 is the & 3 & .556 & 5,859 & Keep the null hypothesis \\
same on the age categories. & 9.1 & & & \\
The distribution of Variable 9.2 is the & 3 & .866 & 3,196 & Keep the null hypothesis \\
same on the age categories. & 9.2 & & & \\
The distribution of Variable 10 is the & 3 & .759 & 4,180 & Keep the null hypothesis \\
same on the age categories. & 10 & & & \\
The distribution of Variable 13 is the & 3 & .166 & 10,422 & Keep the null hypothesis \\
same on the age categories. & 13 & & & \\
\hline
\end{tabular}

Table A7c.3, Kruskal-Wallis Test for independent samples, variable 3/9.1, 9.2, 10, 13


Figure A7c.3.1, Kruskal-Wallis Test for independent samples, variables 3 and 9.1


Figure A7c.3.3, Kruskal-Wallis Test for independent samples, variables 3 and 10


Figure A7c.3.2, Kruskal-Wallis Test for independent samples, variables 3 and 9.2


Figure A7c.3.4, Kruskal-Wallis Test for independent samples, variables 3 and 13

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\begin{tabular}{lcccll|}
\hline \multicolumn{4}{c|}{ Kruskal-Wallis Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 9.1 is the & 4.1 & .374 & 1,968 & Keep the null hypothesis \\
same on the categories of variable 4.1. & 9.1 & & & \\
\hline The distribution of Variable 9.2 is the & 4.1 & .887 &, 239 & Keep the null hypothesis \\
same on the categories of variable 4.1. & 9.2 & & 8,670 & Reject the null hypothesis \\
The distribution of Variable 10 is the & 4.1 & .013 & & \\
same on the categories of variable 4.1. & 10 & & 8,850 & Reject the null hypothesis \\
The distribution of Variable 13 is the & 4.1 & .012 & & \\
same on the categories of variable 4.1. & 13 & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline The distribution of Variable 9.1 is the & 4.2 & . 234 & 2,906 & Keep the null hypothesis \\
\hline same on the categories of variable 4.2. & 9.1 & & & \\
\hline The distribution of Variable 9.2 is the & 4.2 & . 248 & 2,790 & Keep the null hypothesis \\
\hline same on the categories of variable 4.2. & 9.2 & & & \\
\hline The distribution of Variable 10 is the & 4.2 & . 124 & 4,180 & Keep the null hypothesis \\
\hline same on the categories of variable 4.2. & 10 & & & \\
\hline The distribution of Variable 13 is the & 4.2 & . 010 & 9,230 & Reject the null hypothesis \\
\hline same on the categories of variable 4.2. & 13 & & & \\
\hline
\end{tabular}

Table A7c.4, Kruskal-Wallis Test for independent samples, variable 4.1 and 4.2/9.1, 9.2, 10, 13


Figure A7c.4.1, Kruskal-Wallis Test for independent samples, variables 4.1 and 9.1


Figure A7c.4.2, Kruskal-Wallis Test for independent samples, variables 4.1 and 9.2


Figure A7c.4.3, Kruskal-Wallis Test for independent samples, variables 4.1 and 10


Figure A7c.4.5, Kruskal-Wallis Test for independent samples, variables 4.2 and 9.1


Figure A7c.4.7, Kruskal-Wallis Test for independent samples, variables 4.2 and 10


Figure A7c.4.4, Kruskal-Wallis Test for independent samples, variables 4.1 and 13


Figure A7c.4.6, Kruskal-Wallis Test for independent samples, variables 4.2 and 9.2


Figure A7c.4.8, Kruskal-Wallis Test for independent samples, variables 4.2 and 13
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Mann-Whitney U Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & z & Decision \\
\hline The distribution of Variable 9.1 is the same on the Research subscriber categories. & \[
\begin{aligned}
& \hline 7.1 \\
& 9.1
\end{aligned}
\] & . 017 & 21350,500 & 2.384 & Reject the null hypothesis \\
\hline The distribution of Variable 9.2 is the same on the Research subscriber categories. & \[
\begin{aligned}
& 7.1 \\
& 9.2
\end{aligned}
\] & . 638 & 19111,500 & . 470 & Keep the null hypothesis \\
\hline The distribution of Variable 10 is the same on the Research subscriber categories. & \[
\begin{aligned}
& 7.1 \\
& 10
\end{aligned}
\] & . 637 & 17988,500 & -. 471 & Keep the null hypothesis \\
\hline The distribution of Variable 13 is the same on the Research subscriber categories. & \[
\begin{aligned}
& 7.1 \\
& 13
\end{aligned}
\] & . 956 & 18646,500 & . 055 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 9.1 is the same on the Researcher categories. & 7.2
9.1 & . 513 & 14780,000 & . 654 & Keep the null hypothesis \\
\hline The distribution of Variable 9.2 is the same on the Researcher categories. & 7.2
9.2 & . 273 & 15195,000 & 1.097 & Keep the null hypothesis \\
\hline The distribution of Variable 10 is the same on the Researcher categories. & 7.2
10 & . 090 & 12395,000 & -1.697 & Keep the null hypothesis \\
\hline The distribution of Variable 13 is the same on the Researcher categories. & 7.2
13 & . 057 & 12183,500 & -1.900 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 9.1 is the same & 7.3 & . 595 & 6344,500 & -. 531 & Keep the null \\
\hline on the Author categories. & 9.1 & & & & hypothesis \\
\hline The distribution of Variable 9.2 is the same on the Author categories. & 7.3
9.2 & . 707 & 6461,000 & -. 376 & Keep the null hypothesis \\
\hline The distribution of Variable 10 is the same on the Author categories & 7.3
10 & . 046 & 5333,000 & -1.995 & Reject the null hypothesis \\
\hline The distribution of Variable 13 is the same on the Author categories & 7.3
13 & . 122 & 5628,500 & -1.548 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7c.5, Mann-Whitney U Test for independent samples, variable 7.1, 7.2 and 7.3/9.1, 9.2, 10, 13

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Figure A7c.5.1, Mann-Whitney U Test for independent samples, variables 7.1 and 9.1


Figure A7c.5.3, Mann-Whitney U Test for independent samples, variables 7.1 and 10


Figure A7c.5.5, Mann-Whitney U Test for independent samples, variables 7.2 and 9.1

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Figure A7c.5.2, Mann-Whitney U Test for independent samples, variables 7.1 and 9.2


Figure A7c.5.4, Mann-Whitney U Test for independent samples, variables 7.1 and 13


Figure A7c.5.6, Mann-Whitney U Test for independent samples, variables 7.2 and 9.2

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Figure A7c.5.7, Mann-Whitney U Test for independent samples, variables 7.2 and 10


Figure A7c.5.9, Mann-Whitney U Test for independent samples, variables 7.3 and 9.1


Figure A7c.5.11, Mann-Whitney U Test for independent samples, variables 7.3 and 10

Figure A7c.5.8, Mann-Whitney U Test for independent samples, variables 7.2 and 13


Figure A7c.5.10, Mann-Whitney U Test for independent samples, variables 7.3 and 9.2


Figure A7c.5.12, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 13
\begin{tabular}{lccccl|}
\hline & \multicolumn{2}{l}{ Kruskal-Wallis Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the & 1 & .516 & 7,194 & Keep the null hypothesis \\
same on the school categories. & 15.1 & & & \\
\hline The distribution of Variable 15.2 is the & 1 & .622 & 6,228 & Keep the null hypothesis \\
same on the school categories. & 15.2 & & & \\
The distribution of Variable 15.3 is the & 1 & .328 & 9,178 & Keep the null hypothesis \\
same on the school categories. & 15.3 & & & Keep the null hypothesis \\
The distribution of Variable 21.1 is the & 1 & .888 & 3,645 & & \\
same on the school categories. & 21.1 & & & \\
\hline
\end{tabular}

Table A7c.6, Kruskal-Wallis Test for independent samples, variable 1/15.1, 15.2, 15.3, 21.1


Figure A7c.6.1, Kruskal-Wallis Test for independent samples, variables 1 and 15.1


Figure A7c.6.3, Kruskal-Wallis Test for independent samples, variables 1 and 15.3


Figure A7c.6.2, Kruskal-Wallis Test for independent samples, variables 1 and 15.2


Figure A7c.6.4, Kruskal-Wallis Test for independent samples, variables 1 and 21.1

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Kruskal-Wallis Test for independent samples
\begin{tabular}{lccccl|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the same & 2 & .801 & 2,339 & Keep the null hypothesis \\
on the experience categories. & 15.1 & & & \\
The distribution of Variable 15.2 is the same & 2 & .949 & 1,159 & Keep the null hypothesis \\
on the experience categories. & 15.2 & & & \\
The distribution of Variable 15.3 is the same & 2 & .531 & 4,128 & Keep the null hypothesis \\
on the experience categories. & 15.3 & & & \\
The distribution of Variable 21.1 is the same & 2 & .397 & 5,154 & Keep the null hypothesis \\
on the experience categories. & 21.1 & & &
\end{tabular}

Table A7c.7, Kruskal-Wallis Test for independent samples, variable 2/15.1, 15.2, 15.3, 21.1


Figure A7c.7.1, Kruskal-Wallis Test for independent samples, variables 2 and 15.1


Figure A7c.7.3, Kruskal-Wallis Test for independent samples, variables 2 and 15.3

Figure A7c.7.2, Kruskal-Wallis Test for independent samples, variables 2 and 15.2


Figure A7c.7.4, Kruskal-Wallis Test for independent samples, variables 2 and 21.1
\begin{tabular}{lccccl|}
\hline & \multicolumn{3}{l|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the & 3 & .556 & 5,858 & Keep the null hypothesis \\
same on the age categories. & 15.1 & & & \\
The distribution of Variable 15.2 is the & 3 & .740 & 4,341 & Keep the null hypothesis \\
same on the age categories. & 15.2 & & & \\
The distribution of Variable 15.3 is the & 3 & .074 & 12,940 & Keep the null hypothesis \\
same on the age categories. & 15.3 & & & Keep the null hypothesis \\
The distribution of Variable 21.1 is the & 3 & .263 & 8,858 & & \\
same on the age categories. & 21.1 & & &
\end{tabular}

Table A7c.8, Kruskal-Wallis Test for independent samples, variable 3/15.1, 15.2, 15.3, 21.1


Figure A7c.8.1, Kruskal-Wallis Test for independent samples, variables 3 and 15.1


Figure A7c.8.3, Kruskal-Wallis Test for independent samples, variables 3 and 15.3


Figure A7c.8.2, Kruskal-Wallis Test for independent samples, variables 3 and 15.2


Figure A7c.8.4, Kruskal-Wallis Test for independent samples, variables 3 and 21.1

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\begin{tabular}{lccccl|}
\hline \multicolumn{5}{c|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the & 4.1 & .039 & 6,496 & Reject the null hypothesis \\
same on the categories of variable 4.1. & 15.1 & & & \\
\hline The distribution of Variable 15.2 is the & 4.1 & .487 & 1,438 & Keep the null hypothesis \\
same on the categories of variable 4.1. & 15.2 & & & \\
\hline The distribution of Variable 15.3 is the & 4.1 & .108 & 4,442 & Keep the null hypothesis \\
same on the categories of variable 4.1. & 15.3 & & & \\
\hline The distribution of Variable 21.1 is the & 4.1 & .042 & 6,354 & Reject the null hypothesis \\
same on the categories of variable 4.1. & 21.1 & & & \\
\hline
\end{tabular}
\begin{tabular}{lccccc|}
\hline The distribution of Variable 15.1 is the & 4.2 & .137 & 3,972 & Keep the null hypothesis \\
same on the categories of variable 4.2. & 15.1 & & & \\
\hline The distribution of Variable 15.2 is the & 4.2 & .233 & 2,914 & Keep the null hypothesis \\
same on the categories of variable 4.2. & 15.2 & & & \\
\hline The distribution of Variable 15.3 is the & 4.2 & .705 & Keep the null hypothesis \\
same on the categories of variable 4.2. & 15.3 & & & \\
\hline The distribution of Variable 21.1 is the & 4.2 & .540 & 1,231 & Keep the null hypothesis \\
same on the categories of variable 4.2. & 21.1 & & & \\
\hline
\end{tabular}

Table A7c.9, Kruskal-Wallis Test for independent samples, variable 4.1 and 4.2/15.1, 15.2, 15.3, 21.1


Figure A7c.9.1, Kruskal-Wallis Test for independent samples, variables 4.1 and 15.1


Figure A7c.9.2, Kruskal-Wallis Test for independent samples, variables 4.1 and 15.2


Figure A7c.9.3, Kruskal-Wallis Test for independent samples, variables 4.1 and 15.3


Figure A7c.9.5, Kruskal-Wallis Test for independent samples, variables 4.2 and 15.1


Figure A7c.9.7, Kruskal-Wallis Test for independent samples, variables 4.2 and 15.3


Figure A7c.9.4, Kruskal-Wallis Test for independent samples, variables 4.1 and 21.1


Figure A7c.9.6, Kruskal-Wallis Test for independent samples, variables 4.2 and 15.2


Figure A7c.9.8, Kruskal-Wallis Test for independent samples, variables 4.2 and 21.1
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Mann-Whitney U Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & z & Decision \\
\hline The distribution of Variable 15.1 is the same on the Research subscriber categories. & \[
\begin{gathered}
\hline 7.1 \\
15.1
\end{gathered}
\] & <. 001 & 13249,000 & -4.575 & Reject the null hypothesis \\
\hline The distribution of Variable 15.2 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
15.2
\end{gathered}
\] & . 006 & 15385,500 & -2.770 & Reject the null hypothesis \\
\hline The distribution of Variable 15.3 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
15.3
\end{gathered}
\] & . 907 & 18715,500 & . 117 & Keep the null hypothesis \\
\hline The distribution of Variable 21.1 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
21.1
\end{gathered}
\] & . 286 & 17350,500 & -1.068 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 15.1 is the same on the Researcher categories. & \[
\begin{gathered}
\hline 7.2 \\
15.1
\end{gathered}
\] & . 003 & 11110,500 & -2.960 & Reject the null hypothesis \\
\hline The distribution of Variable 15.2 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
15.2
\end{gathered}
\] & . 014 & 11635,500 & -2.468 & Reject the null hypothesis \\
\hline The distribution of Variable 15.3 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
15.3
\end{gathered}
\] & . 088 & 12429,500 & -1.705 & Keep the null hypothesis \\
\hline The distribution of Variable 21.1 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
21.1
\end{gathered}
\] & . 088 & 12402,000 & -1.707 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{lccccll|}
\hline The distribution of Variable 15.1 is the same & 7.3 & .057 & 5380,500 & -1.905 & Keep the null \\
on the Author categories. & 15.1 & & & & hypothesis \\
The distribution of Variable 15.2 is the same & 7.3 & .014 & 5017,500 & -2.448 & Reject the null \\
on the Author categories. & 15.2 & & & hypothesis \\
The distribution of Variable 15.3 is the same & 7.3 & .168 & 5774,000 & -1.379 & Keep the null \\
on the Author categories & 15.3 & & & hypothesis \\
The distribution of Variable 21.1 is the same & 7.3 & .352 & 6070,500 & -.930 & Keep the null \\
on the Author categories & 21.1 & & & hypothesis \\
\hline
\end{tabular}

Table A7c.10, Mann-Whitney U Test for independent samples, variable 7.1, 7.2 and 7.3/15.1, 15.2, 15.3, 21.1

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Figure A7c.10.1, Mann-Whitney U Test for independent samples, variables 7.1 and 15.1


Figure A7c.10.3, Mann-Whitney U Test for independent samples, variables 7.1 and 15.3


Figure A7c.10.5, Mann-Whitney U Test for independent samples, variables 7.2 and 15.1

Figure A7c.10.2, Mann-Whitney U Test for independent samples, variables 7.1 and 15.2

Rosoarch subscriber


Figure A7c.10.4, Mann-Whitney \(U\) Test for independent samples, variables 7.1 and 21.1

Figure A7c.10.6, Mann-Whitney U Test for independent samples, variables 7.2 and 15.2


Figure A7c.10.7, Mann-Whitney U Test for independent samples, variables 7.2 and 15.3


Figure A7c.10.9, Mann-Whitney U Test for independent samples, variables 7.3 and 15.1


Figure A7c.10.11, Mann-Whitney U Test for independent samples, variables 7.3 and 15.3

Research researcher


Figure A7c.10.8, Mann-Whitney \(U\) Test for independent samples, variables 7.2 and 21.1


Figure A7c.10.10, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 15.2

Figure A7c.10.12, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 21.1

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\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{9}{|c|}{Spearman's rho} \\
\hline & & 9.1 & 9.2 & 10 & 13 & 15.1 & 15.2 & 15.3 & 21.1 \\
\hline Correlation coefficient & 9.1 & 1,000 & . 034 & . \(143{ }^{* *}\) & . \(201{ }^{* *}\) & . 081 & . 037 & . \(146{ }^{* *}\) & -. 024 \\
\hline Sig. (two-tailed) & & & . 477 & . 003 & <. 001 & . 089 & . 441 & . 002 & . 613 \\
\hline Correlation coefficient & 9.2 & . 034 & 1,000 & -. 051 & -. 055 & -.095* & -. 044 & . 009 & -. 037 \\
\hline Sig. (two-tailed) & & . 477 & & . 289 & . 247 & . 047 & . 354 & . 847 & . 445 \\
\hline Correlation coefficient & 10 & . \(143{ }^{* *}\) & -. 051 & 1,000 & .243** & . 183 ** & . \(138{ }^{* *}\) & .097* & . \(143{ }^{* *}\) \\
\hline Sig. (two-tailed) & & . 003 & . 289 & & <. 001 & <. 001 & . 004 & . 042 & . 003 \\
\hline Correlation coefficient & 13 & . 201 ** & -. 055 & . 243 ** & 1,000 & . \(362{ }^{* *}\) & . \(247{ }^{* *}\) & . \(181{ }^{* *}\) & . \(136{ }^{* *}\) \\
\hline Sig. (two-tailed) & & <. 001 & . 247 & <. 001 & & <. 001 & <. 001 & <. 001 & . 004 \\
\hline Correlation coefficient & 15.1 & . 081 & -.095* & . 183 ** & . 362 ** & 1,000 & . \(432{ }^{* *}\) & . \(368{ }^{* *}\) & . \(364{ }^{* *}\) \\
\hline Sig. (two-tailed) & & . 089 & . 047 & <. 001 & <. 001 & & <. 001 & <. 001 & <. 001 \\
\hline Correlation coefficient & 15.2 & . 037 & -. 044 & . \(138{ }^{* *}\) & . \(247 * *\) & . \(432 *\) & 1,000 & . \(200{ }^{* *}\) & . \(226{ }^{* *}\) \\
\hline Sig. (two-tailed) & & . 441 & . 354 & . 004 & <. 001 & <. 001 & & <. 001 & <. 001 \\
\hline Correlation coefficient & 15.3 & . \(146{ }^{* *}\) & . 009 & . \(097{ }^{*}\) & . 181 ** & . 368 ** & . 200 ** & 1,000 & . 050 \\
\hline Sig. (two-tailed) & & . 002 & . 847 & . 042 & <. 001 & <. 001 & <. 001 & & . 295 \\
\hline Correlation coefficient & 21.1 & -. 024 & -. 037 & . 143 ** & . \(136{ }^{* *}\) & . 364 ** & . \(226{ }^{* *}\) & . 050 & 1,000 \\
\hline Sig. (two-tailed) & & . 613 & . 445 & . 003 & . 004 & <. 001 & <. 001 & . 295 & \\
\hline
\end{tabular}

Table A7c.11, Spearman's rank correlation coefficient, variables 9.1, 9.2, 10, 13, 15.1, 15.2, 15.3, 21.1
\({ }^{* *}\) The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05

Figures and tables relating to research question 2d
\begin{tabular}{lccccl|}
\hline & \multicolumn{3}{l|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the & 1 & .516 & 7,194 & Keep the null hypothesis \\
same on the school categories. & 15.1 & & & \\
The distribution of Variable 15.3 is the & 1 & .328 & 9,178 & Keep the null hypothesis \\
same on the school categories. & 15.3 & & & \\
\hline
\end{tabular}

Table A7d.1, Kruskal-Wallis Test for independent samples, variable 1/15.1,15.3


Figure A7d.1.1, Kruskal-Wallis Test for independent samples, variables 1 and 15.1


Figure A7d.1.2, Kruskal-Wallis Test for independent samples, variables 1 and 15.3
\begin{tabular}{lccccl|}
\hline \multicolumn{4}{c|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the & 2 & .801 & 2,339 & Keep the null hypothesis \\
same on the experience categories. & 15.1 & & & \\
The distribution of Variable 15.3 is the & 2 & .531 & 4,128 & Keep the null hypothesis \\
same on the experience categories. & 15.3 & & & \\
\hline
\end{tabular}

Table A7d.2, Kruskal-Wallis Test for independent samples, variable 3/15.1,15.3


Figure A7d.2.1, Kruskal-Wallis Test for independent samples, variables 2 and 15.1


Figure A7d.2-2, Kruskal-Wallis Test for independent samples, variables 2 and 15.3
\begin{tabular}{lccccl|}
\hline & \multicolumn{4}{c|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the & 3 & .556 & 5,858 & Keep the null hypothesis \\
same on the age categories. & 15.1 & & & \\
The distribution of Variable 15.3 is the & 3 & .074 & 12,940 & Keep the null hypothesis \\
same on the age categories. & 15.3 & & & \\
\hline
\end{tabular}

Table A7d.3, Kruskal-Wallis Test for independent samples, variable 2/15.1,15.3


Figure A7d.3.1, Kruskal-Wallis Test for independent samples, variables 3 and 15.1


Figure A7d.3.2, Kruskal-Wallis Test for independent samples, variables 3 and 15.3
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Mann-Whitney U Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & \(z\) & Decision \\
\hline The distribution of Variable 15.1 is the same on the Research subscriber categories. & \[
\begin{gathered}
\hline 7.1 \\
15.1
\end{gathered}
\] & <. 001 & 13249,000 & -4.575 & Reject the null hypothesis \\
\hline The distribution of Variable 15.3 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
15.3
\end{gathered}
\] & . 907 & 20558,000 & . 117 & Keep the null hypothesis \\
\hline The distribution of Variable 15.1 is the same on the Researcher categories. & \[
\begin{gathered}
\hline 7.2 \\
15.1
\end{gathered}
\] & . 003 & 11110,500 & -2.960 & Reject the null hypothesis \\
\hline The distribution of Variable 15.3 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
15.3
\end{gathered}
\] & . 088 & 12429,500 & -1.705 & Keep the null hypothesis \\
\hline The distribution of Variable 15.1 is the same on the Author categories. & \[
\begin{gathered}
\hline 7.3 \\
15.1
\end{gathered}
\] & . 057 & 5380,500 & -1.905 & Keep the null hypothesis \\
\hline The distribution of Variable 15.3 is the same on the Author categories. & \[
\begin{gathered}
7.3 \\
15.3
\end{gathered}
\] & . 168 & 5774,000 & -1.379 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7d.4, Mann-Whitney U Test for independent samples, variable 7.1, 7.2 and 7.3/15.1, 15.3


Figure A7d.4.1, Mann-Whitney U Test for independent samples, variables 7.1 and 15.1


Figure A7d.4.3, Mann-Whitney U Test for independent samples, variables 7.2 and 15.1


Figure A7d.4.5, Mann-Whitney U Test for independent samples, variables 7.3 and 15.1


Figure A7d.4.4, Mann-Whitney U Test for independent samples, variables 7.2 and 15.3


Figure A7d.4.6, Mann-Whitney U Test for independent samples, variables 7.3 and 15.3
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Kruskal-Wallis Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 17 is the same on the school categories. & \[
\begin{gathered}
1 \\
17
\end{gathered}
\] & . 547 & 6,900 & Keep the null hypothesis \\
\hline The distribution of Variable 18 is the same on the school categories. & \[
\begin{gathered}
1 \\
18
\end{gathered}
\] & . 432 & 8,018 & Keep the null hypothesis \\
\hline The distribution of Variable 19 is the same on the school categories. & \[
\begin{gathered}
1 \\
19
\end{gathered}
\] & . 587 & 6,538 & Keep the null hypothesis \\
\hline The distribution of Variable 20 is the same on the school categories. & \[
\begin{gathered}
1 \\
20
\end{gathered}
\] & . 755 & 5,019 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7d.5, Kruskal-Wallis Test for independent samples, variable 1/17, 18, 19, 20


Figure A7d.5.1, Kruskal-Wallis Test for independent samples, variables 1 and 17


Figure A7d.5.3, Kruskal-Wallis Test for independent samples, variables 1 and 19


Figure A7d.5.2, Kruskal-Wallis Test for independent samples, variables 1 and 18


Figure A7d.5.4, Kruskal-Wallis Test for independent samples, variables 1 and 20

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\begin{tabular}{lccccl|}
\hline \multicolumn{4}{c|}{ Kruskal-Wallis Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 17 is the & 2 & .047 & 11,224 & Reject the null hypothesis \\
same on the experience categories. & 17 & & & \\
\hline The distribution of Variable 18 is the & 2 & .404 & 5,099 & Keep the null hypothesis \\
same on the experience categories. & 18 & & & \\
The distribution of Variable 19 is the & 2 & .367 & 5,414 & Keep the null hypothesis \\
same on the experience categories. & 19 & & & \\
The distribution of Variable 20 is the & 2 & .309 & 5,976 & Keep the null hypothesis \\
same on the experience categories. & 20 & & & \\
\hline
\end{tabular}

Table A7d.6, Kruskal-Wallis Test for independent samples, variable 2/17, 18, 19, 20


Figure A7d.6.1, Kruskal-Wallis Test for independent samples, variables 2 and 17


Figure A7d.6.3, Kruskal-Wallis Test for independent samples, variables 2 and 19


Figure A7d.6.2, Kruskal-Wallis Test for independent samples, variables 2 and 18


Figure A7d.6.4, Kruskal-Wallis Test for independent samples, variables 2 and 20

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\begin{tabular}{lcccll|}
\hline & \multicolumn{3}{l|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 17 is the & 3 & .242 & 9,155 & Keep the null hypothesis \\
same on the age categories. & 17 & & & \\
The distribution of Variable 18 is the & 3 & .307 & 8,299 & Keep the null hypothesis \\
same on the age categories. & 18 & & \\
The distribution of Variable 19 is the & 3 & .854 & 3,317 & Keep the null hypothesis \\
same on the age categories. & 19 & & & \\
The distribution of Variable 20 is the & 3 & .193 & 9,926 & Keep the null hypothesis \\
same on the age categories. & 20 & & & \\
\hline
\end{tabular}

Table A7d.7, Kruskal-Wallis Test for independent samples, variable 3/17, 18, 19, 20


Figure A7d.7.1, Kruskal-Wallis Test for independent samples, variables 3 and 17


Figure A7d.7.3, Kruskal-Wallis Test for independent samples, variables 3 and 19


Figure A7d.7.2, Kruskal-Wallis Test for independent samples, variables 3 and 18


Figure A7d.7.4, Kruskal-Wallis Test for independent samples, variables 3 and 20
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Mann-Whitney U Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & z & Decision \\
\hline The distribution of Variable 17 is the same on the Research subscriber categories. & \[
\begin{aligned}
& \hline 7.1 \\
& 17
\end{aligned}
\] & . 343 & 17474,000 & -. 948 & Keep the null hypothesis \\
\hline The distribution of Variable 18 is the same on the Research subscriber categories. & \[
\begin{aligned}
& 7.1 \\
& 18
\end{aligned}
\] & . 184 & 17028,500 & -1.330 & Keep the null hypothesis \\
\hline The distribution of Variable 19 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
19
\end{gathered}
\] & . 448 & 17694,500 & -. 760 & Keep the null hypothesis \\
\hline The distribution of Variable 20 is the same on the Research subscriber categories. & \[
\begin{aligned}
& 7.1 \\
& 20
\end{aligned}
\] & . 068 & 16450,000 & -1.827 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 17 is the same on the Researcher categories. & \[
\begin{aligned}
& \hline 7.2 \\
& 17
\end{aligned}
\] & . 664 & 13675,500 & -. 434 & Keep the null hypothesis \\
\hline The distribution of Variable 18 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
18
\end{gathered}
\] & . 114 & 12509,500 & -1.579 & Keep the null hypothesis \\
\hline The distribution of Variable 19 is the same on the Researcher categories. & 7.2
19 & . 237 & 12913,500 & -1.183 & Keep the null hypothesis \\
\hline The distribution of Variable 20 is the same on the Researcher categories. & 7.2
20 & . 004 & 11160,500 & -2.907 & Reject the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 17 is the same on the Author categories. & 7.3
17 & . 625 & 7058,500 & . 488 & Keep the null hypothesis \\
\hline The distribution of Variable 18 is the same on the Author categories. & 7.3
18 & . 481 & 7210,500 & . 705 & Keep the null hypothesis \\
\hline The distribution of Variable 19 is the same on the Author categories. & 7.3
19 & . 430 & 7270,000 & . 789 & Keep the null hypothesis \\
\hline The distribution of Variable 20 is the same on the Author categories & 7.3
20 & . 202 & 5820,000 & -1.276 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7d.8, Mann-Whitney U Test for independent samples, variable 7.1, 7.2 and 7.3/17, 18, 19, 20


Figure A7d.8.1, Mann-Whitney U Test for independent samples, variables 7.1 and 17


Figure A7d.8.3, Mann-Whitney U Test for independent samples, variables 7.1 and 19


Figure A7d.8.5, Mann-Whitney U Test for independent samples, variables 7.2 and 17


Figure A7d.8.2, Mann-Whitney U Test for independent samples, variables 7.1 and 18


Figure A7d. 8.4, Mann-Whitney \(U\) Test for independent samples, variables 7.1 and 20


Figure A7d.8.6, Mann-Whitney U Test for independent samples, variables 7.2 and 18

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Figure A7d.8.7, Mann-Whitney U Test for independent samples, variables 7.2 and 19


Figure A7d.8.9, Mann-Whitney U Test for independent samples, variables 7.3 and 17


Figure A7d.8.11, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 19


Figure A7d.8.8, Mann-Whitney U Test for independent samples, variables 7.2 and 20


Figure A7d.8.10, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 18


Figure A7d.8.12, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 20
\begin{tabular}{lccccl|}
\hline & \multicolumn{2}{l}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 21.1 is the & 1 & .888 & 3,645 & Keep the null hypothesis \\
same on the school categories. & 21.1 & & & \\
The distribution of Variable 21.2 is the & 1 & .019 & 18,281 & Reject the null hypothesis \\
same on the school categories. & 21.2 & & \\
The distribution of Variable 22.1 is the & 1 & .010 & 20,205 & Reject the null hypothesis \\
same on the school categories. & 22.1 & & & \\
The distribution of Variable 22.2 is the & 1 & .001 & 25,223 & Reject the null hypothesis \\
same on the school categories. & 22.2 & & & \\
The distribution of Variable 22.3 is the & 1 & .507 & 7,281 & Keep the null hypothesis \\
same on the school categories. & 22.3 & & & \\
\hline
\end{tabular}

Table A7d.9, Kruskal-Wallis Test for independent samples, variable 1/21.1, 21.2, 22.1, 22.2, 22.3


Figure A7d.9.1, Kruskal-Wallis Test for independent samples, variables 1 and 21.1


Figure A7d.9.3, Kruskal-Wallis Test for independent samples, variables 1 and 22.1


Figure A7d.9.2, Kruskal-Wallis Test for independent samples, variables 1 and 21.2


Figure A7d.9.4, Kruskal-Wallis Test for independent samples, variables 1 and 22.2


Figure A7d.9.5, Kruskal-Wallis Test for independent samples, variables 1 and 22.3
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Kruskal-Wallis Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 21.1 is the same on the experience categories. & \[
\begin{gathered}
\hline 2 \\
21.1
\end{gathered}
\] & . 397 & 5,154 & Keep the null hypothesis \\
\hline The distribution of Variable 21.2 is the same on the experience categories. & \[
\begin{gathered}
2 \\
21.2
\end{gathered}
\] & . 043 & 11,435 & Reject the null hypothesis \\
\hline The distribution of Variable 22.1 is the same on the experience categories. & \[
\begin{gathered}
2 \\
22.1
\end{gathered}
\] & . 886 & 1,719 & Keep the null hypothesis \\
\hline The distribution of Variable 22.2 is the same on the experience categories. & \[
\begin{gathered}
2 \\
22.2
\end{gathered}
\] & . 320 & 5,865 & Keep the null hypothesis \\
\hline The distribution of Variable 22.3 is the same on the experience categories. & \[
\begin{gathered}
2 \\
22.3
\end{gathered}
\] & . 715 & 2,904 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7d.10, Kruskal-Wallis Test for independent samples, variable 2/21.1, 21.2, 22.1, 22.2, 22.3


Figure A7d.10.1, Kruskal-Wallis Test for independent samples, variables 2 and 21.1


Figure A7d.10.2, Kruskal-Wallis Test for independent samples, variables 2 and 21.2


Figure A7d.10.3, Kruskal-Wallis Test for independent samples, variables 2 and 22.1



Figure A7d.10.4, Kruskal-Wallis Test for independent samples, variables 2 and 22.2

Figure A7d.10.5, Kruskal-Wallis Test for independent samples, variables 2 and 22.3

Kruskal-Wallis Test for independent samples
\begin{tabular}{|c|c|c|c|c|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 21.1 is the same on the age categories. & \[
\begin{gathered}
\hline 3 \\
21.1
\end{gathered}
\] & . 263 & 8,858 & Keep the null hypothesis \\
\hline The distribution of Variable 21.2 is the same on the age categories. & \[
\begin{gathered}
3 \\
21.2
\end{gathered}
\] & . 329 & 8,040 & Keep the null hypothesis \\
\hline The distribution of Variable 22.1 is the same on the age categories. & \[
\begin{gathered}
3 \\
22.1
\end{gathered}
\] & . 625 & 5,290 & Keep the null hypothesis \\
\hline The distribution of Variable 22.2 is the same on the age categories. & \[
\begin{gathered}
3 \\
22.2
\end{gathered}
\] & . 058 & 13,616 & Keep the null hypothesis \\
\hline The distribution of Variable 22.3 is the same on the age categories. & \[
\begin{gathered}
3 \\
22.3
\end{gathered}
\] & . 536 & 6,031 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7d.11, Kruskal-Wallis Test for independent samples, variable 3/21.1, 21.2, 22.1, 22.2, 22.3


Figure A7d.11.1, Kruskal-Wallis Test for independent samples, variables 3 and 21.1


Figure A7d.11.3, Kruskal-Wallis Test for independent samples, variables 3 and 22.1



Figure A7d.11.2, Kruskal-Wallis Test for independent samples, variables 3 and 21.2


Figure A7d.11.4, Kruskal-Wallis Test for independent samples, variables 3 and 22.2

Figure A7d.11.5, Kruskal-Wallis Test for independent samples, variables 3 and 22.3
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Mann-Whitney U Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & z & Decision \\
\hline The distribution of Variable 21.1 is the same on the Research subscriber categories. & \[
\begin{gathered}
\hline 7.1 \\
21.1
\end{gathered}
\] & . 286 & 17350,500 & -1.068 & Keep the null hypothesis \\
\hline The distribution of Variable 21.2 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
21.2
\end{gathered}
\] & . 932 & 18677,500 & . 085 & Keep the null hypothesis \\
\hline The distribution of Variable 22.1 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
22.1
\end{gathered}
\] & . 128 & 16807,000 & -1.523 & Keep the null hypothesis \\
\hline The distribution of Variable 22.2 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
22.2
\end{gathered}
\] & . 469 & 19427,000 & . 725 & Keep the null hypothesis \\
\hline The distribution of Variable 22.3 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
22.3
\end{gathered}
\] & . 201 & 17129,500 & -1.278 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 21.1 is the same on the Researcher categories. & \[
\begin{gathered}
\hline 7.2 \\
21.1
\end{gathered}
\] & . 088 & 12402,000 & -1.707 & Keep the null hypothesis \\
\hline The distribution of Variable 21.2 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
21.2
\end{gathered}
\] & . 434 & 13355,500 & -. 783 & Keep the null hypothesis \\
\hline The distribution of Variable 22.1 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
22.1
\end{gathered}
\] & . 018 & 11710,500 & -2.370 & Reject the null hypothesis \\
\hline The distribution of Variable 22.2 is the same on the Researcher categories. & \[
\begin{gathered}
7.2 \\
22.2
\end{gathered}
\] & . 966 & 14074,500 & -. 043 & Keep the null hypothesis \\
\hline The distribution of Variable 22.3 is the same on the Researcher categories. & 7.2
22.3 & . 123 & 12588,000 & -1.544 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 21.1 is the same on the Author categories. & \[
\begin{gathered}
\hline 7.3 \\
21.1
\end{gathered}
\] & . 352 & 6070,500 & -. 930 & Keep the null hypothesis \\
\hline The distribution of Variable 21.2 is the same on the Author categories. & \[
\begin{gathered}
7.3 \\
21.2
\end{gathered}
\] & . 439 & 7235,500 & . 774 & Keep the null hypothesis \\
\hline The distribution of Variable 22.1 is the same on the Author categories. & \[
\begin{gathered}
7.3 \\
22.1
\end{gathered}
\] & . 364 & 6079,500 & -. 908 & Keep the null hypothesis \\
\hline The distribution of Variable 22.2 is the same on the Author categories. & \[
\begin{gathered}
7.3 \\
22.2
\end{gathered}
\] & . 175 & 7666,500 & 1.357 & Keep the null hypothesis \\
\hline The distribution of Variable 22.3 is the same on the Author categories & 7.3
22.3 & . 464 & 6215,500 & -. 732 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A7d.12, Mann-Whitney U Test for independent samples, variable 7.1, 7.2 and 7.3/21.1, 21.2, 22.1, 22.2, 22.3

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Figure A7d.12.1, Mann-Whitney \(U\) Test for independent samples, variables 7.1 and 21.1


Figure A7d.12.3, Mann-Whitney U Test for independent samples, variables 7.1 and 22.1


Figure A7d.12.5, Mann-Whitney U Test for independent samples, variables 7.1 and 22.3


Figure A7d.12.2, Mann-Whitney \(U\) Test for independent samples, variables 7.1 and 21.2


Figure A7d.12.4, Mann-Whitney U Test for independent samples, variables 7.1 and 22.2

Research researcher


Figure A7d.12.6, Mann-Whitney \(U\) Test for independent samples, variables 7.2 and 21.1


Figure A7d.12.7, Mann-Whitney U Test for independent samples, variables 7.2 and 21.2


Figure A7d.12.9, Mann-Whitney \(U\) Test for independent samples, variables 7.2 and 22.2


Figure A7d.12.11, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 21.1


Figure A7d.12.8, Mann-Whitney U Test for independent samples, variables 7.2 and 22.1


Figure A7d.12.10, Mann-Whitney U Test for independent samples, variables 7.2 and 22.3


Figure A7d.12.12, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 21.2

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Figure A7d.12.13, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 22.1

\section*{Research author}

Yss


Ressearch author


Figure A7d.12.14, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 22.2

Figure A7d.12.15, Mann-Whitney \(U\) Test for independent samples, variables 7.3 and 22.3

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\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{13}{|c|}{Spearman's rho} \\
\hline & & 15.1 & 15.3 & 17 & 18 & 19 & 20 & 21.1 & 21.2 & 22.1 & 22.2 & 22.3 \\
\hline Correlation coeff. & 15.1 & 1,000 & . \(368{ }^{* *}\) & -. 093 & -. 048 & -. 018 & . 453 ** & . \(364{ }^{* *}\) & . 061 & . 009 & -. 133 ** & . 031 \\
\hline Sig. (two-tailed) & & & <. 001 & . 050 & . 316 & . 706 & <. 001 & <. 001 & . 205 & . 858 & . 005 & . 513 \\
\hline Correlation coeff. & 15.3 & . \(368{ }^{* *}\) & 1,000 & -. 140 ** & -. \(104{ }^{*}\) & -. \(118{ }^{*}\) & . 160 ** & . 050 & -. 025 & -. 016 & . 006 & -. 087 \\
\hline Sig. (two-tailed) & & <. 001 & & . 003 & . 029 & . 013 & <. 001 & . 295 & . 596 & . 737 & . 895 & . 067 \\
\hline Correlation coeff. & 17 & -. 093 & \(-.140 * *\) & 1,000 & . \(645{ }^{* *}\) & .690** & . 008 & . 036 & . \(117^{*}\) & -. 004 & . 025 & . 085 \\
\hline Sig. (two-tailed) & & . 050 & . 003 & & <. 001 & <. 001 & . 873 & . 455 & . 014 & . 938 & . 607 & . 073 \\
\hline Correlation coeff. & 18 & -. 048 & -. \(104{ }^{*}\) & . \(645{ }^{* *}\) & 1,000 & .693* & -. 007 & -. 010 & . \(133 * *\) & . 010 & . 036 & . 072 \\
\hline Sig. (two-tailed) & & . 316 & . 029 & <. 001 & & <. 001 & . 884 & . 828 & . 005 & . 827 & . 453 & . 131 \\
\hline Correlation coeff. & 19 & -. 018 & -. \(118{ }^{*}\) & .690** & .693** & 1,000 & . 068 & . 071 & . \(143{ }^{* *}\) & . 021 & . 060 & . \(122{ }^{*}\) \\
\hline Sig. (two-tailed) & & . 706 & . 013 & <. 001 & <. 001 & & . 157 & . 140 & .003* & . 653 & . 212 & . 011 \\
\hline Correlation coeff. & 20 & . \(453{ }^{* *}\) & . 160 ** & . 008 & -. 007 & . 068 & 1,000 & . \(657{ }^{* *}\) & .293** & . 017 & -. 081 & . 002 \\
\hline Sig. (two-tailed) & & <. 001 & <. 001 & . 873 & . 884 & . 157 & & <. 001 & <,001 & . 727 & . 089 & . 962 \\
\hline Correlation coeff. & 21.1 & . \(364{ }^{* *}\) & . 050 & . 036 & -. 010 & . 071 & . \(657^{* *}\) & 1,000 & . \(307{ }^{* *}\) & -. 020 & -.117* & -. 022 \\
\hline Sig. (two-tailed) & & <. 001 & . 295 & . 455 & . 828 & . 140 & <. 001 & & <. 001 & . 672 & . 014 & . 640 \\
\hline Correlation coeff. & 21.2 & . 061 & -. 025 & . \(117^{*}\) & .133** & . \(143{ }^{*}\) & . 293 ** & . \(307 *\) & 1,000 & . 005 & . \(096{ }^{*}\) & -. 022 \\
\hline Sig. (two-tailed) & & . 205 & . 596 & . 014 & . 005 & . 003 & <. 001 & <. 001 & & . 917 & . 044 & . 645 \\
\hline Correlation coeff. & 22.1 & . 009 & -. 016 & -. 004 & . 010 & . 021 & . 017 & -. 020 & . 005 & 1,000 & .528** & -. 062 \\
\hline Sig. (two-tailed) & & . 858 & . 737 & . 938 & . 827 & . 653 & . 727 & . 672 & . 917 & & <. 001 & . 195 \\
\hline Correlation coeff. & 22.2 & -. 133 ** & . 006 & . 025 & . 036 & . 060 & -. 081 & -.117* & .096* & . \(528{ }^{* *}\) & 1,000 & -. 042 \\
\hline Sig. (two-tailed) & & . 005 & . 895 & . 607 & . 453 & . 212 & . 089 & ,014 & . 044 & <. 001 & & . 375 \\
\hline Correlation coeff. & 22.3 & . 031 & -. 087 & . 085 & . 072 & . \(122{ }^{*}\) & . 002 & -. 022 & -. 022 & -. 062 & -. 042 & 1,000 \\
\hline Sig. (two-tailed) & & . 513 & . 067 & . 073 & . 131 & . 011 & . 962 & . 640 & . 645 & . 195 & . 375 & \\
\hline
\end{tabular}

Table A7d.13, Spearman's rank correlation coefficient, variables 15.1, 15.3, 17, 18, 19, 20, 21.1, 21.2, 22.1, 22.2, 22.3
\({ }^{* *}\) The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05
\begin{tabular}{lcc|}
\hline Type of upper secondary school & \(\mathbf{N}^{\circ}\) & \% \\
\hline Liceo & 1 & 10 \\
Istituto Tecnico & 4 & 40 \\
Both & 5 & 50 \\
& Total & 10
\end{tabular}

Table A8.1, ISL Questionnaire, question 1.
\begin{tabular}{lcc|}
\hline \begin{tabular}{l} 
ISL Teaching \\
experience
\end{tabular} & \(\mathbf{N}^{\circ}\) & \(\mathbf{\%}\) \\
\hline Less than one year & 0 & 0 \\
1-5 years & 1 & 10 \\
6-10 years & 0 & 0 \\
11-20 years & 3 & 30 \\
21-30 years & 6 & 60 \\
30+ years & 0 & 0 \\
& Total & 10
\end{tabular}

Table A8.2, ISL Questionnaire, question 2.
\begin{tabular}{lcc|}
\hline Age range & \(\mathbf{N}^{\circ}\) & \% \\
\hline Under 25 & 1 & 10 \\
\(26-30\) years & 0 & 0 \\
\(31-40\) years & 1 & 10 \\
\(41-50\) years & 5 & 50 \\
\(51-60\) years & 3 & 30 \\
60+ years & 0 & 0 \\
Prefer not say & Total & 10
\end{tabular}

Table A8.3, ISL Questionnaire, question 3.
\begin{tabular}{lcccccccc|}
\hline \begin{tabular}{l} 
ISL specific learning objective \\
awareness
\end{tabular} & Yes & \% & No & \% & \begin{tabular}{c} 
I don't \\
know...
\end{tabular} & \% & Tot & \% \\
\hline \begin{tabular}{l} 
I have read the national guidelines \\
relating to the specific LO for ISL
\end{tabular} & 10 & 100 & 0 & 0 & 0 & 0 & 10 & 100 \\
\begin{tabular}{l} 
I am aware of the specific learning \\
objectives for ISL
\end{tabular} & 10 & 100 & 0 & 0 & 0 & 0 & 10 & 100 \\
\hline
\end{tabular}

Table A8.4, ISL Questionnaire, question 4.
\begin{tabular}{lcccccccc|}
\hline ISL specific learning objectives for & \multicolumn{6}{c|}{ Frequency scale - Very often to never } \\
upper secondary schools & \(\mathbf{6}\) & \(\mathbf{5}\) & \(\mathbf{4}\) & \(\mathbf{3}\) & \(\mathbf{2}\) & \(\mathbf{1}\) & Total \\
\hline I attend staff meetings to discuss the & 4 & 4 & 0 & 2 & 0 & 0 & 10 \\
established learning objectives & \(40 \%\) & \(40 \%\) & \(0 \%\) & \(20 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
I revise the best approaches for the & 2 & 8 & 0 & 0 & 0 & 0 & 10 \\
students to meet said LO & \(20 \%\) & \(80 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
I discuss the selection of instructional & 1 & 6 & 2 & 0 & 1 & 0 & 10 \\
media & \(10 \%\) & \(60 \%\) & \(20 \%\) & \(0 \%\) & \(10 \%\) & \(0 \%\) & \(100 \%\) \\
I decide the selection of instructional & 3 & 3 & 3 & 0 & 1 & 0 & 10 \\
media & \(30 \%\) & \(30 \%\) & \(30 \%\) & \(0 \%\) & \(10 \%\) & \(0 \%\) & \(100 \%\) \\
I develop (part of) a school curriculum & 1 & 3 & 3 & 0 & 2 & 1 & 10 \\
& \(10 \%\) & \(30 \%\) & \(30 \%\) & \(0 \%\) & \(20 \%\) & \(10 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A8.5, ISL Questionnaire, question 5.

ICT - Information and Communication Technology
ISL - Italian as a Second Language
LE - Language Education
LO - Learning Objectives
L2 - Foreign Language
SLL - Foreign Language Learning
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{The established specific learning objectives} & \multicolumn{8}{|c|}{Agreement scale - Strongly Agree to Strongly Disagree \({ }^{1}\)} \\
\hline & SD & A & PA & PD & D & SD & DK & Total \\
\hline ...are suitable for the curriculum proposed by the upper secondary school I teach in & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
7 \\
70 \%
\end{gathered}
\] & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...are suitable for a multicultural learning environment & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
4 \\
40 \%
\end{gathered}
\] & \[
\begin{gathered}
4 \\
40 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...are suitable for a digital learning environment & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
5 \\
50 \%
\end{gathered}
\] & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...are suitable for a multimodal learning environment & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
5 \\
50 \%
\end{gathered}
\] & \[
\begin{gathered}
4 \\
40 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...are suitable to promote lifelong learning & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...should be concretely implemented in class & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
4 \\
40 \%
\end{gathered}
\] & \[
\begin{gathered}
5 \\
50 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...should be an integral part of teacher training & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
5 \\
50 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...should be updated & \[
\begin{gathered}
6 \\
60 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline
\end{tabular}

Table A8.6, ISL Questionnaire, question 6.
\begin{tabular}{lcccccc|}
\hline Familiarity with research & Yes & \% & No & \% & Total & \% \\
\hline I am a subscriber to one or more printed journals & 2 & 20 & 8 & 80 & 10 & 100 \\
I am a researcher myself & 0 & 0 & 10 & 100 & 10 & 100 \\
I am an author myself & 0 & 0 & 10 & 100 & 10 & 100 \\
\hline
\end{tabular}

Table A8.7, ISL Questionnaire, question 7.
\begin{tabular}{lcccccccc|}
\hline Knowledge of the recently published & \multicolumn{7}{c|}{ Frequency scale - Very often to never } \\
research in the field & \(\mathbf{6}\) & \(\mathbf{5}\) & \(\mathbf{4}\) & \(\mathbf{3}\) & \(\mathbf{2}\) & \(\mathbf{1}\) & Total \\
\hline I receive updates in the field of & 0 & 1 & 2 & 5 & 1 & 1 & 10 \\
language education & \(0 \%\) & \(10 \%\) & \(20 \%\) & \(50 \%\) & \(10 \%\) & \(10 \%\) & \(100 \%\) \\
I read updated research in the field of & 0 & 1 & 3 & 3 & 2 & 1 & 10 \\
language education & \(0 \%\) & \(10 \%\) & \(30 \%\) & \(30 \%\) & \(20 \%\) & \(10 \%\) & \(100 \%\) \\
My school encourages teachers to & 1 & 3 & 2 & 4 & 0 & 0 & 10 \\
look for updates in our field & \(10 \%\) & \(30 \%\) & \(20 \%\) & \(40 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
My school provides teachers with & 1 & 1 & 4 & 2 & 1 & 1 & 10 \\
updated resources & \(10 \%\) & \(10 \%\) & \(40 \%\) & \(20 \%\) & \(10 \%\) & \(10 \%\) & \(100 \%\) \\
lindependently consult websites and & 1 & 2 & 5 & 0 & 0 & 2 & 10 \\
online resources related to language & \(10 \%\) & \(20 \%\) & \(50 \%\) & \(0 \%\) & \(0 \%\) & \(20 \%\) & \(100 \%\) \\
education & & & & & & & \\
\hline
\end{tabular}

Table A8.8, ISL Questionnaire, question 8.
\({ }^{1}\) Answer options for agreement scales are:
Strongly Agree (SA) Partially Disagree (PD)
Agree (A)
Partially Agree (PA)
Disagree (D)
Sometimes the option "I don't know enough about it" (DK) is added.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Relationship between research and school approaches} & \multicolumn{8}{|c|}{Agreement scale - Strongly Agree to Strongly Disagree} \\
\hline & SA & A & PA & PD & D & SD & DK & Tot \\
\hline The specific LO established for SLL are in step with the most recent studies in the field of LE & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
6 \\
60 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline The approaches proposed for SLL are in step with the most recent studies in the field of LE & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
7 \\
70 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline The school curricula are updated on the basis of the results obtained from studies in the LE field & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline The specific LO are updated on the basis of the results obtained from studies in the LE field & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline Most research studies fail to take into account many factors involved in everyday school reality & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
4 \\
40 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline
\end{tabular}

Table A8.9, ISL Questionnaire, question 9.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline My school & Yes & \% & No & \% & I don't know... & \% & Total & \% \\
\hline ...promotes digital approaches & 10 & 100 & 0 & 0 & 0 & 0 & 10 & 100 \\
\hline ...promotes multimodal approaches & 10 & 100 & 0 & 0 & 0 & 0 & 10 & 100 \\
\hline ...promotes multicultural approaches & 10 & 100 & 0 & 0 & 0 & 0 & 10 & 100 \\
\hline ...provides training opportunities that allow teachers to stay up to date & 6 & 60 & 2 & 20 & 2 & 20 & 10 & 100 \\
\hline ...invites teachers to do research & 3 & 30 & 5 & 50 & 2 & 20 & 10 & 100 \\
\hline ...provides teachers with tools and means to do research & 2 & 20 & 6 & 60 & 2 & 20 & 10 & 100 \\
\hline
\end{tabular}

Table A8.10, ISL Questionnaire, question 10.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Contact with the following terms} & \multicolumn{2}{|l|}{Research studies} & \multicolumn{2}{|r|}{In class} & \multicolumn{2}{|r|}{Teacher Training} & \multicolumn{2}{|c|}{Never} \\
\hline & \(\mathrm{N}^{\circ}\) & \% & \(\mathrm{N}^{\circ}\) & \% & \(\mathrm{N}^{\circ}\) & \% & \(\mathrm{N}^{\circ}\) & \% \\
\hline Literacy & 6 & 60 & 2 & 20 & 6 & 60 & 3 & 30 \\
\hline Digital Literacy & 6 & 60 & 2 & 20 & 7 & 70 & 2 & 20 \\
\hline Mode & 4 & 40 & 0 & 0 & 4 & 40 & 4 & 40 \\
\hline Medium & 5 & 50 & 0 & 0 & 2 & 20 & 6 & 60 \\
\hline Multimodality & 3 & 30 & 0 & 0 & 8 & 80 & 1 & 10 \\
\hline Multimodal Text & 3 & 30 & 1 & 10 & 9 & 90 & 1 & 10 \\
\hline Learning styles & 6 & 60 & 5 & 50 & 5 & 50 & 0 & 0 \\
\hline Learning modalities & 6 & 60 & 4 & 40 & 5 & 50 & 0 & 0 \\
\hline Multiliteracies & 5 & 50 & 2 & 20 & 3 & 30 & 5 & 50 \\
\hline New Literacies & 4 & 40 & 0 & 0 & 3 & 30 & 5 & 50 \\
\hline
\end{tabular}

Table A8.11, ISL Questionnaire, question 11.

\section*{APPENDIX 8 - ISL Questionnaire data}
\begin{tabular}{lll|}
\hline Literacy definitions - Categories & \(\mathbf{N}^{\circ}\) & \% \\
\hline Empty set & 2 & 20 \\
One word & 3 & 30 \\
Comprehension & 1 & 10 \\
Ability to read and write & 2 & 20 \\
Ability to read and write and communication & 2 & 20 \\
\hline
\end{tabular}

Table A8.12, ISL Questionnaire, question 12.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Areas covered during formal education and/or training} & \multicolumn{7}{|c|}{Opinion scale - Fully covered to not at all} \\
\hline & 6 & 5 & 4 & 3 & 2 & 1 & Tot \\
\hline \multirow[t]{2}{*}{Knowledge of the curriculum} & 2 & 2 & 5 & 0 & 0 & 1 & 10 \\
\hline & 20\% & 20\% & 50\% & 0\% & 0\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{Content and performance standards in my main subject field(s)} & 2 & 1 & 7 & 0 & 0 & 0 & 10 \\
\hline & 20\% & 10\% & 70\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{ICT skills for teaching} & 2 & 2 & 4 & 2 & 0 & 0 & 10 \\
\hline & 20\% & 20\% & 40\% & 20\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Pedagogical competencies in teaching my subject field(s)} & 1 & 3 & 5 & 1 & 0 & 0 & 10 \\
\hline & 10\% & 30\% & 50\% & 10\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Educational Psychology} & 1 & 2 & 2 & 5 & 0 & 0 & 10 \\
\hline & 10\% & 20\% & 20\% & 50\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Studies and theories related to my subject field(s)} & 0 & 4 & 3 & 3 & 0 & 0 & 10 \\
\hline & 0\% & 40\% & 30\% & 30\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Teaching students with special learning needs} & 0 & 2 & 1 & 4 & 2 & 1 & 10 \\
\hline & 0\% & 20\% & 10\% & 40\% & 20\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{Teaching in a multicultural or multilingual setting} & 1 & 2 & 5 & 0 & 1 & 1 & 10 \\
\hline & 10\% & 20\% & 50\% & 0\% & 10\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{Communicating with people from different cultures or countries} & 1 & 1 & 3 & 3 & 1 & 1 & 10 \\
\hline & 10\% & 10\% & 30\% & 30\% & 10\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{Teaching cross-curricular skills} & 1 & 3 & 1 & 4 & 0 & 1 & 10 \\
\hline & 10\% & 30\% & 10\% & 40\% & 0\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{Student assessment practices} & 1 & 3 & 0 & 6 & 0 & 0 & 10 \\
\hline & 10\% & 30\% & 0\% & 60\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{School management and administration} & 0 & 1 & 2 & 6 & 1 & 0 & 10 \\
\hline & 0\% & 10\% & 20\% & 60\% & 10\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Literacy} & 0 & 3 & 2 & 4 & 1 & 0 & 10 \\
\hline & 0\% & 30\% & 20\% & 40\% & 10\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{New Literacies} & 1 & 0 & 2 & 1 & 5 & 1 & 10 \\
\hline & 10\% & 0\% & 20\% & 10\% & 50\% & 10\% & 100\% \\
\hline
\end{tabular}

Table A8.13, ISL Questionnaire, question 13.
\begin{tabular}{lccccccc|}
\hline The concept of Literacy & \multicolumn{7}{c|}{ Agreement scale - Strongly Agree to Strongly Disagree } \\
& SA & A & PA & PD & D & SD & Tot \\
\hline ...has changed significantly over the last & 1 & 8 & 1 & 0 & 0 & 0 & 10 \\
few decades & \(10 \%\) & \(80 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
...enables students to achieve their goals & 1 & 6 & 3 & 0 & 0 & 0 & 10 \\
& \(10 \%\) & \(60 \%\) & \(30 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
...enables students to develop their & 1 & 7 & 2 & 0 & 0 & 0 & 10 \\
knowledge & \(10 \%\) & \(70 \%\) & \(20 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
...enables students to develop their & 1 & 8 & 1 & 0 & 0 & 0 & 10 \\
potential & \(10 \%\) & \(80 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
...is something teachers should focus their & 4 & 5 & 1 & 0 & 0 & 0 & 10 \\
attention on when teaching ISL & \(40 \%\) & \(50 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\)
\end{tabular}

\section*{APPENDIX 8 - ISL Questionnaire data}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline ...is something teachers should make sure their students are familiar with & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
6 \\
60 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...is a plural concept & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
5 \\
50 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...is a multimodal concept & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...involves multiple skills & \[
\begin{gathered}
3 \\
30 \%
\end{gathered}
\] & \[
\begin{gathered}
7 \\
70 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline ...involves a continuum of learning & \[
\begin{gathered}
5 \\
50 \%
\end{gathered}
\] & \[
\begin{gathered}
4 \\
40 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & & \[
\begin{gathered}
10 \% \\
100 \%
\end{gathered}
\] \\
\hline ...is taken into consideration by the specific LO established for L2 education in upper secondary schools & \[
\begin{gathered}
2 \\
20 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
6 \\
60 \%
\end{gathered}
\] & \[
\begin{gathered}
1 \\
10 \%
\end{gathered}
\] & \[
\begin{gathered}
0 \\
0 \%
\end{gathered}
\] & 0
\(0 \%\) & \[
\begin{gathered}
10 \\
100 \%
\end{gathered}
\] \\
\hline
\end{tabular}

Table A8.14, ISL Questionnaire, question 14.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{When in class, to convey meaning I resort to} & \multicolumn{7}{|c|}{Agreement scale - Strongly Agree to Strongly Disagree} \\
\hline & SA & A & PA & PD & D & SD & Tot \\
\hline \multirow[t]{2}{*}{...the use of printed texts} & 3 & 7 & 0 & 0 & 0 & 0 & 10 \\
\hline & 30\% & 70\% & 0\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of texts in digital format} & 0 & 7 & 3 & 0 & 0 & 0 & 10 \\
\hline & 0\% & 70\% & 30\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of various types of images} & 2 & 7 & 1 & 0 & 0 & 0 & 10 \\
\hline & 20\% & 70\% & 10\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of videos} & 2 & 7 & 1 & 0 & 0 & 0 & 10 \\
\hline & 20\% & 70\% & 10\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of audios} & 3 & 6 & 1 & 0 & 0 & 0 & 10 \\
\hline & 30\% & 60\% & 10\% & 0\% & 0\% & 0\% & 100\% \\
\hline ...the use of facial expressions and body & 2 & 4 & 3 & 1 & 0 & 0 & 10 \\
\hline language & 20\% & 40\% & 30\% & 10\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of proxemics} & 2 & 0 & 6 & 0 & 1 & 1 & 10 \\
\hline & 20\% & 0\% & 60\% & 0\% & 10\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of paralanguage} & 1 & 2 & 5 & 0 & 1 & 1 & 10 \\
\hline & 10\% & 20\% & 50\% & 0\% & 10\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{...interacting with objects} & 1 & 1 & 3 & 4 & 1 & 0 & 10 \\
\hline & 10\% & 10\% & 30\% & 40\% & 10\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of different means in one lesson} & 1 & 8 & 1 & 0 & 0 & 0 & 10 \\
\hline & 10\% & 80\% & 10\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the combination of two or more means at once} & 2 & 6 & 2 & 0 & 0 & 0 & 10 \\
\hline & 20\% & 60\% & 20\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{...the use of multimodal texts} & 0 & 5 & 5 & 0 & 0 & 0 & 10 \\
\hline & 0\% & 50\% & 50\% & 0\% & 0\% & 0\% & 100\% \\
\hline
\end{tabular}

Table A8.15, ISL Questionnaire, question 15.
\begin{tabular}{lcc|}
\hline Digital Literacy definitions - Categories & \(\mathbf{N}^{\circ}\) & \(\mathbf{\%}\) \\
\hline Empty set & 1 & 10 \\
One word & 2 & 20 \\
ICT skills & 5 & 50 \\
Complex analysis & 2 & 20 \\
\hline
\end{tabular}

Table A8.16, ISL Questionnaire, question 16.

\section*{APPENDIX 8 - ISL Questionnaire data}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Competence using the following tools} & \multicolumn{7}{|c|}{Attitude scale - Excellent to scarce} \\
\hline & 6 & 5 & 4 & 3 & 2 & 1 & Tot \\
\hline Word processing applications (e.g. MS & 5 & 5 & 0 & 0 & 0 & 0 & 10 \\
\hline Word) & 50\% & 50\% & 0\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Spreadsheet applications (e.g. MS Excel)} & 0 & 4 & 4 & 1 & 0 & 1 & 10 \\
\hline & 0\% & 40\% & 40\% & 10\% & 0\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{Database applications (e.g. MS Access)} & 0 & 1 & 4 & 3 & 0 & 2 & 10 \\
\hline & 0\% & 10\% & 40\% & 30\% & 0\% & 20\% & 100\% \\
\hline Presentation applications (e.g. MS & 4 & 6 & 0 & 0 & 0 & 0 & 10 \\
\hline PowerPoint) & 40\% & 60\% & 0\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Communication applications (e.g. Skype)} & 2 & 7 & 0 & 0 & 0 & 1 & 10 \\
\hline & 20\% & 70\% & 0\% & 0\% & 0\% & 10\% & 100\% \\
\hline Learning management Systems (e.g. & 2 & 6 & 1 & 1 & 0 & 0 & 10 \\
\hline Moodle) & 20\% & 60\% & 10\% & 10\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Virtual worlds (e.g. Second Life)} & 0 & 1 & 2 & 1 & 2 & 4 & 10 \\
\hline & 0\% & 10\% & 20\% & 10\% & 20\% & 40\% & 100\% \\
\hline \multirow[t]{2}{*}{Social networking services (e.g. Facebook)} & 2 & 4 & 2 & 0 & 1 & 1 & 10 \\
\hline & 20\% & 40\% & 20\% & 0\% & 10\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{Blogs (e.g. Blogger)} & 0 & 1 & 6 & 0 & 1 & 2 & 10 \\
\hline & 0\% & 10\% & 60\% & 0\% & 10\% & 20\% & 100\% \\
\hline \multirow[t]{2}{*}{Wikis (e.g. PBwork)} & 0 & 2 & 4 & 1 & 1 & 2 & 10 \\
\hline & 0\% & 20\% & 40\% & 10\% & 10\% & 20\% & 100\% \\
\hline \multirow[t]{2}{*}{Podcasts (e.g. Apple Podcasts)} & 0 & 2 & 3 & 3 & 0 & 2 & 10 \\
\hline & 0\% & 20\% & 30\% & 30\% & 0\% & 20\% & 100\% \\
\hline \multirow[t]{2}{*}{File sharing sites (e.g. Dropbox)} & 1 & 1 & 5 & 2 & 0 & 1 & 10 \\
\hline & 10\% & 10\% & 50\% & 20\% & 0\% & 10\% & 100\% \\
\hline \multirow[t]{2}{*}{Photo sharing sites (e.g. Picasa)} & 1 & 2 & 2 & 2 & 1 & 2 & 10 \\
\hline & 10\% & 20\% & 20\% & 20\% & 10\% & 20\% & 100\% \\
\hline \multirow[t]{2}{*}{Video sharing sites (e.g. YouTube)} & 2 & 7 & 0 & 1 & 0 & 0 & 10 \\
\hline & 20\% & 70\% & 0\% & 10\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Web design applications (e.g. Dreamweaver)} & 0 & 0 & 3 & 2 & 2 & 3 & 10 \\
\hline & 0\% & 0\% & 30\% & 20\% & 20\% & 30\% & 100\% \\
\hline \multirow[t]{2}{*}{Web search engines (e.g. Google)} & 7 & 3 & 0 & 0 & 0 & 0 & 10 \\
\hline & 70\% & 30\% & 0\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Dictionary apps (e.g. Dictionary.com)} & 5 & 4 & 1 & 0 & 0 & 0 & 10 \\
\hline & 50\% & 40\% & 10\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Language exchange apps (e.g. Tandem)} & 0 & 2 & 3 & 1 & 1 & 3 & 10 \\
\hline & 0\% & 20\% & 30\% & 10\% & 10\% & 30\% & 100\% \\
\hline
\end{tabular}

Table A8.17, ISL Questionnaire, question 17.
\begin{tabular}{lcccccccc|}
\hline Degree of usefulness of the following tools & \(\mathbf{6}\) & \(\mathbf{5}\) & Opinion scale - Useful to not at all \\
& & \(\mathbf{6}\) & \(\mathbf{4}\) & \(\mathbf{3}\) & \(\mathbf{2}\) & \(\mathbf{1}\) & Tot \\
\hline Word processing applications (e.g. MS & 9 & 1 & 0 & 0 & 0 & 0 & 10 \\
Word) & \(90 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
Spreadsheet applications (e.g. MS Excel) & 2 & 0 & 5 & 2 & 0 & 1 & 10 \\
& \(20 \%\) & \(0 \%\) & \(50 \%\) & \(20 \%\) & \(0 \%\) & \(10 \%\) & \(100 \%\) \\
Database applications (e.g. MS Access) & 0 & 3 & 1 & 2 & 4 & 0 & 10 \\
& \(0 \%\) & \(30 \%\) & \(10 \%\) & \(20 \%\) & \(40 \%\) & \(0 \%\) & \(100 \%\) \\
Presentation applications (e.g. MS & 9 & 1 & 0 & 0 & 0 & 0 & 10 \\
PowerPoint) & \(90 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
Communication applications (e.g. Skype) & 5 & 3 & 1 & 0 & 1 & 0 & 10 \\
& \(50 \%\) & \(30 \%\) & \(10 \%\) & \(0 \%\) & \(10 \%\) & \(0 \%\) & \(100 \%\) \\
Learning management Systems (e.g. & 2 & 3 & 4 & 0 & 1 & 0 & 10 \\
Moodle) & \(20 \%\) & \(30 \%\) & \(40 \%\) & \(0 \%\) & \(10 \%\) & \(0 \%\) & \(100 \%\) \\
Virtual worlds (e.g. Second Life) & 0 & 1 & 4 & 1 & 4 & 0 & 10 \\
& \(0 \%\) & \(10 \%\) & \(40 \%\) & \(10 \%\) & \(40 \%\) & \(0 \%\) & \(100 \%\) \\
Social networking services (e.g. Facebook) & 1 & 4 & 2 & 2 & 1 & 0 & 10 \\
& \(10 \%\) & \(40 \%\) & \(20 \%\) & \(20 \%\) & \(10 \%\) & \(0 \%\) & \(100 \%\) \\
Blogs (e.g. Blogger) & 0 & 2 & 5 & 0 & 3 & 0 & 10
\end{tabular}

\section*{APPENDIX 8 - ISL Questionnaire data}
\begin{tabular}{lccccccc|} 
& \(0 \%\) & \(20 \%\) & \(50 \%\) & \(0 \%\) & \(30 \%\) & \(0 \%\) & \(100 \%\) \\
Wikis (e.g. PBwork) & 0 & 3 & 3 & 2 & 2 & 0 & 10 \\
& \(0 \%\) & \(30 \%\) & \(30 \%\) & \(20 \%\) & \(20 \%\) & \(0 \%\) & \(100 \%\) \\
Podcasts (e.g. Apple Podcasts) & 0 & 3 & 4 & 1 & 1 & 1 & 10 \\
& \(0 \%\) & \(30 \%\) & \(40 \%\) & \(10 \%\) & \(10 \%\) & \(10 \%\) & \(100 \%\) \\
File sharing sites (e.g. Dropbox) & 0 & 6 & 2 & 1 & 1 & 0 & 10 \\
& \(0 \%\) & \(60 \%\) & \(20 \%\) & \(10 \%\) & \(10 \%\) & \(0 \%\) & \(100 \%\) \\
Photo sharing sites (e.g. Picasa) & 0 & 2 & 3 & 4 & 0 & 1 & 10 \\
& \(0 \%\) & \(20 \%\) & \(30 \%\) & \(40 \%\) & \(0 \%\) & \(10 \%\) & \(100 \%\) \\
Video sharing sites (e.g. YouTube) & 3 & 6 & 1 & 0 & 0 & 0 & 10 \\
& \(30 \%\) & \(60 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
Web design applications (e.g. & 0 & 1 & 2 & 3 & 1 & 3 & 10 \\
Dreamweaver) & \(0 \%\) & \(10 \%\) & \(20 \%\) & \(30 \%\) & \(10 \%\) & \(30 \%\) & \(100 \%\) \\
Web search engines (e.g. Google) & 7 & 3 & 0 & 0 & 0 & 0 & 10 \\
& \(70 \%\) & \(30 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
Dictionary apps (e.g. Dictionary.com) & 7 & 2 & 1 & 0 & 0 & 0 & 10 \\
& \(70 \%\) & \(20 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
Language exchange apps (e.g. Tandem) & 1 & 2 & 3 & 2 & 2 & 0 & 10 \\
& \(10 \%\) & \(20 \%\) & \(30 \%\) & \(20 \%\) & \(20 \%\) & \(0 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A8.18, ISL Questionnaire, question 18.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Actual use in class of the following tools} & \multicolumn{7}{|c|}{Frequency scale - Very often to never} \\
\hline & 6 & 5 & 4 & 3 & 2 & 1 & Tot \\
\hline Word processing applications (e.g. MS & 4 & 6 & 0 & 0 & 0 & 0 & 10 \\
\hline Word) & 40\% & 60\% & 0\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Spreadsheet applications (e.g. MS Excel)} & 0 & 0 & 2 & 1 & 2 & 5 & 10 \\
\hline & 0\% & 0\% & 20\% & 10\% & 20\% & 50\% & 100\% \\
\hline \multirow[t]{2}{*}{Database applications (e.g. MS Access)} & 0 & 0 & 3 & 1 & 2 & 4 & 10 \\
\hline & 0\% & 0\% & 30\% & 10\% & 20\% & 40\% & 100\% \\
\hline Presentation applications (e.g. MS & 1 & 7 & 2 & 0 & 0 & 0 & 10 \\
\hline PowerPoint) & 10\% & 70\% & 20\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Communication applications (e.g. Skype)} & 2 & 2 & 3 & 1 & 0 & 2 & 10 \\
\hline & 20\% & 20\% & 30\% & 10\% & 0\% & 20\% & 100\% \\
\hline Learning management Systems (e.g. & 3 & 3 & 1 & 1 & 0 & 2 & 10 \\
\hline Moodle) & 30\% & 30\% & 10\% & 10\% & 0\% & 20\% & 100\% \\
\hline \multirow[t]{2}{*}{Virtual worlds (e.g. Second Life)} & 0 & 1 & 0 & 0 & 3 & 6 & 10 \\
\hline & 0\% & 10\% & 0\% & 0\% & 30\% & 60\% & 100\% \\
\hline \multirow[t]{2}{*}{Social networking services (e.g. Facebook)} & 0 & 0 & 1 & 2 & 2 & 5 & 10 \\
\hline & 0\% & 0\% & 10\% & 20\% & 20\% & 50\% & 100\% \\
\hline \multirow[t]{2}{*}{Blogs (e.g. Blogger)} & 0 & 0 & 1 & 2 & 3 & 4 & 10 \\
\hline & 0\% & 0\% & 10\% & 20\% & 30\% & 40\% & 100\% \\
\hline \multirow[t]{2}{*}{Wikis (e.g. PBwork)} & 0 & 0 & 2 & 0 & 2 & 6 & 10 \\
\hline & 0\% & 0\% & 20\% & 0\% & 20\% & 60\% & 100\% \\
\hline \multirow[t]{2}{*}{Podcasts (e.g. Apple Podcasts)} & 0 & 2 & 3 & 1 & 0 & 4 & 10 \\
\hline & 0\% & 20\% & 30\% & 10\% & 0\% & 40\% & 100\% \\
\hline \multirow[t]{2}{*}{File sharing sites (e.g. Dropbox)} & 0 & 0 & 2 & 2 & 2 & 4 & 10 \\
\hline & 0\% & 0\% & 20\% & 20\% & 20\% & 40\% & 100\% \\
\hline \multirow[t]{2}{*}{Photo sharing sites (e.g. Picasa)} & 0 & 0 & 2 & 1 & 2 & 5 & 10 \\
\hline & 0\% & 0\% & 20\% & 10\% & 20\% & 50\% & 100\% \\
\hline \multirow[t]{2}{*}{Video sharing sites (e.g. YouTube)} & 2 & 5 & 3 & 0 & 0 & 0 & 10 \\
\hline & 20\% & 50\% & 30\% & 0\% & 0\% & 0\% & 100\% \\
\hline Web design applications (e.g. & 0 & 0 & 0 & 1 & 0 & 9 & 10 \\
\hline Dreamweaver) & 0\% & 0\% & 0\% & 10\% & 0\% & 90\% & 100\% \\
\hline \multirow[t]{2}{*}{Web search engines (e.g. Google)} & 8 & 2 & 0 & 0 & 0 & 0 & 10 \\
\hline & 80\% & 20\% & 0\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Dictionary apps (e.g. Dictionary.com)} & 2 & 6 & 2 & 0 & 0 & 0 & 10 \\
\hline & 20\% & 60\% & 20\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Language exchange apps (e.g. Tandem)} & 0 & 0 & 1 & 0 & 1 & 8 & 10 \\
\hline & 0\% & 0\% & 10\% & 0\% & 10\% & 80\% & 100\% \\
\hline
\end{tabular}

Table A8.19, ISL Questionnaire, question 19.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{The use of technology facilitates foreign language learning when it comes to} & \multicolumn{7}{|l|}{Agreement scale - Strongly Agree to Strongly Disagree} \\
\hline & SA & A & PA & PD & D & SD & Tot \\
\hline \multirow[t]{2}{*}{Interest} & 4 & 5 & 1 & 0 & 0 & 0 & 10 \\
\hline & 40\% & 50\% & 10\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Attention} & 3 & 4 & 3 & 0 & 0 & 0 & 10 \\
\hline & 30\% & 40\% & 30\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Motivation} & 4 & 5 & 1 & 0 & 0 & 0 & 10 \\
\hline & 40\% & 50\% & 10\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Participation} & 2 & 6 & 2 & 0 & 0 & 0 & 10 \\
\hline & 20\% & 60\% & 20\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Retention of information} & 1 & 8 & 0 & 1 & 0 & 0 & 10 \\
\hline & 10\% & 80\% & 0\% & 10\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Relationship with the teacher} & 1 & 6 & 2 & 1 & 0 & 0 & 10 \\
\hline & 10\% & 60\% & 20\% & 10\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Relationship with peers} & 1 & 7 & 2 & 0 & 0 & 0 & 10 \\
\hline & 10\% & 70\% & 20\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Literacy} & 2 & 5 & 3 & 0 & 0 & 0 & 10 \\
\hline & 20\% & 50\% & 30\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Agency} & 0 & 8 & 2 & 0 & 0 & 0 & 10 \\
\hline & 0\% & 80\% & 20\% & 0\% & 0\% & 0\% & 100\% \\
\hline \multirow[t]{2}{*}{Performance} & 0 & 7 & 3 & 0 & 0 & 0 & 10 \\
\hline & 0\% & 70\% & 30\% & 0\% & 0\% & 0\% & 100\% \\
\hline
\end{tabular}

Table A8.20, ISL Questionnaire, question 20.
\begin{tabular}{lccccccc|}
\hline Technology & Agreement scale - Strongly Agree to Strongly Disagree \\
& SA & A & PA & PD & D & SD & Tot \\
\hline Is very useful when it comes to L2 & 5 & 5 & 0 & 0 & 0 & 0 & 10 \\
teaching & \(50 \%\) & \(50 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
Is very useful when it comes to SLL & 5 & 5 & 0 & 0 & 0 & 0 & 10 \\
& \(50 \%\) & \(50 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
...and the use of technological tools in & 7 & 3 & 0 & 0 & 0 & 0 & 10 \\
LL can help develop digital literacies & \(70 \%\) & \(30 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
... and the use of technological tools in & 6 & 4 & 0 & 0 & 0 & 0 & 10 \\
LL can help develop multimodality & \(60 \%\) & \(40 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
...is something students can generally & 4 & 4 & 2 & 0 & 0 & 0 & 10 \\
approach better than their teachers & \(40 \%\) & \(40 \%\) & \(20 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
...is something the specific LO & 7 & 3 & 0 & 0 & 0 & 0 & 10 \\
established for L2 education in upper & \(70 \%\) & \(30 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
secondary schools should take into & & & & & & & \\
consideration & & & & & & 0 & 10 \\
...should be implemented in L2 & 7 & 3 & 0 & 0 & 0 & 0 & 10 \\
teaching & \(70 \%\) & \(30 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A8.21, ISL Questionnaire, question 21.
\begin{tabular}{lcccccccc|}
\hline Reasons that might have hindered the & \multicolumn{7}{c|}{ Agreement scale - Strongly Agree to Strongly Disagree } \\
use of technology so far & SA & A & PA & PD & D & SD & Tot \\
\hline My school lacks the appropriate & 0 & 1 & 2 & 2 & 2 & 3 & 10 \\
technological tools & \(0 \%\) & \(10 \%\) & \(20 \%\) & \(20 \%\) & \(20 \%\) & \(30 \%\) & \(100 \%\) \\
My school fails to promote the use of & 0 & 0 & 0 & 4 & 4 & 2 & 10 \\
technological tools & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(40 \%\) & \(40 \%\) & \(20 \%\) & \(100 \%\) \\
The tools provided by my school are & 0 & 0 & 4 & 1 & 3 & 2 & 10 \\
obsolete & \(0 \%\) & \(0 \%\) & \(40 \%\) & \(10 \%\) & \(30 \%\) & \(20 \%\) & \(100 \%\) \\
My school's wifi network is not sufficient & 0 & 0 & 1 & 3 & 2 & 4 & 10 \\
to support intensive use of said tools & \(0 \%\) & \(0 \%\) & \(10 \%\) & \(30 \%\) & \(20 \%\) & \(40 \%\) & \(100 \%\) \\
The time available is not sufficient to & 1 & 3 & 5 & 1 & 0 & 0 & 10 \\
introduce new tools and activities & \(10 \%\) & \(30 \%\) & \(50 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
My digital skills are not sufficient to & 0 & 1 & 3 & 5 & 0 & 1 & 10 \\
regularly approach language teaching & \(0 \%\) & \(10 \%\) & \(30 \%\) & \(50 \%\) & \(0 \%\) & \(10 \%\) & \(100 \%\) \\
through technological tools & & & & & & & \\
The students' digital skills are not & 0 & 0 & 5 & 3 & 2 & 0 & 10 \\
\begin{tabular}{l} 
sufficient to properly approach digital \\
language learning
\end{tabular} & \(0 \%\) & \(0 \%\) & \(50 \%\) & \(30 \%\) & \(20 \%\) & \(0 \%\) & \(100 \%\) \\
The students lack the appropriate & & 0 & 1 & 4 & & & & \\
technological tools & \(0 \%\) & \(10 \%\) & \(40 \%\) & \(30 \%\) & \(20 \%\) & \(0 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A8.22, ISL Questionnaire, question 22.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{In light of the health emergency developed in 2020, which forced upper secondary schools to hold most of their lessons through different distance learning modalities} & \multicolumn{2}{|c|}{Yes} & \multicolumn{2}{|c|}{No} & \multicolumn{2}{|c|}{Total} \\
\hline & \({ }^{\circ}\) & \% & \({ }^{\circ}\) & \% & \({ }^{\circ}\) & \% \\
\hline ...my technological preparation proved sufficient to properly manage distance learning & 9 & 90 & 1 & 10 & 10 & 100 \\
\hline ...the technological means provided by my school proved sufficient to properly manage distance learning & 6 & 60 & 4 & 40 & 10 & 100 \\
\hline ...the technological preparation of the students proved sufficient for them to properly manage distance learning & 5 & 50 & 5 & 50 & 10 & 100 \\
\hline ...my school helped to provide a smooth transition & 7 & 70 & 3 & 30 & 10 & 100 \\
\hline ...my school helped to provide the appropriate instructions and/or training & 10 & 100 & 0 & 0 & 10 & 100 \\
\hline
\end{tabular}

Table A8.23, ISL Questionnaire, question 23.
\begin{tabular}{lcccccccc}
\hline Distance Learning & \multicolumn{6}{c|}{ Agreement scale - Strongly Agree to Strongly Disagree } \\
& SA & A & PA & PD & D & SD & Tot \\
\hline ...proved a valid alternative to in-situ & 0 & 2 & 7 & 0 & 1 & 0 & 10 \\
lessons & \(0 \%\) & \(20 \%\) & \(70 \%\) & \(0 \%\) & \(10 \%\) & \(0 \%\) & \(100 \%\) \\
..has helped to emphasise the & 3 & 6 & 1 & 0 & 0 & 0 & 10 \\
importance of greater technological & \(30 \%\) & \(60 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
\begin{tabular}{l} 
preparation for schools
\end{tabular} & & & & & & & \\
\begin{tabular}{l}
..has helped to emphasise the \\
importance of greater technological \\
preparation for teachers
\end{tabular} & 4 & 5 & 1 & 0 & 0 & 0 & 10 \\
\begin{tabular}{l}
..has helped to emphasise the \\
importance of greater technological \\
preparation for students
\end{tabular} & \(40 \%\) & \(50 \%\) & \(10 \%\) & \(0 \%\) & \(0 \%\) & \(0 \%\) & \(100 \%\) \\
\hline
\end{tabular}

Table A8.24, ISL Questionnaire, question 24.

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures related to Question 1 of the ISL Questionnaire


Figure A9.1.1, Frequency graph (Total Question 1, ISL Questionnaire)

Figures related to Question 2 of the ISL Questionnaire

gure A9.2.1, Frequency graph (Total Question 2, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures related to Question 3 of the ISL Questionnaire


Figure A9.3.1, Frequency graph (Total Question 3, ISL Questionnaire)

Figures related to Scale 4 of the ISL Questionnaire


Figure A9.4, Frequency graph for items 4a and 4b, ISL Questionnaire

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures and Tables related to Scale 5 of the ISL Questionnaire
Table A9.5.1, KMO indicator and Bartlett's sphericity test (Scale 5, ISL Questionnaire)
Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura di Kaisar-Majer-OIkin ol adeguateze dst camplonamenfa.} & ,554 \\
\hline \multirow[t]{3}{*}{Test della sterkita di Bartlat} & Appross Chl-quadrato & 12,405 \\
\hline & 41 & 10 \\
\hline & Bign & . 259 \\
\hline
\end{tabular}

Table A9.5.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 5, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{2 , 3 7 3}\) & 1,998 \\
2 & \(\mathbf{1 , 4 1 8}\) & 1,310 \\
3 &, 689 & \(\mathbf{8 9 8}\) \\
\hline
\end{tabular}

Grafico scree


Figure A9.5.1, Screeplot (Scale 5, ISL Questionnaire)
Table A9.5.3, Model and structure matrices obtained from the analysis of the main components of Scale 5 of the ISL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Pattern Matrix} & \multicolumn{2}{|l|}{Structure Matrix} \\
\hline & \multicolumn{2}{|l|}{Component} & \multicolumn{2}{|l|}{Component} \\
\hline & 1 & 2 & 1 & 2 \\
\hline a. I attend staff meetings to discuss the established learning objectives & & -,880 & & -,878 \\
\hline b. I revise the best approaches for the students to meet said learning objectives & ,785 & -,369 & ,851 & -,508 \\
\hline c. I discuss the selection of instructional media & & -,885 & & -,896 \\
\hline d. I decide the selection of instructional media & ,885 & ,359 & ,821 & \\
\hline e. I develop (part of) a school curriculum & ,690 & & ,723 & -,311 \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.5.2, Histogram (Total subscale 5.1, ISL Questionnaire)


Figure A9.5.4, Q-Q plot (Total subscale 5.1, ISL Questionnaire)

Figure A9.5.6, Boxplot (Total subscale 5.1, ISL Questionnaire)


Figure A9.5.3, Post-transformation Histogram (Total subscale 5.1, ISL Questionnaire)


Figure A9.5.5, Post-transformation Q-Q plot (Total subscale 5.1, ISL Questionnaire)


Figure A9.5.7, Post-transformation Boxplot (Total subscale 5.1, ISL Questionnaire)

Figures and Tables related to Scale 6 of the ISL Questionnaire
Table A9.6.1, KMO indicator and Bartlett's sphericity test (Scale 6, ISL Questionnaire)

\section*{Test di KMO e Bartlett}
\begin{tabular}{l|l|r}
\hline \begin{tabular}{l} 
Misura di Kaiser-Meyer-Olkin di adeguatezza del \\
campionamento.
\end{tabular} &, 319 \\
\hline \begin{tabular}{l} 
Test della sfericità di \\
Bartlett
\end{tabular} & Appross. Chi-quadrato & 46,098 \\
\cline { 2 - 3 } & gl & 28 \\
\hline & Sign. &, 017 \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.6.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 6, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{2 , 9 5 6}\) & 2,697 \\
2 & \(\mathbf{2 , 1 6 0}\) & 1,756 \\
3 & 1,208 & \(\mathbf{1 , 3 4 1}\) \\
4 &, 797 & \(\mathbf{, 9 6 5}\) \\
\hline
\end{tabular}


Figure A9.6.1, Screeplot (Scale 6, ISL Questionnaire)
Table A9.6.3, Model and structure matrices obtained from the analysis of the main components of Scale 6 of the ISL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Pattern Matrix} & \multicolumn{2}{|l|}{Structure Matrix} \\
\hline & \multicolumn{2}{|l|}{Component} & \multicolumn{2}{|l|}{Component} \\
\hline & 1 & 2 & 1 & 2 \\
\hline a. ...are suitable for the curriculum proposed by the upper secondary school I teach in & ,651 & & ,667 & \\
\hline b. ...are suitable for a multicultural learning environment & ,824 & & ,806 & \\
\hline c. ...are suitable for a digital learning environment & ,862 & & ,850 & \\
\hline d. ...are suitable for a multimodal learning environment & ,833 & & ,824 & \\
\hline e. ...are suitable to promote lifelong learning & ,815 & & ,816 & \\
\hline f. ...should be concretely implemented in class & , 442 & ,579 & ,554 & ,665 \\
\hline g. ...should be an integral part of teacher training & ,459 & ,567 & 569 & ,656 \\
\hline h. ...should be updated & & ,799 & & ,749 \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.6.2, Histogram (Total subscale 6.1, ISL Questionnaire)


Figure A9.6.4, Q-Q Plot (Total subscale 6.1,ISL Questionnaire)


Figure A9.6.6, Boxplot (Total subscale 6.1,ISL Questionnaire)


Figure A9.6.8, Histogram (Total subscale 6.2, ISL Questionnaire)


Figure A9.6.3, Post-transformation Histogram (Total subscale 6.1, ISL Questionnaire)


Figure A9.6.5, Post-transformation Q-Q Plot (Total subscale 6.1, ISL Questionnaire)


Figure A9.6.7, Post-transformation Boxplot (Total subscale 6.1, ISL Questionnaire)


Figure A9.6.9, Post-transformation Histogram (Total subscale 6.2, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.6.10, Q-Q Plot (Total subscale 6.2, ISL Questionnaire)


Figure A9.6.12, Boxplot (Total subscale 6.2, ISL Questionnaire)


Figure A9.6.11, Post-transformation Q-Q Plot (Total subscale 6.2, ISL Questionnaire)


Figure A9.6.13, Post-transformation Boxplot (Total subscale 6.2, ISL Questionnaire)

Figures related to Scale 7 of the ISL Questionnaire


Figure A9.7.1, Frequency graph for items 7a, 7b and 7c, ISL Questionnaire

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures and Tables related to Scale 8 of the ISL Questionnaire
Table A9.8.1, KMO indicator and Bartlett's sphericity test (Scale 8, ISL Questionnaire)
Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura diticiscr-Marer-Oikin di adagustoura dal camplonamento} & . 606 \\
\hline \multirow[t]{3}{*}{Tast delia sfaricta d Barist.} & Appross Chi-quadrato & 31,675 \\
\hline & gi & 10 \\
\hline & 3ign & \(<.001\) \\
\hline
\end{tabular}

Table A9.8.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 8, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{2 , 8 7 1}\) & 1,998 \\
2 & \(\mathbf{1 , 7 4 6}\) & 1,310 \\
3 &, 207 & \(\mathbf{8 9 8}\) \\
\hline
\end{tabular}

Grafico scree


Figure A9.8.1, Screeplot (Scale 8, ISL Questionnaire)
Table A9.8.3, Correlation matrix between components (Scale 8, ISL Questionnaire)

\section*{Matrice di correlazione dei componenti}
\begin{tabular}{c|r|r} 
Companante & \multicolumn{1}{c}{1} & \multicolumn{1}{c}{2} \\
\hline 1 & 1,000 & .155 \\
\hline 2 & .155 & 1,000 \\
\hline
\end{tabular}

Metodo di estrazione: Analisi dei componenti principall.
Metodo di rotazione: Oblimin con normalizazong Kaissr

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.8.4, Model and structure matrices obtained from the analysis of the main components of Scale 8 of the ISL Teacher Questionnaire


Figure A9.8.3, Post-transformation Histogram (Total subscale 8.1, ISL Questionnaire)


Figure A9.8.5, Post-transformation Q-Q Plot (Total subscale 8.1, ISL Questionnaire)


Figure A9.8.7, Post-transformation Boxplot (Total subscale 8.1, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.8.8, Histogram (Total subscale 8.2, ISL Questionnaire)


Figure A9.8.10, Q-Q plot (Total subscale 8.2, ISL Questionnaire)


Figure A9.8.12, Boxplot (Total subscale 8.2, ISL Questionnaire)

Figure A9.8.9, Post-transformation Histogram (Total subscale 8.2, ISL Questionnaire)


Figure A9.8.11, Post-transformation Q-Q plot (Total subscale 8.2, ISL Questionnaire)


Figure A9.8.13, Post-transformation Boxplot (Total subscale 8.2, ISL Questionnaire)

\section*{Figures and Tables related to Scale 9 of the ISL Questionnaire}

Table A9.9.1, KMO indicator and Bartlett's sphericity test (Scale 9, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura di Kalser-Nsyar-DIkin digdagupleme del. tampioriamento.} & ,587 \\
\hline \multirow[t]{3}{*}{Test della sferiniti di Bartich} & Appross. Cht-quadrato & 25,220 \\
\hline & al & 10 \\
\hline & Sign & . 005 \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.9.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 9, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{2 , 4 1 4}\) & 1,998 \\
2 & \(\mathbf{2 , 0 2 4}\) & 1,310 \\
3 &, 337 &, 898 \\
\hline
\end{tabular}

Grafico scree


Figure A9.9.1, Screeplot (Scale 9, ISL Questionnaire)
Matrice di correlazione dei componenti
\begin{tabular}{ll|l} 
Componsnts & 1 & 2 \\
\hline 1 & 1,000 & -.047 \\
\hline 2 & -.047 & 1,000 \\
\hline
\end{tabular}

Table A9.9.3, Correlation matrix between components (Scale 9, ISL Questionnaire)

Metodo di estrazione: Analisi dei
componenti principali.
Metodo di rotazione: Oblimin con
normalizzazione Kaiser.

Table A9.9.4, Model and structure matrices obtained from the analysis of the main components of Scale 9 of the ISL Teacher Questionnaire


APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.9.2, Histogram (Total subscale 9.1, ISL Questionnaire)


Figure A9.9.4, Q-Q Plot (Total subscale 9.1, ISL Questionnaire)


Figure A9.9.6, Boxplot (Total subscale 9.1, ISL Questionnaire)


Figure A9.9.8, Histogram (Total subscale 9.2, ISL Questionnaire)


Figure A9.9.3, Post-transformation Histogram (Total subscale 9.1, ISL Questionnaire)


Figure A9.9.5, Post-transformation Q-Q Plot (Total subscale 9.1, ISL Questionnaire)


Figure A9.9.7, Post-transformation Boxplot (Total subscale 9.1, ISL Questionnaire)


Figure A9.9.9, Post-transformation Histogram (Total subscale 9.2, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.9.10, Q-Q Plot (Total subscale 9.2, ISL Questionnaire)


Figure A9.9.12, Boxplot (Total subscale 9.2, ISL Questionnaire)


Figure A9.9.11, Post-transformation Q-Q Plot (Total subscale 9.2, ISL Questionnaire)

Figure A9.9.13, Post-transformation Boxplot (Total subscale 9.2, ISL Questionnaire)

Figures and Tables related to Scale 10 of the ISL Questionnaire


Figure A9.10.1, Frequency graph for items 10a, 10b, 10c, 10d, 10e and 10f, ISL Questionnaire

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.10.2, Histogram (Total subscale 10.1, ISL Questionnaire)


Figure A9.10.4, Q-Q Plot (Total subscale 10.1, ISL Questionnaire)


Figure A9.10.6, Boxplot (Total subscale 10.1, ISL Questionnaire)


Figure A9.10.3, Post-transformation Histogram (Total subscale 10.1, ISL Questionnaire)


Figure A9.10.5, Post-transformation Q-Q Plot (Total subscale 10.1, ISL Questionnaire)


Figure A9.10.7, Post-transformation Boxplot (Total subscale 10.1, ISL Questionnaire)

Figures and Tables related to Scale 11 of the ISL Questionnaire
Table A9.11.1, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 11, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{5 , 6 2 3}\) & 3,047 \\
2 & \(\mathbf{1 , 6 4 4}\) & 2,140 \\
3 & 1,451 & \(\mathbf{1 , 6 1 2}\) \\
4 &, 545 & \(\mathbf{1 , 1 8 1}\) \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.11.1, Histogram (Total subscale 11.1, ISL Questionnaire)


Figure A9.11.3, Q-Q Plot (Total subscale 11.1, ISL Questionnaire)


Figure A9.11.5, Boxplot (Total subscale 11.1, ISL Questionnaire)


Figure A9.11.2, Post-transformation Histogram (Total subscale 11.1, ISL Questionnaire)


Figure A9.11.4, Post-transformation Q-Q Plot (Total subscale 11.1, ISL Questionnaire)


Figure A9.11.6, Post-transformation Boxplot (Total subscale 11.1, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures related to Question 12 of the ISL Questionnaire


Figure A9.12.1, Frequency graph (Total Question 12, ISL Questionnaire)
Figures and Tables related to Scale 13 of the ISL Questionnaire
Table A9.13.1, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 13, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{8 , 7 2 9}\) & 3,705 \\
2 & 2,164 & \(\mathbf{2 , 8 2 0}\) \\
3 & 1,122 & \(\mathbf{2 , 1 8 3}\) \\
4 &, 904 & \(\mathbf{1 , 6 3 7}\) \\
\hline
\end{tabular}

Grafico scree


Figure A9.13.1, Screeplot (Scale 13, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.13.2, Model and structure matrices obtained from the analysis of the main components of Scale 13 of the ISL Teacher Questionnaire
\begin{tabular}{|c|c|}
\hline & Pattern Matrix \\
\hline & Component \\
\hline a. Knowledge of the curriculum & ,863 \\
\hline b. Content and performance standards in my main subject field(s) & ,875 \\
\hline c. ICT (information and communication technology) skills for teaching & ,647 \\
\hline d. Pedagogical competencies in teaching my subject field(s) & ,934 \\
\hline e. Educational Psychology & ,570 \\
\hline f. Studies and theories related to my subject field(s) & ,845 \\
\hline g. Teaching students with special learning needs & ,881 \\
\hline h. Teaching in a multicultural or multilingual setting & ,650 \\
\hline i. Communicating with people from different cultures or countries & ,782 \\
\hline I. Teaching cross-curricular skills (e.g. problem solving, learning-to-learn) & ,918 \\
\hline m . Student assessment practices & ,718 \\
\hline n . School management and administration & ,690 \\
\hline o. Literacy & ,774 \\
\hline p. New Literacies (e.g. critical thinking, scientific reasoning, multi-cultural awareness...) & ,804 \\
\hline
\end{tabular}


Figure A9.13.2, Histogram (Total subscale 13.1, ISL Questionnaire)


Figure A9.13.3, Post-transformation Histogram (Total subscale 13.1, ISL Questionnaire)


Figure A9.13.4, Q-Q Plot (Total subscale 13.1, ISL Questionnaire)


Figure A9.13.5, Post-transformation Q-Q Plot (Total subscale 13.1, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.13.6, Boxplot (Total subscale 13.1, ISL Questionnaire)


Figure A9.13.7, Post-transformation Boxplot (Total subscale 13.1, ISL Questionnaire)

\section*{Figures and Tables related to Scale 14 of the ISL Questionnaire}

Table A9.14.1, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 14, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{7 , 2 8 6}\) & 3,242 \\
2 & 1,198 & \(\mathbf{2 , 3 3 1}\) \\
3 &, 942 & \(\mathbf{1 , 7 1 7}\) \\
\hline
\end{tabular}

Grafico scree


Figure A9.14.1, Screeplot (Scale 14, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.14.2, Model and structure matrices obtained from the analysis of the main components of Scale 14 of the ISL Teacher Questionnaire
\begin{tabular}{l|r|}
\hline & Pattern Matrix \\
\hline & Component \\
\hline a. ...has changed significantly over the last few decades & \(\mathbf{8 9 2}\) \\
b. ...enables students to achieve their goals & \(\mathbf{8 3 6}\) \\
c. ...enables students to develop their knowledge & \(\mathbf{7 7 5}\) \\
d. ...enables students to develop their potential & \(\mathbf{8 9 2}\) \\
e. ...is something teachers should focus their attention on when teaching EFL & \(\mathbf{7 6 6}\) \\
f. ...is something teachers should make sure their students are familiar with & \(\mathbf{8 0 4}\) \\
g. ...is a plural concept & \(\mathbf{9 3 1}\) \\
h. ...is a multimodal concept & \(\mathbf{8 6 6}\) \\
i. ...involves multiple skills & \(\mathbf{7 3 9}\) \\
l. ..involves a continuum of learning & \(\mathbf{, 8 0 6}\) \\
m. ...is taken into consideration by the specific learning objectives established for & \(\mathbf{5 9 1}\) \\
foreign language education in upper secondary schools & \\
\hline
\end{tabular}


Figure A9.14.2, Histogram (Total subscale 14.1, ISL Questionnaire)


Figure A9.14.4, Boxplot (Total subscale 14.1, ISL Questionnaire)


Figure A9.14.3, Q-Q Plot (Total subscale 14.1, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures and Tables related to Scale 15 of the ISL Questionnaire

Table A9.15.1, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 15, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{4 , 4 7 4}\) & 3,393 \\
2 & \(\mathbf{2 , 5 8 2}\) & 2,474 \\
3 & \(\mathbf{1 , 9 7 4}\) & 1,847 \\
4 & 1,187 & \(\mathbf{1 , 4 1 5}\) \\
5 &, 760 & \(\mathbf{1 , 0 4 4}\) \\
\hline
\end{tabular}

Grafico scree


Figure A9.15.1, Screeplot (Scale 15, ISL Questionnaire)
Table A9.15.2, Model and structure matrices obtained from the analysis of the main components of Scale 15 of the ISL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{} & \multicolumn{3}{|c|}{Pattern Matrix} & \multicolumn{3}{|l|}{Structure Matrix} \\
\hline & \multicolumn{3}{|c|}{Component} & \multicolumn{3}{|c|}{Component} \\
\hline & 1 & 2 & 3 & 1 & 2 & 3 \\
\hline a. ...the use of printed texts & ,871 & & ,435 & ,798 & & ,308 \\
\hline b. ...the use of texts in digital format & & -,334 & -,620 & & -,492 & -,719 \\
\hline c. ...the use of various types of images (e.g. illustrations, graphs...) & ,897 & & & ,884 & & \\
\hline d. ...the use of videos & ,706 & & -,425 & ,791 & -,335 & -, 570 \\
\hline e. ...the use of audios (e.g. recordings, podcasts, songs...) & ,764 & & -,313 & ,830 & -,301 & -,463 \\
\hline f. ...the use of facial expressions and body language & & -,831 & & & -,815 & \\
\hline g. ...the use of proxemics & & -,906 & & & -,901 & \\
\hline h. ...the use of paralanguage & & -,858 & & & -,846 & \\
\hline i. ...interacting with objects (e.g. games, technological devices...) & & -,844 & & & -,859 & \\
\hline I. ...the use of different tools in one lesson & & & -,780 & & & -,807 \\
\hline m . ...the combination of two or more tools at once (e.g. multimedia presentations) & & & -,923 & & & -,834 \\
\hline n. ...the use of multimodal texts & & & -,663 & & -,372 & -,724 \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.15.3, Correlation matrix between components (Scale 15, ISL Questionnaire)

Matrice di correlazione dei
componenti
\begin{tabular}{l|l|l|l} 
Componente & 1 & 2 & 3 \\
\hline 1 & 1,000 & -125 & -157 \\
\hline 2 & -125 & 1,000 &, 224 \\
\hline 3 & -157 & 224 & 1,000 \\
\hline \begin{tabular}{l} 
Metodo di estrazione: Analisi dei componenti
\end{tabular} \\
\begin{tabular}{l} 
pincpall \\
Msiodo di rotadons: Oblimin con nermalizadons \\
Kaiser.
\end{tabular}
\end{tabular}


Figure A9.15.2, Histogram (Total subscale 15.1, ISL Questionnaire)


Figure A9.15.4, Boxplot (Total subscale 15.1, ISL Questionnaire)


Figure A9.15.6, Post-transformation Histogram (Total subscale 15.2, ISL Questionnaire)


Figure A9.15.3, Q-Q Plot (Total subscale 15.1, ISL Questionnaire)


Figure A9.15.5, Histogram (Total subscale 15.2, ISL Questionnaire)


Figure A9.15.7, Q-Q Plot (Total subscale 15.2, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.15.8, Post-transformation Q-Q Plot (Total subscale 15.2, ISL Questionnaire)


Figure A9.15.10, Post-transformation Boxplot (Total subscale 15.2, ISL Questionnaire)


Figure A9.15.12, Q-Q Plot (Total subscale 15.3, ISL Questionnaire)


Figure A9.15.9, Boxplot (Total subscale 15.2, ISL Questionnaire)


Figure A9.15.11, Histogram (Total subscale 15.3, ISL Questionnaire)

Figure A9.15.13, Boxplot (Total subscale 15.3, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures related to Question 16 of the ISL Questionnaire


Figure A9.16.1, Frequency graph (Total Question 16, ISL Questionnaire)
Figures and Tables related to Scale 17 of the ISL Questionnaire
Table A9.17.1, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 17, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{1 4 , 3 1 3}\) & 4,497 \\
2 & \(\mathbf{4 , 8 3 7}\) & 3,372 \\
3 & \(\mathbf{3 , 9 9 4}\) & 2,653 \\
4 & \(\mathbf{2 , 2 0 8}\) & 2,101 \\
5 & 1,158 & \(\mathbf{1 , 6 1 9}\) \\
6 &, 846 & \(\mathbf{1 , 2 5 8}\) \\
\hline
\end{tabular}

Grafico scree


Figure A9.17.1, Screeplot (Scale 17, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.17.2, Correlation matrix between components (Scale 17, ISL Questionnaire)

\section*{Matrice di covarianza del punteggi del \\ componenti}
\begin{tabular}{|c|c|c|c|c|}
\hline Componente & 1 & 2 & 3 & 4 \\
\hline 1 & . 947 & -,419 & 1,835 & . 273 \\
\hline 2 & -479 & 1,065 & -,557 & -.184 \\
\hline 3 & 1.835 & -. 557 & 2.848 & . 278 \\
\hline 4 & , 273 & -, 184 & , 279 & . 912 \\
\hline
\end{tabular}

Table A9.17.3, Model and structure matrices obtained from the analysis of the main components of Scale 17 of the ISL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{4}{|c|}{Pattern Matrix} & & \multicolumn{4}{|c|}{Structure Matrix} & \\
\hline & \multicolumn{4}{|c|}{Component} & & \multicolumn{4}{|c|}{Component} & \\
\hline & 1 & 2 & 3 & 4 & 5 & 1 & 2 & 3 & 4 & 5 \\
\hline a. Word processing applications (e.g., MSWord) & , 319 & & & ,817 & -,337 & , 475 & & & ,870 & \\
\hline b. Spreadsheet applications(e.g., MS Excel) & ,915 & & & & & ,951 & & & ,362 & \\
\hline c. Database applications (e.g., MS Access) & & & -,384 & & ,887 & & ,357 & -,346 & & ,887 \\
\hline d. Presentation applications(e.g., MS PowerPoint) & & 311 & -,399 & ,765 & & ,435 & \(\underline{425}\) & -,401 & ,798 & \\
\hline e. Communication applications (e.g., Skype) & 1,015 & & & & -,304 & ,937 & & & & \\
\hline f. Learning management systems (e.g., Moodle) & ,871 & & & & & ,951 & & & . 481 & \\
\hline g. Virtual worlds (e.g., SecondLife) & & 398 & ,401 & & ,512 & ,445 & , 503 & ,345 & & ,704 \\
\hline h. Social networking services(e.g., Facebook) & \(\underline{395}\) & ,640 & -,345 & & & \(\underline{575}\) & ,790 & -,461 & & ,376 \\
\hline i. Blogs (e.g., Blogger) & & & -,315 & & ,614 & ,582 & ,546 & -,325 & ,395 & ,756 \\
\hline I. Wikis (e.g., PBworks) & ,786 & & & & 434 & ,827 & & & & ,600 \\
\hline m. Podcasts (e.g., ApplePodcasts) & & & -,815 & & & & ,317 & -,839 & & \\
\hline n. File sharing sites (e.g., Dropbox) & ,813 & & & & & ,858 & & & & ,401 \\
\hline o. Photo sharing sites (e.g., Picasa) & & & & & ,910 & & ,420 & & & ,955 \\
\hline p. Video sharing sites (e.g., YouTube) & & ,923 & & & & & ,954 & & & ,395 \\
\hline q. Web design applications(e.g., Dreamweaver) & ,592 & & ,672 & & & ,637 & & ,660 & ,484 & ,305 \\
\hline r. Web search engines (e.g., Google) & -,324 & & & ,960 & & & & ,366 & ,890 & \\
\hline s. Dictionary apps (e.g., Dictionary.com) & & -,353 & & ,789 & 380 & ,368 & & & ,823 & \(\underline{375}\) \\
\hline t. Language exchange app(e.g, Tandem) & ,353 & ,400 & & ,549 & & ,613 & , 507 & & ,725 & ,435 \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.17.2, Histogram (Total scale 17, ISL Questionnaire)


Figure A9.17.4, Q-Q Plot (Total scale 17, ISL Questionnaire)


Figure A9.17.6, Boxplot (Total scale 17, ISL Questionnaire)


Figure A9.17.3, Post-transformation Histogram (Total scale 17, ISL Questionnaire)


Figure A9.17.5, Post-transformation Q-Q Plot (Total scale 17, ISL Questionnaire)

Figure A9.17.7, Post-transformation Boxplot (Total scale 17, ISL Questionnaire)

Figures and Tables related to Scale 18 of the ISL Questionnaire

Table A9.18.1, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 18, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{5 , 6 9 2}\) & 4,497 \\
2 & \(\mathbf{4 , 0 2 3}\) & 3,372 \\
3 & \(\mathbf{2 , 8 7 1}\) & 2,653 \\
4 & \(\mathbf{2 , 1 4 2}\) & 2,101 \\
5 & 1,378 & 1,619 \\
6 &, 767 & \(\mathbf{1 , 2 5 8}\) \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Grafico scree


Figure A9.18.1, Screeplot (Scale 18, ISL Questionnaire)
Table A9.18.2, Correlation matrix between components (Scale 18, ISL Questionnaire)
Matrice di correlazione del componenti
\begin{tabular}{|c|c|c|c|c|c|}
\hline Components & 1 & 2 & 3 & 4 & 5 \\
\hline 1 & 1,000 & -.127 & -.066 & \(-.288\) & ,153 \\
\hline 2 & -, 127 & 1,000 & . 053 & -.077 & --193 \\
\hline 3 & \(-.066\) & 053 & 1.000 & -.051 & . 149 \\
\hline 4 & -,268 & -.077 & -.061 & 1,000 & -.012 \\
\hline 5. & . 153 & -193 & . 149 & -.012 & 1,000 \\
\hline
\end{tabular}

Metodo diestazone: Rnalisi dei componenti principali.
Melodo dirolazione: Cbimin con normalzazone Kaiser.

Table A9.18.3, Model and structure matrices obtained from the analysis of the main components of Scale 18 of the ISL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{5}{|c|}{Pattern Matrix} & \multicolumn{5}{|c|}{Structure Matrix} \\
\hline & \multicolumn{5}{|c|}{Component} & \multicolumn{5}{|c|}{Component} \\
\hline & 1 & 2 & 3 & 4 & 5 & 1 & 2 & 3 & 4 & 5 \\
\hline a. Word processing applications (e.g., MSWord) & & ,980 & & & & & ,973 & & & \\
\hline b. Spreadsheet applications(e.g., MS Excel) & 1,009 & & & & & ,963 & & & & \\
\hline c. Database applications (e.g., MS Access) & & -487 & ,328 & -,533 & & ,430 & -,498 & , 353 & -,575 & ,399 \\
\hline d. Presentation applications(e.g., MS PowerPoint) & & ,980 & & & & & . 973 & & & \\
\hline e. Communication applications (e.g., Skype) & ,868 & & -,360 & & & ,879 & & -,429 & & \\
\hline f. Learning management systems (e.g., Moodle) & ,656 & & -,416 & & \(\underline{555}\) & ,763 & & -,375 & & \(\underline{587}\) \\
\hline g. Virtual worlds (e.g., SecondLife) & & & & -,850 & & & & & -,855 & \\
\hline h. Social networking services(e.g., Facebook) & ,753 & . 334 & & -,349 & & ,773 & , 309 & & -,567 & \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline i. Blogs (e.g., Blogger) & & \multicolumn{4}{|c|}{-,988} & & & & \multicolumn{2}{|l|}{-,982} \\
\hline I. Wikis (e.g., PBworks) & ,601 & & & & , 344 & ,723 & -,360 & & -,372 & , 528 \\
\hline m. Podcasts (e.g., ApplePodcasts) & & & & & ,867 & & -,337 & & ,349 & ,821 \\
\hline n. File sharing sites (e.g., Dropbox) & \(\underline{321}\) & & -,809 & & ,347 & \(\underline{432}\) & & -,785 & & \\
\hline o. Photo sharing sites (e.g., Picasa) & ,349 & \(\underline{-378}\) & & ,724 & & & -,517 & & ,640 & ,435 \\
\hline p. Video sharing sites (e.g., YouTube) & & & ,858 & & & & & ,844 & & \\
\hline q. Web design applications(e.g., Dreamweaver) & ,420 & -,490 & ,301 & & 418 & , 594 & -,588 & ,325 & -,349 & ,624 \\
\hline r. Web search engines (e.g., Google) & & ,648 & , 319 & & ,359 & & ,623 & ,426 & & \\
\hline s. Dictionary apps (e.g., Dictionary.com) & & 436 & ,525 & & \(\underline{555}\) & & , 371 & ,643 & -,310 & , 556 \\
\hline t. Language exchange app(e.g, Tandem) & & & & -,794 & & . 480 & & & -,868 & \\
\hline
\end{tabular}


Figure A9.18.2, Histogram (Total scale 18, ISL Questionnaire)


Figure A9.18.4, Q-Q Plot (Total scale 18, ISL Questionnaire)


Figure A9.18.6, Boxplot (Total scale 18, ISL Questionnaire)


Figure A9.18.3, Post-transformation Histogram (Total scale 18, ISL Questionnaire)


Figure A9.18.5, Post-transformation Q-Q Plot (Total scale 18, ISL Questionnaire)


Figure A9.18.7, Post-transformation Boxplot (Total scale 18, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures and Tables related to Scale 19 of the ISL Questionnaire
Table A9.19.1, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 19, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{7 , 4 6 8}\) & 4,497 \\
2 & \(\mathbf{4 , 0 2 6}\) & 3,372 \\
3 & 2,172 & 2,653 \\
4 & 1,637 & 2,101 \\
5 & 1,124 & 1,619 \\
6 &, 762 & \(\mathbf{1 , 2 5 8}\) \\
\hline
\end{tabular}


Figure A9.19.1, Screeplot (Scale 19, ISL Questionnaire)

Table A9.19.2, Correlation matrix between components (Scale 19, ISL Questionnaire)

\section*{Matrice di correlazione del component}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Companerle & 1 & 2 & 3 & 4 & 5 \\
\hline 1 & 1,000 & -031 & 179 & . 321 & . 371 \\
\hline \(z\) & -.134 & 1,000 & -0.024 & .067 & ,082 \\
\hline 2 & . 179 & -.024 & 1,000 & . 107 & -082 \\
\hline 4 & . 321 & . 067 & 107 & 1.000 & . 183 \\
\hline 5 & ,281 & ,062 & -082 & . 183 & 7,000 \\
\hline
\end{tabular}

\footnotetext{
Metodo diestacione: Analsi der component principsi
Metodo of rotazione: Obimin con nommaluapone Kaiser
}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.19.3, Model and structure matrices obtained from the analysis of the main components of Scale 19 of the ISL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{5}{|c|}{Pattern Matrix} & \multicolumn{5}{|c|}{Structure Matrix} \\
\hline & \multicolumn{5}{|c|}{Component} & \multicolumn{5}{|c|}{Component} \\
\hline & 1 & 2 & 3 & 4 & 5 & 1 & 2 & 3 & 4 & 5 \\
\hline a. Word processing applications (e.g., MSWord) & & , 308 & & ,878 & & ,332 & , 369 & & ,906 & \\
\hline b. Spreadsheet applications(e.g., & & & & ,737 & & ,601 & & & ,861 & ,384 \\
\hline MS Excel) & & & & & & & & & & \\
\hline c. Database applications (e.g., MS & & & & ,628 & \(\underline{597}\) & ,502 & & & ,754 & \(\underline{697}\) \\
\hline Access) & & & & & & & & & & \\
\hline d. Presentation applications(e.g., MS PowerPoint) & & ,689 & & & ,593 & & ,764 & & & ,595 \\
\hline e. Communication applications (e.g., Skype) & & -786 & \(\underline{367}\) & ,354 & & & -,782 & 420 & & \\
\hline f. Learning management systems (e.g., Moodle) & & & ,973 & & & & & ,986 & & \\
\hline g. Virtual worlds (e.g., SecondLife) & ,813 & & & & & ,941 & & ,325 & ,427 & ,475 \\
\hline h. Social networking services(e.g., Facebook) & ,855 & -368 & -349 & & & ,843 & -,378 & & & ,369 \\
\hline i. Blogs (e.g., Blogger) & ,591 & & ,352 & -,314 & 530 & ,748 & & ,380 & & \(\underline{666}\) \\
\hline I. Wikis (e.g., PBworks) & & & , 352 & ,699 & & ,543 & & ,474 & ,811 & \\
\hline m. Podcasts (e.g., ApplePodcasts) & & & & & ,912 & ,362 & & & & ,941 \\
\hline n. File sharing sites (e.g., Dropbox) & \(\stackrel{465}{ }\) & -,594 & & & \(\stackrel{413}{ }\) & ,677 & -,562 & & ,340 & \(\underline{571}\) \\
\hline o. Photo sharing sites (e.g., Picasa) & ,391 & 400 & -,316 & 319 & \(\underline{361}\) & ,558 & ,447 & & \(\underline{504}\) & ,623 \\
\hline p. Video sharing sites (e.g., YouTube) & & ,904 & & & & & ,916 & & & \\
\hline q. Web design applications(e.g., Dreamweaver) & 961 & & & & & ,955 & & ,315 & ,374 & \\
\hline r. Web search engines (e.g., Google) & & ,754 & & & & & ,741 & & & \\
\hline s. Dictionary apps (e.g., Dictionary.com) & & ,711 & ,309 & & & ,318 & ,702 & ,317 & & \\
\hline t. Language exchange app(e.g, Tandem) & ,907 & & & & & ,959 & & & ,524 & ,329 \\
\hline
\end{tabular}


Figure A9.19.2, Histogram (Total scale 19, ISL Questionnaire)


Figure A9.19.3, Post-transformation Histogram (Total scale 19, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.19.4, Q-Q Plot (Total scale 19, ISL Questionnaire)


Figure A9.19.6, Boxplot (Total scale 19, ISL Questionnaire)


Figure A9.19.5, Post-transformation Q-Q Plot (Total scale 19, ISL Questionnaire)


Figure A9.19.7, Post-transformation Boxplot (Total scale 19, ISL Questionnaire)

Figures and Tables related to Scale 20 of the ISL Questionnaire
Table A9.20.1, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 20, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{5 , 4 4 2}\) & 3,047 \\
2 & \(\mathbf{2 , 8 1 4}\) & 2,140 \\
3 &, 676 & 1,612 \\
\hline
\end{tabular}

Grafico scree


Figure A9.20.1, Screeplot (Scale 20, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

\section*{Matrice di correlazione dei componenti}
\begin{tabular}{ll|r} 
Componente & 1 & \multicolumn{1}{c}{2} \\
\hline 1 & 1,000 &, 220 \\
\hline 2 &, 220 & 1,000 \\
\hline
\end{tabular}

Metodo di estrazione: Analisi dei componenti principali.
Metodo di rotazione: Oblimin con
normalizzazione Kaiser

Table A9.20.2, Correlation matrix between components (Scale 20, ISL Questionnaire)

Table A9.20.3, Model and structure matrices obtained from the analysis of the main components of Scale 20 of the ISL Questionnaire
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Pattern Matrix} & \multicolumn{2}{|l|}{Structure Matrix} \\
\hline & \multicolumn{2}{|l|}{Component} & \multicolumn{2}{|l|}{Component} \\
\hline a. Interest & & ,968 & & ,963 \\
\hline b. Attention & & ,777 & & ,756 \\
\hline c. Motivation & & ,968 & & ,963 \\
\hline d. Participation & ,695 & ,424 & ,788 & ,577 \\
\hline e. Retention of information & & ,763 & ,465 & ,828 \\
\hline f. Relationship with the teacher & ,952 & & ,900 & \\
\hline g. Relationship with peers & 1,008 & -,317 & ,939 & \\
\hline h. Literacy & ,757 & & ,819 & ,451 \\
\hline i. Agency & ,858 & & ,880 & \\
\hline I. Performance & ,893 & & ,928 & ,356 \\
\hline
\end{tabular}


Figure A9.20.2, Histogram (Total subscale 20.1, ISL Questionnaire)


Figure A9.20.4, Q-Q Plot (Total subscale 20.1, ISL Questionnaire)


Figure A9.20.3, Post-transformation Histogram (Total subscale 20.1, ISL Questionnaire)


Figure A9.20.5, Post-transformation Q-Q Plot (Total subscale 20.1, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.20.6, Boxplot (Total subscale 20.1, ISL Questionnaire)


Figure A9.20.8, Histogram (Total subscale 20.2, ISL Questionnaire)


Figure A9.20.10, Q-Q Plot (Total subscale 20.2, ISL Questionnaire)


Figure A9.20.12, Boxplot (Total subscale 20.2, ISL Questionnaire)


Figure A9.20.7, Post-transformation Boxplot (Total subscale 20.1, ISL Questionnaire)


Figure A9.20.9, Post-transformation Histogram (Total subscale 20.2, ISL Questionnaire)


Figure A9.20.11, Post-transformation Q-Q Plot (Total subscale 20.2, ISL Questionnaire)


Figure A9.20.13, Post-transformation Boxplot (Total subscale 20.2, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures and Tables related to Scale 21 of the ISL Questionnaire
Table A9.21.1, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 21, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{4 , 7 2 9}\) & 2,445 \\
2 & 1,385 & \(\mathbf{1 , 9 5 6}\) \\
3 &, 510 & 1,179 \\
\hline
\end{tabular}


Figure A9.21.1, Screeplot (Scale 21, ISL Questionnaire)
Table A9.21.2, Model and structure matrices obtained from the analysis of the main components of Scale 21 of the ISL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Pattern Matrix} & \multicolumn{2}{|l|}{Structure Matrix} \\
\hline & \multicolumn{2}{|l|}{Component} & \multicolumn{2}{|l|}{Component} \\
\hline & 1 & 2 & 1 & 2 \\
\hline a. ...is very useful when it comes to foreign language teaching & ,870 & & ,895 & ,318 \\
\hline b. ...is very useful when it comes to foreign language learning & ,870 & & ,895 & ,318 \\
\hline c. ...and the use of technological tools in language learning can help develop digital literacies & ,705 & ,445 & ,758 & \(\underline{530}\) \\
\hline d. ...and the use of technological tools in language learning can help develop multimodality & ,936 & & ,948 & \\
\hline e. ...is something students can generally approach better than their teachers & & ,931 & & ,936 \\
\hline f. ...is something the specific learning objectives established for foreign language education in upper secondary schools should take into consideration & ,939 & -,365 & ,895 & \\
\hline g. ...should be implemented in foreign language teaching & ,939 & -. 365 & ,895 & \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

\section*{Matrice di correlazione dei componenti}
\begin{tabular}{c|c|c} 
Componente & 1 & \multicolumn{1}{c}{2} \\
\hline 1 & 1,000 &, 120 \\
\hline 2 &, 120 & 1,000 \\
\hline
\end{tabular}

Metodo di estrazione: Analisi dei componenti principali. Metodo di rotzzione: Oblimin con normalizazione kaiser.


Figure A9.21.2, Histogram (Total subscale 21.1, ISL Questionnaire)


Figure A9.21.4, Q-Q Plot (Total subscale 21.1, ISL Questionnaire)


Figure A9.21.6, Boxplot (Total subscale 21.1, ISL Questionnaire)

Table A9.21.3, Correlation matrix (Scale 21, ISL Questionnaire)


Figure A9.21.3, Post-transformation Histogram (Total subscale 21.1, ISL Questionnaire)


Figure A9.21.5, Post-transformation Q-Q Plot (Total subscale 21.1, ISL Questionnaire)


Figure A9.21.7, Post-transformation Boxplot (Total subscale 21.1, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.21.8, Histogram (Total subscale 21.2, ISL Questionnaire)


Figure A9.21.10, Q-Q Plot (Total subscale 21.2, ISL Questionnaire)


Figure A9.21.12, Boxplot (Total subscale 21.2, ISL Questionnaire)


Figure A9.21.9, Post-transformation Histogram (Total subscale 21.2, ISL Questionnaire)


Figure A9.21.11, Post-transformation Q-Q Plot (Total subscale 21.2, ISL Questionnaire)


Figure A9.21.13, Post-transformation Boxplot (Total subscale 21.2, ISL Questionnaire)

Figures and Tables related to Scale 22 of the ISL Questionnaire
Table A9.22.1, KMO indicator and Bartlett's sphericity test (Scale 22, ISL Questionnaire)

Test di KMO e Bartlett
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Misura d Kaiser-Meyor:OFon diadeguacazza del. campionamento.} & . 339 \\
\hline \multirow[t]{3}{*}{Test daile starikita di Barlist} & Appross, Cht-quadrato & 63.454 \\
\hline & g1 & 28 \\
\hline & Sig & \(\times .001\) \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.22.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 22, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{3 , 9 3 7}\) & 2,697 \\
2 & \(\mathbf{1 , 5 5 9}\) & 1,756 \\
3 & \(\mathbf{1 , 3 9 2}\) & 1,341 \\
4 &, 657 & \(\mathbf{9 6 5}\) \\
\hline
\end{tabular}

Grafico scree


Figure A9.22.1, Screeplot (Scale 22, ISL Questionnaire)

Table A9.22.3, Model and structure matrices obtained from the analysis of the main components of Scale 22 of the ISL Teacher Questionnaire
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{3}{|c|}{Pattern Matrix} & \multicolumn{3}{|l|}{Structure Matrix} \\
\hline & \multicolumn{3}{|c|}{Component} & \multicolumn{3}{|c|}{Component} \\
\hline & 1 & 2 & 3 & 1 & 2 & 3 \\
\hline a. My school lacks the appropriate technological tools & ,771 & & -,526 & ,853 & & -,660 \\
\hline b. My school fails to promote the use of technological tools & ,910 & & & ,935 & -,468 & \\
\hline c. The tools provided by my school are obsolete & ,958 & & & ,970 & & -,331 \\
\hline d. My school's wifi network is not sufficient to support intensive use of said tools & & ,772 & & -,331 & ,809 & \\
\hline e. The time available is not sufficient to introduce new tools and activities & & & -,777 & ,399 & & -,822 \\
\hline f. My digital skills are not sufficient to regularly approach language teaching through technological tools & & & -,872 & & & -,872 \\
\hline g . The students' digital skills are not sufficient to properly approach digital language learning & & ,975 & & & ,941 & \\
\hline h. The students lack the appropriate technological tools & -,452 & ,677 & & -,612 & ,782 & \\
\hline
\end{tabular}

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

\section*{Matrice di correlazione dei componenti}
\begin{tabular}{ccc|c} 
Componente & 1 & \multicolumn{1}{l}{2} & \multicolumn{1}{c}{3} \\
\hline 1 & 1,000 & -287 & -.183 \\
\hline 2 &,- 287 & 1000 & 129 \\
\hline 3 & -183 &, 129 & 1,000 \\
\hline
\end{tabular}

Metodo ol estraziona: Analisi dal component principall
Matodo di rotajone: Obilmin con normauizazione Kalser


Figure A9.22.2, Histogram (Total subscale 22.1, ISL Questionnaire)


Figure A9.22.4, Q-Q Plot (Total subscale 22.1, ISL Questionnaire)


Figure A9.22.6, Boxplot (Total subscale 22.1, ISL Questionnaire)

Table A9.22.4, Correlation matrix (Scale 22, ISL Questionnaire)


Figure A9.22.3, Post-transformation Histogram (Total subscale 22.1, ISL Questionnaire)


Figure A9.22.5, Post-transformation Q-Q Plot (Total subscale 22.1, ISL Questionnaire)


Figure A9.22.7, Post-transformation Boxplot (Total subscale 22.1, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Figures and Tables related to Scale 23 of the ISL Questionnaire


Figure A9.23.1, Frequency graph for items 23a, 23b, 23c, 23d and 23e, ISL Questionnaire


Figure A9.23.2, Histogram (Total subscale 23.1, ISL Questionnaire)


Figure A9.23.4, Q-Q Plot (Total subscale 23.1, ISL Questionnaire)


Figure A9.23.3, Post-transformation Histogram (Total subscale 23.1, ISL Questionnaire)


Figure A9.23.5, Post-transformation Q-Q Plot (Total subscale 23.1, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.


Figure A9.23.6, Boxplot (Total subscale 23.1, ISL Questionnaire)


Figure A9.23.7, Post-transformation Boxplot (Total subscale 23.1, ISL Questionnaire)

Figures and Tables related to Scale 24 of the ISL Questionnaire
Table A9.24.1, KMO indicator and Bartlett's sphericity test (Scale 24, ISL Questionnaire)

Test di KMO e Bartlett
Msura d Kaisar-Maycr-هilin di adoguateza dat campionamento
Tegt dells sfencti di Bartlat
\begin{tabular}{lr} 
Approses CW-quairath & 20,694 \\
\hline ol & 6 \\
\hline\(\$ \operatorname{sgn}\) &, 002 \\
\hline
\end{tabular}

Table A9.24.2, Comparison between the eigenvalues obtained from Principal Component Analysis (PCA) and the criterion values obtained from Parallel Analysis (Scale 24, ISL Questionnaire)
\begin{tabular}{|c|c|c|}
\hline Components & PCA eigenvalues & Parallel Analysis values \\
\hline 1 & \(\mathbf{2 , 9 5 4}\) & 1,767 \\
2 &, 619 & \(\mathbf{1 , 1 0 5}\) \\
\hline
\end{tabular}


Figure A9.24.1, Screeplot (Scale 24, ISL Questionnaire)

APPENDIX 9 - Tables and figures relating to the preliminary analyses of each Question and Scale composing the ISL Questionnaire.

Table A9.24.3, Model and structure matrices obtained from the analysis of the main components of Scale 24 of the ISL Teacher Questionnaire
\begin{tabular}{l|c|}
\hline & Pattern Matrix \\
\hline & Component \\
\hline a. ...proved to be a valid alternative to in-situ lessons &, \(\mathbf{7 9 4}\) \\
b. ...has helped to emphasize the importance of greater technological preparation & ,822 \\
for schools \\
c. ...has helped to emphasize the importance of greater technological preparation \\
for teachers \\
d. ...has helped to emphasize the importance of greater technological preparation \\
for students
\end{tabular}


Figure A9.24.2, Histogram (Total subscale 24.1, ISL Questionnaire)


Figure A9.24.4, Q-Q Plot (Total subscale 24.1, ISL Questionnaire)


Figure A9.24.3, Post-transformation Histogram (Total subscale 24.1, ISL Questionnaire)


Figure A9.24.5, Post-transformation Q-Q Plot (Total subscale 24.1, ISL Questionnaire)


Figure A9.24.6, Boxplot (Total subscale 24.1, ISL Questionnaire)

Figure A9.24.7, Post-transformation Boxplot (Total subscale 24.1, ISL Questionnaire)

Figures and tables relating to research question 2a
\begin{tabular}{lccccl|}
\hline & \multicolumn{3}{l|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 5 is the same & 1 & .068 & 5,389 & Keep the null hypothesis \\
on the school categories. & 5 & & & \\
The distribution of Variable 6.1 is the & 1 & .510 & 1,346 & Keep the null hypothesis \\
same on the school categories. & 6.1 & & & \\
The distribution of Variable 6.2 is the & 1 & .303 & 2,386 & Keep the null hypothesis \\
same on the school categories. & 6.2 & & & \\
\hline
\end{tabular}

Table A10a.1, Kruskal-Wallis Test for independent samples, variable 1/5, 6.1, 6.2,


Figure A10a.1.1, Kruskal-Wallis Test for independent samples, variables 1 and 5



Figure A10a.1.1, Kruskal-Wallis Test for independent samples, variables 1 and 6.1

Figure A10a.1.1, Kruskal-Wallis Test for independent samples, variables 1 and 6.2

Legend
1. Liceo
2. Istituto Tecnico
3. Both
\begin{tabular}{lcccll|}
\hline \multicolumn{4}{l|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 5 is the same on & 2 & .572 & 1,108 & Keep the null hypothesis \\
the experience categories. & 5 & & & \\
The distribution of Variable 6.1 is the same & 2 & .287 & 2,500 & Keep the null hypothesis \\
on the experience categories. & 6.1 & & & \\
The distribution of Variable 6.2 is the same & 2 & .342 & 2,146 & Keep the null hypothesis \\
on the experience categories. & 6.2 & & & \\
\hline
\end{tabular}

\footnotetext{
Table A10a.2, Kruskal-Wallis Test for independent samples, variable 2/5, 6.1, 6.2
}


Figure A10a.2.1, Kruskal-Wallis Test for independent samples, variables 2 and 5



Figure A10a.2.2, Kruskal-Wallis Test for independent samples, variables 2 and 6.1

Figure A10a.2.3, Kruskal-Wallis Test for independent samples, variables 2 and 6.2

Legend
2. 1-5 years
4. 11-20 years
5. 21-30 years

\section*{Kruskal-Wallis Test for independent samples}
\begin{tabular}{lcccl|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 5 is the same & 3 & .186 & 4,807 & Keep the null hypothesis \\
on the age categories. & 5 & & & \\
The distribution of Variable 6.1 is the & 3 & .211 & 4,515 & Keep the null hypothesis \\
same on the age categories. & 6.1 & & & \\
The distribution of Variable 6.2 is the & 3 & .443 & 2,686 & Keep the null hypothesis \\
same on the age categories. & 6.2 & & & \\
\hline
\end{tabular}

Table A10a.3, Kruskal-Wallis Test for independent samples, variable 3/5, 6.1, 6.2


Figure A10a.3.1, Kruskal-Wallis Test for independent samples, variables 3 and 5


Figure A10a.3.2, Kruskal-Wallis Test for independent samples, variables 3 and 6.1


Figure A10a.3.3, Kruskal-Wallis Test for independent samples, variables 3 and 6.2

Legend
1. Less than 25
3. 31-40 years
4. 41-50 years
5. \(51-60\) vears
\begin{tabular}{lccccll|}
\hline \multicolumn{5}{c|}{ Mann-Whitney U Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & \(\mathbf{z}\) & Decision \\
\hline The distribution of Variable 5 is the same on the & 7.1 & \(.711^{*}\) & 9,500 & .397 & Keep the null \\
Research subscriber categories. & 5 & & & & hypothesis \\
The distribution of Variable 6.1 is the same on & 7.1 & \(.400^{*}\) & 4,500 & -.922 & Keep the null \\
the Research subscriber categories. & 6.1 & & & hypothesis \\
The distribution of Variable 6.2 is the same on & 7.1 & \(.889^{*}\) & 7,500 & -.136 & Keep the null \\
the Research subscriber categories. & 6.2 & & & & & \\
\hline
\end{tabular}

Table A10a.4, Mann-Whitney U Test for independent samples, variable 7.1/5, 6.1, 6.2
* The exact significance is displayed for this test.


\begin{tabular}{ll|ccc|}
\hline \multicolumn{5}{c|}{ Spearman's rho } \\
\hline & \multicolumn{5}{l|}{\(\mathbf{5}\)} & 6.1 & 6.2 \\
\hline \(\mathbf{5}\) & Correlation coefficient & 1,000 & -.090 & -.343 \\
& Sig. (two-tailed) & & .805 & .332 \\
\hline 6.1 & Correlation coefficient & -.090 & 1,000 & -.115 \\
& Sig. (two-tailed) & .805 & & .752 \\
\hline 6.2 & Correlation coefficient & -.343 & -.115 & 1,000 \\
& Sig. (two-tailed) & .332 & .752 & \\
\hline
\end{tabular}

Table A10a.5, Spearman's rank correlation coefficient, variables 5, 6.1, 6.2
\({ }^{* *}\) The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05

Figures and tables relating to research question 2b
\begin{tabular}{lccccl|}
\hline & \multicolumn{2}{c|}{ Kruskal-Wallis Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 8.1 is the & 1 & .245 & 2,813 & Keep the null hypothesis \\
same on the school categories. & 8.1 & & & \\
The distribution of Variable 8.2 is the & 1 & .757 &, 556 & Keep the null hypothesis \\
same on the school categories. & 8.2 & & \\
The distribution of Variable 11 is the & 1 & .235 & 2,896 & Keep the null hypothesis \\
same on the school categories. & 11 & & & \\
The distribution of Variable 14 is the & 1 & .289 & 2,485 & Keep the null hypothesis \\
same on the school categories. & 14 & & & \\
\hline
\end{tabular}

Table A10b.1, Kruskal-Wallis Test for independent samples, variable 1/8.1, 8.2, 11, 14


Figure A10b.1.1, Kruskal-Wallis Test for independent samples, variables 1 and 8.1


Figure A10b.1.3, Kruskal-Wallis Test for independent samples, variables 1 and 11


Figure A10b.1.2, Kruskal-Wallis Test for independent samples, variables 1 and 8.2


Figure A10b.1.4, Kruskal-Wallis Test for independent samples, variables 1 and 14

Kruskal-Wallis Test for independent samples
\begin{tabular}{|c|c|c|c|c|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 8.1 is the same on the experience categories. & \[
\begin{gathered}
2 \\
8.1
\end{gathered}
\] & . 368 & 2,000 & Keep the null hypothesis \\
\hline The distribution of Variable 8.2 is the same on the experience categories. & \[
\begin{gathered}
2 \\
8.2
\end{gathered}
\] & . 766 & ,532 & Keep the null hypothesis \\
\hline The distribution of Variable 11 is the same on the experience categories. & \[
\begin{gathered}
2 \\
11
\end{gathered}
\] & . 198 & 3,236 & Keep the null hypothesis \\
\hline The distribution of Variable 14 is the same on the experience categories. & \[
\begin{gathered}
2 \\
14
\end{gathered}
\] & . 923 & ,161 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A10b.2, Kruskal-Wallis Test for independent samples, variable 2/8.1, 8.2, 11, 14


Figure A10b.2.1, Kruskal-Wallis Test for independent samples, variables 2 and 8.1


Figure A10b.2.3, Kruskal-Wallis Test for independent samples, variables 2 and 11


Figure A10b.2.2, Kruskal-Wallis Test for independent samples, variables 2 and 8.2


Figure A10b.2.4, Kruskal-Wallis Test for independent samples, variables 2 and 14
\begin{tabular}{lccccl|}
\hline & \multicolumn{3}{l|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 8.1 is the & 3 & .525 & 2,237 & Keep the null hypothesis \\
same on the age categories. & 8.1 & & & \\
The distribution of Variable 8.2 is the & 3 & .125 & 5,737 & Keep the null hypothesis \\
same on the age categories. & 8.2 & & \\
The distribution of Variable 11 is the & 3 & .076 & 6,876 & Keep the null hypothesis \\
same on the age categories. & 11 & & & \\
The distribution of Variable 14 is the & 3 & .928 &, 456 & Keep the null hypothesis \\
same on the age categories. & 14 & & &
\end{tabular}

Table A10b.3, Kruskal-Wallis Test for independent samples, variable 3/8.1, 8.2, 11, 14


Figure A10b.3.1, Kruskal-Wallis Test for independent samples, variables 3 and 8.1


Figure A10b.3.3, Kruskal-Wallis Test for independent samples, variables 3 and 11


Figure A10b.3.2, Kruskal-Wallis Test for independent samples, variables 3 and 8.2


Figure A10b.3.4, Kruskal-Wallis Test for independent samples, variables 3 and 14
\begin{tabular}{lcccccll|}
\hline \multicolumn{6}{c|}{ Mann-Whitney U Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & \(\mathbf{z}\) & Decision \\
\hline The distribution of Variable 8.1 is the same & 7.1 & \(.711^{*}\) & 10,000 & .527 & Keep the null \\
on the Research subscriber categories. & 8.1 & & & & hypothesis \\
The distribution of Variable 8.2 is the same & 7.1 & \(.533^{*}\) & 5,500 & -.659 & Keep the null \\
on the Research subscriber categories. & 8.2 & & & & hypothesis \\
The distribution of Variable 11 is the same & 7.1 & \(.711^{*}\) & 10,000 & .522 & Keep the null \\
on the Research subscriber categories. & 11 & & & hypothesis \\
The distribution of Variable 14 is the same & 7.1 & \(.400^{*}\) & 11,500 & .919 & Keep the null \\
on the Research subscriber categories. & 14 & & & & & & \\
\hline
\end{tabular}

Table A10b.4, Mann-Whitney U Test for independent samples, variable 7.1/8.1, 8.2, 11, 14
* The exact significance is displayed for this test.


Figure A10b.4.1, Mann-Whitney U Test for independent samples, variables 7.1 and 8.1


Figure A10b.4.3, Mann-Whitney U Test for independent samples, variables 7.1 and 11

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Figure A10b.4.2, Mann-Whitney U Test for independent samples, variables 7.1 and 8.2

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Figure A10b.4.4, Mann-Whitney U Test for independent samples, variables 7.1 and 14
\begin{tabular}{lcccccl|}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline The distribution of Variable 12 is the & 1 & .621 & 8,083 & 10 & Keep the null \\
same on the school categories. & 12 & & & 9 & hypothesis \\
The distribution of Variable 16 is the & 1 & .109 & 10,400 & & Keep the null \\
same on the school categories. & 16 & & & & hypothesis \\
\hline
\end{tabular}

Table A10b.5, Chi-square Test, variable 1/12, 16
\begin{tabular}{lcccccl|}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline The distribution of Variable 12 is the & 2 & .206 & 13,333 & 10 & Keep the null \\
same on the experience categories. & 12 & & & & hypothesis \\
The distribution of Variable 16 is the & 2 & .226 & 8,167 & 6 & Keep the null \\
same on the experience categories. & 16 & & & hypothesis \\
\hline
\end{tabular}

Table A10b.6, Chi-square Test, variable 2/12, 16


Figure A10b.5.1, Chi-square Test, variables 1 and 12
Figure A10b.5.2, Chi-square Test, variables 1 and 16


Figure A10b.6.1, Chi-square Test, variables 2 and 12
Figure A10b.6.2, Chi-square Test, variables 2 and 16
\begin{tabular}{lcccccl|}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline The distribution of Variable 12 is the & 3 & .156 & 20,444 & 15 & Keep the null \\
same on the age categories. & 12 & & & 9 & hypothesis \\
The distribution of Variable 16 is the & 3 & .137 & 13,600 & & hypothesis the null \\
same on the age categories. & 16 & & & & \\
\hline
\end{tabular}

Table A10b.7, Chi-square Test, variable 3/12, 16


Figure A10b.7.1, Chi-square Test, variables 3 and 12
Figure A10b.7.2, Chi-square Test, variables 3 and 16
\begin{tabular}{lcccccl|}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline The distribution of Variable 12 is the same & 7.1 & .230 & 6,875 & 5 & Keep the null \\
on the Research subscriber categories. & 12 & & & & hypothesis \\
The distribution of Variable 16 is the same & 7.1 & .599 & 1,875 & 3 & Keep the null \\
on the Research subscriber categories. & 16 & & & & hypothesis \\
\hline
\end{tabular}

Table A10b.8, Chi-square Test, variable 7.1/12, 16


Figure A10b.8.1, Chi-
square Test, variables 7.1
and 12

\begin{tabular}{ll|cccccc|}
\hline & \multicolumn{7}{c|}{ Spearman's rho } \\
\hline & & \(\mathbf{8 . 1}\) & \(\mathbf{8 . 2}\) & \(\mathbf{1 1}\) & \(\mathbf{1 2}\) & \(\mathbf{1 4}\) & 16 \\
\hline Correlation coefficient & \(\mathbf{8 . 1}\) & 1,000 & .194 & .606 & .121 & \(.723^{*}\) & .026 \\
Sig. (two-tailed) & & & .591 & .063 & .739 & .018 & .942 \\
Correlation coefficient & \(\mathbf{8 . 2}\) & .194 & 1,000 & .311 & -.363 & .132 & -.030 \\
Sig. (two-tailed) & & .591 & & .382 & .303 & .716 & .935 \\
Correlation coefficient & \(\mathbf{1 1}\) & .606 & .311 & 1,000 & .470 & .334 & -.015 \\
Sig. (two-tailed) & & .063 & .382 & & .170 & .346 & .967 \\
Correlation coefficient & \(\mathbf{1 2}\) & .121 & -.363 & .470 & 1,000 & -.185 & .644 \\
Sig. (two-tailed) & & .739 & .303 & .170 & & .610 & .104 \\
Correlation coefficient & \(\mathbf{1 4}\) & \(.723^{*}\) & .132 & .334 & -.185 & 1,000 & -.295 \\
Sig. (two-tailed) & & .018 & .716 & .346 & .610 & & .409 \\
Correlation coefficient & \(\mathbf{1 6}\) & .026 & -.030 & -.015 & .644 & -.295 & 1,000 \\
Sig. (two-tailed) & & .942 & .935 & .967 & .104 & .409 & \\
\hline
\end{tabular}

Table A10b.9, Spearman's rank correlation coefficient, variables 8.1, 8.2, 11, 12, 14, 16
\({ }^{* *}\) The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05

Figures and tables relating to research question 2c
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Kruskal-Wallis Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 9.1 is the & 1 & . 536 & 1,249 & Keep the null hypothesis \\
\hline same on the school categories. & 9.1 & & & \\
\hline The distribution of Variable 9.2 is the & 1 & . 861 & ,300 & Keep the null hypothesis \\
\hline same on the school categories. & 9.2 & & & \\
\hline The distribution of Variable 10 is the & 1 & . 896 & 1,753 & Keep the null hypothesis \\
\hline same on the school categories. & 10 & & & \\
\hline The distribution of Variable 13 is the & 1 & . 073 & 5,248 & Keep the null hypothesis \\
\hline same on the school categories. & 13 & & & \\
\hline
\end{tabular}

Table A10c.1, Kruskal-Wallis Test for independent samples, variable 1/9.1, 9.2, 10, 13


Figure A10c.1.1, Kruskal-Wallis Test for independent samples, variables 1 and 9.1


Figure A10c.1.3, Kruskal-Wallis Test for independent samples, variables 1 and 10


Figure A10c.1.2, Kruskal-Wallis Test for independent samples, variables 1 and 9.2


Figure A10c.1.4, Kruskal-Wallis Test for independent samples, variables 1 and 13

Kruskal-Wallis Test for independent samples
\begin{tabular}{lcccl|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 9.1 is the same & 2 & .840 &, 349 & Keep the null hypothesis \\
on the experience categories. & 9.1 & & & \\
The distribution of Variable 9.2 is the same & 2 & .285 & 2,514 & Keep the null hypothesis \\
on the experience categories. & 9.2 & & & \\
The distribution of Variable 10 is the same & 2 & .759 &, 552 & Keep the null hypothesis \\
on the experience categories. & 10 & & 1,532 & Keep the null hypothesis \\
The distribution of Variable 13 is the same & 2 & .465 & & \\
on the experience categories. & 13 & & & \\
\hline
\end{tabular}

Table A10c.2, Kruskal-Wallis Test for independent samples, variable 2/9.1, 9.2, 10, 13


Figure A10c.2.1, Kruskal-Wallis Test for independent samples, variables 2 and 9.1


Figure A10c.2.3, Kruskal-Wallis Test for independent samples, variables 2 and 10

Figure A10c.2.2, Kruskal-Wallis Test for independent samples, variables 2 and 9.2


Figure A10c.2.4, Kruskal-Wallis Test for independent samples, variables 2 and 13
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Kruskal-Wallis Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 9.1 is the same on the age categories. & \[
\begin{gathered}
\hline 3 \\
9.1
\end{gathered}
\] & . 867 & ,726 & Keep the null hypothesis \\
\hline The distribution of Variable 9.2 is the same on the age categories. & \[
\begin{gathered}
3 \\
9.2
\end{gathered}
\] & . 180 & 4,893 & Keep the null hypothesis \\
\hline The distribution of Variable 10 is the same on the age categories. & 3
10 & . 942 & ,390 & Keep the null hypothesis \\
\hline The distribution of Variable 13 is the same on the age categories. & \[
\begin{gathered}
3 \\
13
\end{gathered}
\] & . 440 & 2,704 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A10c.3, Kruskal-Wallis Test for independent samples, variable 3/9.1, 9.2, 10, 13


Figure A10c.3.1, Kruskal-Wallis Test for independent samples, variables 3 and 9.1


Figure A10c.3.3, Kruskal-Wallis Test for independent samples, variables 3 and 10


Figure A10c.3.2, Kruskal-Wallis Test for independent samples, variables 3 and 9.2


Figure A10c.3.4, Kruskal-Wallis Test for independent samples, variables 3 and 13

Mann-Whitney U Test for independent samples
\begin{tabular}{lccccll|}
\hline Null hypothesis & Variables & Sig. & Test statistics & \(\mathbf{z}\) & Decision \\
\hline The distribution of Variable 9.1 is the same & 7.1 & \(.711^{*}\) & 10,000 & .591 & Keep the null \\
on the Research subscriber categories. & 9.1 & & & & hypothesis \\
The distribution of Variable 9.2 is the same & 7.1 & \(.711^{*}\) & 10,000 & .527 & Keep the null \\
on the Research subscriber categories. & 9.2 & & & hypothesis \\
The distribution of Variable 10 is the same & 7.1 & \(.533^{*}\) & 11,000 & .850 & Keep the null \\
on the Research subscriber categories. & 10 & & & hypothesis \\
The distribution of Variable 13 is the same & 7.1 & \(.711^{*}\) & 6,000 &.-.524 & Keep the null \\
on the Research subscriber categories. & 13 & & & & hypothesis \\
\hline
\end{tabular}

Table A10c.4, Mann-Whitney U Test for independent samples, variable 7.1/9.1, 9.2, 10, 13
* The exact significance is displayed for this test.


Figure A10c.4.1, Mann-Whitney U Test for independent samples, variables 7.1 and 9.1

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Figure A10c.4.3, Mann-Whitney U Test for independent samples, variables 7.1 and 10

Figure A10c.4.2, Mann-Whitney U Test for independent samples, variables 7.1 and 9.2

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Figure A10c.4.4, Mann-Whitney U Test for independent samples, variables 7.1 and 13
\begin{tabular}{lccccl|}
\hline & \multicolumn{3}{l|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the & 1 & .620 &, 957 & Keep the null hypothesis \\
same on the school categories. & 15.1 & & & \\
The distribution of Variable 15.2 is the & 1 & .190 & 3,325 & Keep the null hypothesis \\
same on the school categories. & 15.2 & & & \\
The distribution of Variable 15.3 is the & 1 & .095 & 4,700 & Keep the null hypothesis \\
same on the school categories. & 15.3 & & & \\
The distribution of Variable 21.1 is the & 1 & .356 & 2,064 & Keep the null hypothesis \\
same on the school categories. & 21.1 & & & \\
\hline
\end{tabular}

Table A10c.5, Kruskal-Wallis Test for independent samples, variable 1/15.1, 15.2, 15.3, 21.1


Figure A10c.5.1, Kruskal-Wallis Test for independent samples, variables 1 and 15.1


Figure A10c.5.3, Kruskal-Wallis Test for independent samples, variables 1 and 15.3


Figure A10c.5.2, Kruskal-Wallis Test for independent samples, variables 1 and 15.2


Figure A10c.5.4, Kruskal-Wallis Test for independent samples, variables 1 and 21.1

Kruskal-Wallis Test for independent samples
\begin{tabular}{lccccl|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the same & 2 & .230 & 2,936 & Keep the null hypothesis \\
on the experience categories. & 15.1 & & & \\
The distribution of Variable 15.2 is the same & 2 & .225 & 2,982 & Keep the null hypothesis \\
on the experience categories. & 15.2 & & & \\
The distribution of Variable 15.3 is the same & 2 & .910 &, 189 & Keep the null hypothesis \\
on the experience categories. & 15.3 & & & \\
The distribution of Variable 21.1 is the same & 2 & .281 & 2,536 & Keep the null hypothesis \\
on the experience categories. & 21.1 & & & \\
\hline
\end{tabular}

Table A10c.6, Kruskal-Wallis Test for independent samples, variable 2/15.1, 15.2, 15.3, 21.1


Figure A10c.6.1, Kruskal-Wallis Test for independent samples, variables 2 and 15.1


Figure A10c.6.3, Kruskal-Wallis Test for independent samples, variables 2 and 15.3


Figure A10c.6.2, Kruskal-Wallis Test for independent samples, variables 2 and 15.2


Figure A10c.6.4, Kruskal-Wallis Test for independent samples, variables 2 and 21.1
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Kruskal-Wallis Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.1 is the same on the age categories. & \[
\begin{gathered}
3 \\
15.1
\end{gathered}
\] & . 334 & 3,400 & Keep the null hypothesis \\
\hline The distribution of Variable 15.2 is the same on the age categories. & \[
\begin{gathered}
3 \\
15.2
\end{gathered}
\] & . 172 & 5,002 & Keep the null hypothesis \\
\hline The distribution of Variable 15.3 is the same on the age categories. & \[
\begin{gathered}
3 \\
15.3
\end{gathered}
\] & . 904 & ,566 & Keep the null hypothesis \\
\hline The distribution of Variable 21.1 is the same on the age categories. & \[
\begin{gathered}
3 \\
21.1
\end{gathered}
\] & . 110 & 6,025 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A10c.7, Kruskal-Wallis Test for independent samples, variable 3/15.1, 15.2, 15.3, 21.1


Figure A10c.7.1, Kruskal-Wallis Test for independent samples, variables 3 and 15.1


Figure A10c.7.3, Kruskal-Wallis Test for independent samples, variables 3 and 15.3


Figure A10c.7.2, Kruskal-Wallis Test for independent samples, variables 3 and 15.2


Figure A10c.7.4, Kruskal-Wallis Test for independent samples, variables 3 and 21.1

\section*{Mann-Whitney U Test for independent samples}
\begin{tabular}{lccccll|}
\hline Null hypothesis & Variables & Sig. & Test statistics & \(\mathbf{z}\) & Decision \\
\hline The distribution of Variable 15.1 is the same & 7.1 & \(.889^{*}\) & 7,000 & -.282 & Keep the null \\
on the Research subscriber categories. & 15.1 & & & & hypothesis \\
The distribution of Variable 15.2 is the same & 7.1 & \(.400^{*}\) & 12,000 & 1.051 & Keep the null \\
on the Research subscriber categories. & 15.2 & & & & hypothesis \\
The distribution of Variable 15.3 is the same & 7.1 & \(.711^{*}\) & 6,500 & -.399 & Keep the null \\
on the Research subscriber categories. & 15.3 & & & 1.537 & Keep the null \\
The distribution of Variable 21.1 is the same & 7.1 & \(.178^{*}\) & 13,500 & & & \\
on the Research subscriber categories. & 21.1 & & & & & \\
\hline
\end{tabular}

Table A10c.8, Mann-Whitney U Test for independent samples, variable 7.1/15.1, 15.2, 15.3, 21.1
* The exact significance is displayed for this test.


Figure A10c.8.1, Mann-Whitney \(U\) Test for independent samples, variables 7.1 and 15.1


Figure A10c.8.3, Mann-Whitney U Test for independent samples, variables 7.1 and 15.3

Figure A10c.8.2, Mann-Whitney \(U\) Test for independent samples, variables 7.1 and 15.2

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Figure A10c.8.4, Mann-Whitney U Test for independent samples, variables 7.1 and 21.1

APPENDIX 10 - ISL Questionnaire Inferential statistical analyses
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{9}{|c|}{Spearman's rho} \\
\hline & & 9.1 & 9.2 & 10 & 13 & 15.1 & 15.2 & 15.3 & 21.1 \\
\hline Correlation coefficient & 9.1 & 1,000 & . 062 & . 322 & . 271 & . 198 & . 116 & . 591 & -. 183 \\
\hline Sig. (two-tailed) & & & . 865 & . 364 & . 449 & . 584 & . 749 & . 072 & . 613 \\
\hline Correlation coefficient & 9.2 & . 062 & 1,000 & . 353 & . 244 & . \(641{ }^{*}\) & . 311 & . 371 & -. 324 \\
\hline Sig. (two-tailed) & & . 865 & & . 317 & . 498 & . 046 & . 933 & . 291 & . 362 \\
\hline Correlation coefficient & 10 & . 322 & . 353 & 1,000 & -. 202 & -. 037 & -. 368 & -. 072 & -. 518 \\
\hline Sig. (two-tailed) & & . 364 & . 317 & & . 576 & . 918 & . 295 & . 844 & . 125 \\
\hline Correlation coefficient & 13 & . 271 & . 244 & -. 202 & 1,000 & . 095 & . \(636{ }^{*}\) & -. 072 & -. 518 \\
\hline Sig. (two-tailed) & & . 449 & . 498 & . 576 & & . 793 & . 048 & . 844 & . 125 \\
\hline Correlation coefficient & 15.1 & . 198 & . \(641^{*}\) & -. 037 & . 095 & 1,000 & . 154 & . 335 & -. 042 \\
\hline Sig. (two-tailed) & & . 584 & . 046 & . 918 & . 793 & & . 672 & . 344 & . 909 \\
\hline Correlation coefficient & 15.2 & . 116 & . 311 & -. 368 & . \(636{ }^{*}\) & . 154 & 1,000 & . 261 & . \(784{ }^{* *}\) \\
\hline Sig. (two-tailed) & & . 749 & . 933 & . 295 & . 048 & . 672 & & . 466 & . 007 \\
\hline Correlation coefficient & 15.3 & . 591 & . 371 & -. 072 & -. 072 & . 335 & . 261 & 1,000 & -. 010 \\
\hline Sig. (two-tailed) & & . 072 & . 291 & . 844 & . 844 & . 344 & . 466 & & . 978 \\
\hline Correlation coefficient & 21.1 & -. 183 & -. 324 & -. 518 & -. 518 & -. 042 & . \(784{ }^{* *}\) & -. 010 & 1,000 \\
\hline Sig. (two-tailed) & & . 613 & . 362 & . 125 & . 125 & . 909 & . 007 & . 978 & \\
\hline
\end{tabular}

Table A10c.9, Spearman's rank correlation coefficient, variables 9.1, 9.2, 10, 13, 15.1, 15.2, 15.3, 21.1
**The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05

Figures and tables relating to research question 2d
\begin{tabular}{lccccl|}
\hline & \multicolumn{3}{c|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.3 is the & 1 & .095 & 4,700 & Keep the null hypothesis \\
same on the school categories. & 15.3 & & & \\
\hline The distribution of Variable 17 is the & 1 & .175 & 3,491 & Keep the null hypothesis \\
same on the school categories. & 17 & & \\
The distribution of Variable 18 is the & 1 & .087 & 4,890 & Keep the null hypothesis \\
same on the school categories. & 18 & & & \\
The distribution of Variable 19 is the & 1 & .121 & 4,222 & Keep the null hypothesis \\
same on the school categories. & 19 & & & \\
\hline
\end{tabular}

Table A10d.1, Kruskal-Wallis Test for independent samples, variable 1/15.3, 17, 18, 19


Figure A10d.1.1, Kruskal-Wallis Test for independent samples, variables 1 and 15.3


Figure A10d.1.3, Kruskal-Wallis Test for independent samples, variables 1 and 18


Figure A10d.1.2, Kruskal-Wallis Test for independent samples, variables 1 and 17


Figure A10d.1.4, Kruskal-Wallis Test for independent samples, variables 1 and 19
\begin{tabular}{l}
\hline \multicolumn{4}{c|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis \\
\hline The distribution of Variable 15.3 is the \\
Variables \\
same on the experience categories. \\
Sig. \\
The distribution of Variable 17 is the \\
same on the experience categories. \\
The distribution of Variable 18 is the \\
same on the experience categories. \\
The distribution of Variable 19 is the
\end{tabular}

Table A10d.2, Kruskal-Wallis Test for independent samples, variable 2/15.3, 17, 18, 19


Figure A10d.2.1, Kruskal-Wallis Test for independent samples, variables 2 and 15.3


Figure A10d.2.3, Kruskal-Wallis Test for independent samples, variables 2 and 18


Figure A10d.2.2, Kruskal-Wallis Test for independent samples, variables 2 and 17


Figure A10d.2.4, Kruskal-Wallis Test for independent samples, variables 2 and 19
\begin{tabular}{lccccl|}
\hline & \multicolumn{3}{l|}{ Kruskal-Wallis Test for independent samples } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 15.3 is the & 3 & .904 &, 566 & Keep the null hypothesis \\
same on the age categories. & 15.3 & & & \\
The distribution of Variable 17 is the & 3 & .692 & 1,458 & Keep the null hypothesis \\
same on the age categories. & 17 & & & \\
The distribution of Variable 18 is the & 3 & .724 & 1,321 & Keep the null hypothesis \\
same on the age categories. & 18 & & & \\
The distribution of Variable 19 is the & 3 & .566 & 2,033 & Keep the null hypothesis \\
same on the age categories. & 19 & & & \\
\hline
\end{tabular}

Table A10d.3, Kruskal-Wallis Test for independent samples, variable 3/15.3, 17, 18, 19


Figure A10d.3.1, Kruskal-Wallis Test for independent samples, variables 3 and 15.3


Figure A10d.3.3, Kruskal-Wallis Test for independent samples, variables 3 and 18


Figure A10d.3.2, Kruskal-Wallis Test for independent samples, variables 3 and 17


Figure A10d.3.4, Kruskal-Wallis Test for independent samples, variables 3 and 19

Mann-Whitney U Test for independent samples
\begin{tabular}{lcccccl|}
\hline Null hypothesis & Variables & Sig. & Test statistics & z & Decision \\
\hline The distribution of Variable 15.3 is the same & 7.1 & \(.711^{*}\) & 6,500 & -.399 & Keep the null \\
on the Research subscriber categories. & 15.3 & & & & hypothesis \\
The distribution of Variable 17 is the same & 7.1 & \(.711^{*}\) & 10,000 & .525 & Keep the null \\
on the Research subscriber categories. & 17 & & & & hypothesis \\
The distribution of Variable 18 is the same & 7.1 & \(.711^{*}\) & 6,500 & -.393 & Keep the null \\
on the Research subscriber categories. & 18 & & & hypothesis \\
The distribution of Variable 19 is the same & 7.1 & \(.711^{*}\) & 6,000 & --.522 & Keep the null \\
on the Research subscriber categories. & 19 & & & & hypothesis \\
\hline
\end{tabular}

Table A10d.4, Mann-Whitney U Test for independent samples, variable 7.1/15.3, 17, 18, 19
* The exact significance is displayed for this test.


Figure A10d.4.1, Mann-Whitney U Test for independent samples, variables 7.1 and 15.3


Figure A10d.4.3, Mann-Whitney U Test for independent samples, variables 7.1 and 18

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Figure A10d.4.2, Mann-Whitney U Test for independent samples, variables 7.1 and 17

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Figure A10d.4.4, Mann-Whitney U Test for independent samples, variables 7.1 and 19
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Kruskal-Wallis Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 20.1 is the same on the school categories. & \[
\begin{gathered}
\hline 1 \\
20.1
\end{gathered}
\] & . 344 & 2,133 & Keep the null hypothesis \\
\hline The distribution of Variable 20.2 is the same on the school categories. & \[
\begin{gathered}
1 \\
20.2
\end{gathered}
\] & . 379 & 1,942 & Keep the null hypothesis \\
\hline The distribution of Variable 21.1 is the same on the school categories. & \[
\begin{gathered}
1 \\
21.1
\end{gathered}
\] & . 356 & 2,064 & Keep the null hypothesis \\
\hline The distribution of Variable 21.2 is the same on the school categories. & \[
\begin{gathered}
1 \\
21.2
\end{gathered}
\] & . 287 & 2,500 & Keep the null hypothesis \\
\hline The distribution of Variable 22 is the same on the school categories. & \[
\begin{gathered}
1 \\
22
\end{gathered}
\] & . 982 & ,035 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A10d.5, Kruskal-Wallis Test for independent samples, variable 1/20.1, 20.2, 21.1, 21.2, 22


Figure A10d.5.1, Kruskal-Wallis Test for independent samples, variables 1 and 20.1


Figure A10d.5.3, Kruskal-Wallis Test for independent samples, variables 1 and 21.1


Figure A10d.5.2, Kruskal-Wallis Test for independent samples, variables 1 and 20.2


Figure A10d.5.4, Kruskal-Wallis Test for independent samples, variables 1 and 21.2


Figure A10d.5.5, Kruskal-Wallis Test for independent samples, variables 1 and 22
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Kruskal-Wallis Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 20.1 is the same on the experience categories. & \[
\begin{gathered}
\hline 2 \\
20.1
\end{gathered}
\] & . 184 & 3,389 & Keep the null hypothesis \\
\hline The distribution of Variable 20.2 is the same on the experience categories. & \[
\begin{gathered}
2 \\
20.2
\end{gathered}
\] & . 308 & 2,352 & Keep the null hypothesis \\
\hline The distribution of Variable 21.1 is the same on the experience categories. & \[
\begin{gathered}
2 \\
21.1
\end{gathered}
\] & . 281 & 2,536 & Keep the null hypothesis \\
\hline The distribution of Variable 21.2 is the same on the experience categories. & \[
\begin{gathered}
2 \\
21.2
\end{gathered}
\] & . 266 & 2,646 & Keep the null hypothesis \\
\hline The distribution of Variable 22 is the same on the experience categories. & 2
22 & . 667 & ,811 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A10d.6, Kruskal-Wallis Test for independent samples, variable 2/20.1, 20.2, 21.1, 21.2, 22


Figure A10d.6.1, Kruskal-Wallis Test for independent samples, variables 2 and 20.1


Figure A10d.6.2, Kruskal-Wallis Test for independent samples, variables 2 and 20.2


Figure A10d.6.3, Kruskal-Wallis Test for independent samples, variables 2 and 21.1



Figure A10d.6.4, Kruskal-Wallis Test for independent samples, variables 2 and 21.2

Figure A10d.6.5, Kruskal-Wallis Test for independent samples, variables 2 and 22
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Kruskal-Wallis Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 20.1 is the same on the age categories. & \[
\begin{gathered}
\hline 3 \\
20.1
\end{gathered}
\] & . 175 & 4,959 & Keep the null hypothesis \\
\hline The distribution of Variable 20.2 is the same on the age categories. & \[
\begin{gathered}
3 \\
20.2
\end{gathered}
\] & . 349 & 3,288 & Keep the null hypothesis \\
\hline The distribution of Variable 21.1 is the same on the age categories. & \[
\begin{gathered}
3 \\
21.1
\end{gathered}
\] & . 110 & 6,025 & Keep the null hypothesis \\
\hline The distribution of Variable 21.2 is the same on the age categories. & \[
\begin{gathered}
3 \\
21.2
\end{gathered}
\] & . 183 & 4,850 & Keep the null hypothesis \\
\hline The distribution of Variable 22 is the same on the age categories. & 3
22 & . 123 & 5,777 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A10d.7, Kruskal-Wallis Test for independent samples, variable 3/20.1, 20.2, 21.1, 21.2, 22


Figure A10d.7.1, Kruskal-Wallis Test for independent samples, variables 3 and 20.1


Figure A10d.7.3, Kruskal-Wallis Test for independent samples, variables 3 and 21.1



Figure A10d.7.2, Kruskal-Wallis Test for independent samples, variables 3 and 20.2


Figure A10d.7.4, Kruskal-Wallis Test for independent samples, variables 3 and 21.2

Figure A10d.7.5, Kruskal-Wallis Test for independent samples, variables 3 and 22
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Mann-Whitney U Test for independent samples} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & \(z\) & Decision \\
\hline The distribution of Variable 20.1 is the same on the Research subscriber categories. & \[
\begin{gathered}
\hline 7.1 \\
20.1
\end{gathered}
\] & . \(400{ }^{*}\) & 12,000 & 1.054 & Keep the null hypothesis \\
\hline The distribution of Variable 20.2 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
20.2
\end{gathered}
\] & . \(267{ }^{*}\) & 12,500 & 1.216 & Keep the null hypothesis \\
\hline The distribution of Variable 21.1 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
21.1
\end{gathered}
\] & . \(178{ }^{*}\) & 13,500 & 1.537 & Keep the null hypothesis \\
\hline The distribution of Variable 21.2 is the same on the Research subscriber categories. & \[
\begin{gathered}
7.1 \\
21.2
\end{gathered}
\] & . \(267{ }^{*}\) & 13,000 & 1.398 & Keep the null hypothesis \\
\hline The distribution of Variable 22 is the same on the Research subscriber categories. & 7.1
22 & . \(400{ }^{*}\) & 11,500 & . 931 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A10d.8, Mann-Whitney U Test for independent samples, variable 7.1/20.1, 20.2, 21.1, 21.2, 22
* The exact significance is displayed for this test.


Figure A10d.8.1, Mann-Whitney \(U\) Test for independent samples, variables 7.1 and 20.1


Figure A10d.8.3, Mann-Whitney U Test for independent samples, variables 7.1 and 21.1

Figure A10d.8.2, Mann-Whitney \(U\) Test for independent samples, variables 7.1 and 20.2


Figure A10d.8.4, Mann-Whitney \(U\) Test for independent samples, variables 7.1 and 21.2


Figure A10d.8.5, Mann-Whitney U Test for
independent samples, variables 7.1 and 22
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{11}{|c|}{Spearman's rho} \\
\hline & & 15.3 & 17 & 18 & 19 & 20.1 & 20.2 & 21.1 & 21.2 & 22 \\
\hline Correlation coeff. & 15.3 & 1,000 & . \(742^{* *}\) & . \(765^{* *}\) & .704* & . 411 & . 022 & . 000 & -. 397 & -. 167 \\
\hline Sig. (two-tailed) & & & . 014 & . 010 & . 023 & . 238 & . 951 & 1,000 & . 257 & . 645 \\
\hline Correlation coeff. & 17 & . \(742^{* *}\) & 1,000 & . 578 & . 409 & . 298 & . 287 & . 284 & -. 529 & -. 037 \\
\hline Sig. (two-tailed) & & . 014 & & . 080 & . 241 & . 402 & . 421 & . 427 & . 116 & . 919 \\
\hline Correlation coeff. & 18 & . \(765^{* *}\) & . 578 & 1,000 & . \(924 *\) & .666* & . 135 & . 257 & -. 286 & . 334 \\
\hline Sig. (two-tailed) & & . 010 & . 080 & & <. 001 & . 036 & . 709 & . 473 & . 423 & . 345 \\
\hline Correlation coeff. & 19 & . \(704 *\) & . 409 & . \(924 *\) & 1,000 & . 544 & -. 132 & . 104 & -. 208 & . 235 \\
\hline Sig. (two-tailed) & & . 023 & . 241 & <. 001 & & . 104 & . 717 & . 775 & . 565 & . 514 \\
\hline Correlation coeff. & 20.1 & . 411 & . 298 & .666* & . 544 & 1,000 & . 412 & . 488 & -. 177 & . 564 \\
\hline Sig. (two-tailed) & & . 238 & . 402 & . 036 & . 104 & & . 237 & . 153 & . 625 & . 090 \\
\hline Correlation coeff. & 20.2 & . 022 & . 287 & . 135 & -. 132 & . 412 & 1,000 & . \(705^{*}\) & . 047 & . 141 \\
\hline Sig. (two-tailed) & & . 951 & . 421 & . 709 & . 717 & . 237 & & . 023 & . 897 & . 598 \\
\hline Correlation coeff. & 21.1 & . 000 & . 284 & . 257 & . 104 & . 488 & . \(705^{*}\) & 1,000 & . 236 & -. 595 \\
\hline Sig. (two-tailed) & & 1,000 & . 427 & . 473 & . 775 & . 153 & . 023 & & . 511 & . 070 \\
\hline Correlation coeff. & 21.2 & -. 397 & -. 529 & -. 286 & -. 208 & -. 177 & . 047 & . 236 & 1,000 & . 297 \\
\hline Sig. (two-tailed) & & . 257 & . 116 & . 423 & . 565 & . 625 & . 897 & . 511 & & . 404 \\
\hline Correlation coeff. & 22 & -. 167 & -. 037 & . 334 & . 235 & . 564 & . 141 & -. 595 & . 297 & 1,000 \\
\hline Sig. (two-tailed) & & . 645 & . 919 & . 345 & . 514 & . 090 & . 598 & . 070 & . 404 & \\
\hline
\end{tabular}

Table A10d.9, Spearman's rank correlation coefficient, variables 15.3, 17, 18, 19, 20.1, 20.2, 21.1, 21.2, 22
\({ }^{* *}\) The correlation has a significance level of 0.01
*The correlation has a significance level of 0.05

\section*{EFL Questionnaire}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Chi-square Test} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline There is no statistical association between the two variables & \[
\begin{aligned}
& \hline 1 \\
& 2
\end{aligned}
\] & . 042 & 56,747 & 40 & Reject the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{aligned}
& 1 \\
& 3
\end{aligned}
\] & . 191 & 65,040 & 56 & Keep the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
1 \\
4.1
\end{gathered}
\] & . 214 & 20,147 & 16 & Keep the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
1 \\
4.2
\end{gathered}
\] & . 025 & 28,817 & 16 & Reject the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
1 \\
7.1
\end{gathered}
\] & ,372 & 8,658 & 8 & \begin{tabular}{l}
Keep the null \\
hypothesis
\end{tabular} \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
1 \\
7.2
\end{gathered}
\] & ,627 & 6,177 & 8 & Keep the null hypothesis \\
\hline There is no statistical association between the two variables & 1
7.3 & ,634 & 6,114 & 8 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A11.A.1, Chi-square Test, variable 1/ 2, 3, 4.1, 4.2, 7.1, 7.2, 7.3, EFL Questionnaire


Figure A11.A.1, Chi-square Test, variables 1 and 2, EFL Questionnaire


Figure A11.A.2, Chi-
square Test, variables 1
and 3, EFL
Questionnaire


Figure A11.A.3, Chi-
square Test, variables 1
and 4.1, EFL
Questionnaire



Figure A11.A.5, Chi-
square Test, variables 1
and 7.1, EFL
Questionnaire


Figure A11.A.6, Chi-
square Test, variables 1
and 7.2, EFL
Questionnaire


Figure A11.A.7, Chi-
square Test, variables 1
and 7.3, EFL
Questionnaire
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Chi-square Test} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline There is no statistical association between the two variables & \[
\begin{aligned}
& 2 \\
& 3
\end{aligned}
\] & <. 001 & 530,316 & 35 & Reject the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
2 \\
4.1
\end{gathered}
\] & <. 001 & 40,432 & 10 & Reject the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
2 \\
4.2
\end{gathered}
\] & <. 001 & 35,891 & 10 & Reject the null hypothesis \\
\hline \begin{tabular}{l}
There is no statistical association between the two variables \\
\({ }^{\text {a }}\) Pairwise comparisons of column p and "11-20 years"
\end{tabular} & \begin{tabular}{l}
2 \\
7.1 \\
indicate a
\end{tabular} & \begin{tabular}{l}
\[
.015^{a}
\] \\
istributio
\end{tabular} & \begin{tabular}{l}
\[
14,178
\] \\
difference betw
\end{tabular} & cat & Reject the null hypothesis " " \(6-10\) years" \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
2 \\
7.2
\end{gathered}
\] & . 450 & 4,726 & 5 & Keep the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
2 \\
7.3
\end{gathered}
\] & . 694 & 3,037 & 5 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A11.A.2, Chi-square Test, variable 2/3, 4.1, 4.2, 7.1, 7.2, 7.3, EFL Questionnaire


Figure A11.A.8, Chisquare Test, variables 2
and 3, EFL
Questionnaire



Figure A11.A.10, Chi-
square Test, variables 2
and 4.2, EFL
Questionnaire

Figure A11.A.11, Chi-
square Test, variables 2
and 7.1, EFL
Questionnaire

Figure A11.A.12, Chi-
square Test, variables 2
and 7.2, EFL
Questionnaire

Figure A11.A. 13, Chisquare Test, variables 2
and 7.3, EFL
Questionnaire

APPENDIX 11 - EFL and ISL Questionnaires, further tables and figures
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Chi-square Test} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
\hline 3 \\
4.1
\end{gathered}
\] & . 038 & 24,676 & 14 & Reject the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
3 \\
4.2
\end{gathered}
\] & . 026 & 26,034 & 14 & Reject the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
3 \\
7.1
\end{gathered}
\] & . 576 & 5,697 & 7 & Keep the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
3 \\
7.2
\end{gathered}
\] & . 151 & 10,729 & 7 & Keep the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{gathered}
3 \\
7.3
\end{gathered}
\] & . 917 & 2,631 & 7 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A11.A.3, Chi-square Test, variable 3/ 4.1, 4.2, 7.1, 7.2, 7.3, EFL Questionnaire


Figure A11.A.14, Chi-square Test, variables 3 and 4.1, EFL Questionnaire


Figure A11.A.15, Chi-square Test, variables 3 and 4.2, EFL Questionnaire

APPENDIX 11 - EFL and ISL Questionnaires, further tables and figures


Figure A11.A.16, Chi-square Test, variables 3 and 7.1, EFL Questionnaire


Figure A11.A.17, Chi-square Test, variables 3 and 7.2, EFL Questionnaire


Figure A11.A.18, Chi-square Test, variables 3 and 7.3, EFL Questionnaire

APPENDIX 11 - EFL and ISL Questionnaires, further tables and figures
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Chi-square Test} \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline There is no statistical association between the two variables & \[
\begin{aligned}
& \hline 4.1 \\
& 4.2
\end{aligned}
\] & <. 001 & 134,084 & 4 & Reject the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{aligned}
& \hline 7.1 \\
& 7.2
\end{aligned}
\] & . 026 & 4,927 & 1 & Reject the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{aligned}
& 7.1 \\
& 7.3
\end{aligned}
\] & . 853 & ,035 & 1 & Keep the null hypothesis \\
\hline There is no statistical association between the two variables & \[
\begin{aligned}
& 7.2 \\
& 7.3
\end{aligned}
\] & <. 001 & 51,555 & 1 & Reject the null hypothesis \\
\hline
\end{tabular}

Table A11.A.4, Chi-square Test, variable 4.1/ 4.2, 7.1/ 7.2/ 7.3, EFL Questionnaire


Figure A11.A.19, Chi-square Test, variables 4.1 and 4.2, EFL Questionnaire


Figure A11.A.20, Chi-square Test, variables 7.1 and 7.2, EFL Questionnaire

Figure A11.A.21, Chi-square Test, variables 7.1 and 7.3, EFL Questionnaire

APPENDIX 11 - EFL and ISL Questionnaires, further tables and figures


Figure A11.A.22, Chi-square Test, variables 7.2 and 7.3, EFL Questionnaire
\begin{tabular}{lcccccl|}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline There is no statistical association & 12 & \(<.001\) & 483,714 & 144 & Reject the null \\
between the two variables & 16 & & & & hypothesis \\
\hline
\end{tabular}

Table A11.A.5, Chi-square Test, variable 12/16, EFL Questionnaire


Kruskal-Wallis Test for independent samples
\begin{tabular}{lcccl|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 23 is the same & 1 & .053 & 15,330 & Keep the null \\
on the school categories. & 23 & & & hypothesis \\
The distribution of Variable 24 is the same & 1 & .810 & 4,496 & Keep the null \\
on the school categories. & 24 & & & hypothesis \\
\hline
\end{tabular}
\begin{tabular}{lcccl|}
\hline The distribution of Variable 23 is the same & 2 & .024 & 12,986 & Reject the null \\
on the teaching experience categories. & 23 & & & hypothesis
\end{tabular} \begin{tabular}{lcccc|}
\hline The distribution of Variable 24 is the same & 2 & .934 & 1,307 & Keep the null \\
on the teaching experience categories. & 24 & & & hypothesis \\
\hline
\end{tabular}

APPENDIX 11 -EFL and ISL Questionnaires, further tables and figures
\begin{tabular}{lcccl|}
\hline The distribution of Variable 23 is the same & 3 & .041 & 14,600 & Reject the null \\
on the age categories. & 23 & & & hypothesis \\
The distribution of Variable 24 is the same & 3 & .178 & 10,200 & Keep the null \\
on the age categories. & 24 & & & hypothesis \\
\hline
\end{tabular}

Table A11.A.6, Kruskal-Wallis Test for independent samples, variable 1, 2, 3/23, 24, EFL Questionnaire


Figure A11.A.24, Kruskal-Wallis Test for independent samples, variables 1 and 23, EFL Questionnaire


Figure A11.A.26, Kruskal-Wallis Test for independent samples, variables 2 and 23, EFL Questionnaire


Figure A11.A.28, Kruskal-Wallis Test for independent samples, variables 3 and 23, EFL Questionnaire


Figure A11.A.25, Kruskal-Wallis Test for independent samples, variables 1 and 24, EFL Questionnaire


Figure A11.A.27, Kruskal-Wallis Test for independent samples, variables 2 and 24, EFL Questionnaire


Figure A11.A.29, Kruskal-Wallis Test for independent samples, variables 3 and 24, EFL Questionnaire

APPENDIX 11 - EFL and ISL Questionnaires, further tables and figures
Mann-Whitney U Test for independent samples
\begin{tabular}{lccccl|}
\hline Null hypothesis & Variables & Sig. & Test statistics & z & Decision \\
\hline The distribution of Variable 23 is the same & 7.1 & .661 & 19059,000 & .438 & Keep the null \\
on the Research subscriber categories. & 23 & & & & hypothesis \\
The distribution of Variable 24 is the same & 7.1 & .459 & 17722,000 & -.740 & Keep the null \\
on the Research subscriber categories. & 24 & & & & hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 23 is the same on the Researcher categories. & 7.2
23 & . 413 & 13341,000 & -. 818 & Keep the null hypothesis \\
\hline The distribution of Variable 24 is the same on the Researcher categories. & 7.2
24 & . 180 & 12760,500 & -1.341 & Keep the null hypothesis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline The distribution of Variable 23 is the same on the Author categories. & 7.3
23 & . 071 & 5535,000 & -1.803 & Keep the null hypothesis \\
\hline The distribution of Variable 24 is the same on the Author categories. & 7.3
24 & . 485 & 6227,500 & -. 699 & Keep the null hypothesis \\
\hline
\end{tabular}

Table A11.A.7, Mann-Whitney U Test for independent samples, variable 7.1, 7.2 and 7.3/23, 24, EFL Questionnaire


Figure A11.A.30, Mann-Whitney U Test for independent samples, variables 7.1 and 23, EFL Questionnaire


Figure A11.A.32, Mann-Whitney U Test for independent samples, variables 7.2 and 23, EFL Questionnaire


Figure A11.A.31, Mann-Whitney U Test for independent samples, variables 7.1 and 24, EFL Questionnaire


Figure A11.A.33, Mann-Whitney U Test for independent samples, variables 7.2 and 24, EFL Questionnaire

APPENDIX 11 - EFL and ISL Questionnaires, further tables and figures


APPENDIX 11 - EFL and ISL Questionnaires, further tables and figures

\section*{ISL Questionnaire}
\begin{tabular}{lccccll|}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline There is no statistical association & 1 & .263 & 5,250 & 4 & Keep the null \\
between the two variables & 2 & & & 6 & Keep the null \\
There is no statistical association & 1 & .285 & 7,400 & & hypothesis \\
between the two variables & 3 & & 2 & Keep the null \\
There is no statistical association & 1 &, 855 &, 313 & & hypothesis \\
between the two variables & 7.1 & & & & \\
\hline
\end{tabular}

Table A.11.B.1, Chi-square Test, variable 1/ 2, 3, 7.1, ISL Questionnaire


Figure A.11.B.1, Chi-square Test, variables 1 and 2, ISL
Questionnaire


Figure A.11.B.2, Chi-square Test, variables 1 and 3, ISL Questionnaire

Figure A.11.B.3, Chi-square Test, variables 1 and 7.1, ISL Questionnaire
\begin{tabular}{lccccll|}
\hline \multicolumn{6}{c|}{ Chi-square Test } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline There is no statistical association & 2 & .030 & 14,000 & 6 & Reject the null \\
between the two variables & 3 & & & & hypothesis \\
There is no statistical association & 2 & .732 &, 625 & 2 & Keep the null \\
between the two variables & 7.1 & & & hypothesis \\
There is no statistical association & 3 & .172 & 5,000 & 3 & Keep the null \\
between the two variables & 7.1 & & & & hypothesis \\
\hline
\end{tabular}

\footnotetext{
Table A.11.B.2, Chi-square Test, variable 2/37.1, ISL Questionnaire
}

APPENDIX 11 - EFL and ISL Questionnaires, further tables and figures


Figure A.11.B.4, Chi-square Test, variables 2 and 3, ISL
Questionnaire


Figure A.11.B.5, Chi-square Test, variables 2 and 7.1, ISL Questionnaire

Figure A.11.B.6, Chi-square Test, variables 3 and 7.1, ISL Questionnaire
\begin{tabular}{lccccl|}
\hline \multicolumn{6}{c|}{ Chi-square Test } \\
\hline Null hypothesis & Variables & Sig. & Test statistics & df & Decision \\
\hline There is no statistical association & 12 & .112 & 21,883 & 15 & Keep the null \\
between the two variables & 16 & & & & hypothesis \\
\hline
\end{tabular}

Table A.11.B.3, Chi-square Test, variable 12/16, ISL Questionnaire


APPENDIX 11 -EFL and ISL Questionnaires, further tables and figures
Kruskal-Wallis Test for independent samples
\begin{tabular}{lcccl|}
\hline Null hypothesis & Variables & Sig. & Test statistics & Decision \\
\hline The distribution of Variable 23 is the same & 1 & .767 &, 530 & Keep the null \\
on the school categories. & 23 & & & hypothesis \\
The distribution of Variable 24 is the same & 1 & .030 & 7,013 & Reject the null \\
on the school categories. & 24 & & & hypothesis \\
\hline
\end{tabular}
\begin{tabular}{lcccl|}
\hline The distribution of Variable 23 is the same & 2 & .433 & 1,674 & \begin{tabular}{l} 
Keep the null \\
hypothesis
\end{tabular} \\
\begin{tabular}{l} 
on the teaching experience categories.
\end{tabular} & 23 & & & Keep the null \\
\hline The distribution of Variable 24 is the same & 2 & .213 & 3,093 & \begin{tabular}{l} 
Keep \\
hypothesis
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{lcccl|}
\hline The distribution of Variable 23 is the same & 3 & .902 &, 577 & \begin{tabular}{l} 
Keep the null \\
hypothesis
\end{tabular} \\
\begin{tabular}{l} 
on the age categories.
\end{tabular} & 23 & & & 1,726
\end{tabular} Keep the null \begin{tabular}{l} 
hypothesis \\
\hline The distribution of Variable 24 is the same \\
on the age categories.
\end{tabular}

Table A.11.B.4, Kruskal-Wallis Test for independent samples, variable 1, 2, 3/23, 24, ISL Questionnaire


Figure A.11.B.8, Kruskal-Wallis Test for independent samples, variables 1 and 23, ISL Questionnaire


Figure A.11.B.10, Kruskal-Wallis Test for independent samples, variables 2 and 23, ISL Questionnaire


Figure A.11.B.9, Kruskal-Wallis Test for independent samples, variables 1 and 24, ISL Questionnaire


Figure A.11.B.11, Kruskal-Wallis Test for independent samples, variables 2 and 24, ISL Questionnaire

APPENDIX 11 - EFL and ISL Questionnaires, further tables and figures


Figure A.11.B.12, Kruskal-Wallis Test for independent samples, variables 3 and 23, ISL Questionnaire


Figure A.11.B.13, Kruskal-Wallis Test for independent samples, variables 3 and 24, ISL Questionnaire
\begin{tabular}{lccccll|}
\hline \multicolumn{6}{c|}{ Mann-Whitney U Test for independent samples } & \\
\hline Null hypothesis & Variables & Sig. & Test statistics & z & Decision \\
\hline The distribution of Variable 23 is the same & 7.1 & .711 & 10,000 & .591 & Keep the null \\
on the Research subscriber categories. & 23 & & & & hypothesis \\
The distribution of Variable 24 is the same & 7.1 & .711 & 10,000 & .527 & Keep the null \\
on the Research subscriber categories. & 24 & & & & hypothesis \\
\hline
\end{tabular}

Table A.11.B.5, Mann-Whitney U Test for independent samples, variable 7.1/23, 24, ISL Questionnaire


Figure A.11.B.14, Mann-Whitney U Test for independent samples, variables 7.1 and 23 , ISL Questionnaire

Research subscribers


Figure A.11.B.15, Mann-Whitney U Test for independent samples, variables 7.1 and 24 , ISL Questionnaire

\title{
INFORMATIVA SUL TRATTAMENTO DEI DATI PERSONALI NELL'AMBITO DEL PROGETTO "NEW DIGITAL AND MULTIMODAL LITERACIES IN FOREIGN AND SECOND LANGUAGE LEARNING" \\ ai sensi dell'art. 13 del Regolamento generale sulla protezione dei dati - Reg. UE 2016/679 ("GDPR")
}

Con il presente documento, l'Università Ca' Foscari Venezia le fornisce informazioni in merito al trattamento dei dati personali raccolti all'interno del progetto di ricerca denominato New Digital and Multimodal Literacies in Foreign and Second Language Learning che si prefigge di raccogliere dati sullo sviluppo di literacies plurali, digitali e multimodali nell'apprendimento delle lingue straniere e seconde in un contesto formale. Il progetto è condotto da Elisa Da Lio quale Principal Investigator dello studio dottorale e supervisionato dalle Professoresse Carmel Mary Coonan ed Helena Bažec. Ove necessitasse di ulteriori informazioni relative al progetto, la preghiamo di contattare il Principal Investigator scrivendo all'indirizzo di posta elettronica elisa.dalio@unive.it.

Il Progetto è stato redatto conformemente agli standard metodologici del settore disciplinare interessato ed è incardinato presso il Dipartimento di Studi Linguistici e Culturali Comparati dell'Università Ca' Foscari Venezia, ove verrà conservato per cinque anni dalla conclusione programmata della ricerca stessa.

\section*{1. TITOLARI DEL TRATTAMENTO}

Titolare del trattamento è l'Università Ca' Foscari Venezia con sede legale in Dorsoduro 3246, 30123 Venezia, rappresentata dal Magnifico Rettore pro tempore.

\section*{2. RESPONSABILI DELLA PROTEZIONE DEI DATI}

L'Università Ca' Foscari Venezia ha nominato il "Responsabile della Protezione dei Dati", che può essere contattato scrivendo all'indirizzo di posta elettronica dpo@unive.it o al seguente indirizzo: Università Ca' Foscari Venezia, Responsabile della Protezione dei Dati, Dorsoduro n. 3246, 30123 Venezia (VE).

\section*{3. CATEGORIE DI DATI PERSONALI, FINALITÀ E BASE GIURIDICA}

Il Titolare del trattamento raccoglie i seguenti dati personali: dati anagrafici, dati di contatto, esperienze ed opinioni nel campo dell'insegnamento, della formazione e dell'educazione linguistica, registrazione audio ed eventualmente anche video (una volta attenuta l'autorizzazione specifica dal singolo partecipante ai sensi dell'art. 96 e ss. della Legge n. 633/1941), raccogliendo così registrazioni vocali ed immagini nel focus group in questione. Tale focus group si terrà tramite una piattaforma online quale Google Meet o Zoom, in base agli accordi che verranno presi direttamente con i partecipanti.

Il trattamento dei dati personali verrà effettuato con strumenti cartacei ed informatici, adottando misure tecniche e organizzative adeguate a proteggerli da accessi non autorizzati o illeciti, dalla distruzione, dalla perdita d'integrità e riservatezza, anche accidentali.

Per la tutela della riservatezza dei partecipanti, i dati verranno successivamente privati dei riferimenti direttamente identificativi (ad es. nome, cognome, ecc.), in modo che non siano più immediatamente riconducibili al soggetto a cui si riferiscono, e analizzati ai soli fini della realizzazione del suddetto progetto. Le trascrizioni dei focus groups verranno effettuate immediatamente, ed i file audio/video originali verranno eliminati. I dati, resi così anonimi, in quanto privi dei riferimenti identificativi della persona fisica, verranno utilizzati solamente per portare avanti le attività di ricerca.

Le attività di ricerca sono svolte nell'ambito dell'esecuzione delle finalità istituzionali di ricerca scientifica del Titolare del trattamento, sicchè la base giuridica è rappresentata dall'art. 6.1.e) del Regolamento ("esecuzione di un compito d'interesse pubblico")

E' possibile opporsi al predetto trattamento in qualsiasi momento, scrivendo al Responsabile della Protezione dei Dati Personali ai recapiti sopra indicati. Il Titolare si asterrà dal trattare ulteriormente i predetti dati personali salvo sussistano motivi cogenti che legittimino la prosecuzione dello stesso.

\section*{4. TEMPI DI CONSERVAZIONE}

File audio e video raccolti per il tramite dei focus group verranno conservati solo per il tempo necessario a completare la trascrizione, in forma anonima, e poi immediatamente eliminati. I dati personali raccolti, quali i nominativi dei partecipanti o i dati di contatto, saranno conservati fino alla completa trascrizione anonima di quanto contenuto nelle registrazioni audio-
video. I modelli di autorizzazione alla raccolte delle immagini raffiguranti la persona nell'ambito dei focus group saranno conservate per un periodo di cinque anni oltre la conclusione del progetto dottorale.

\section*{DESTINATARI E CATEGORIE DI DESTINATARI DEI DATI PERSONALI}

I dati raccolti saranno trattati dal Principal Investigator impegnato nel progetto, che agisce sulla base di specifiche istruzioni fornite in ordine alle finalità e modalità del trattamento medesimo, nonché da soggetti che forniscono servizi ausiliari al Titolare nominati 'responsabili del trattamento' (e.g., Google, Zoom). La lista aggiornata dei responsabili del trattamento dell'Università Ca' Foscari Venezia è disponibile alla pagina: https://www.unive.it/pag/34666/.

I dati, in forma aggregata ed anonima (in modo da non renderla identificabile), potranno inoltre essere comunicati ad altre Università o enti per lo svolgimento delle attività di ricerca e diffusi per attività di disseminazione dei risultati (ad es. in pubblicazioni, rapporti di ricerca, banche dati nonché citazioni durante lezioni, seminari e convegni). Potranno altresì esaminare tutta la documentazione (comprensiva dei dati identificativi dei partecipanti) raccolta nell'ambito del progetto sia organismi nazionali e internazionali sia comitati delle riviste scientifiche italiane e straniere al fine di controllare che la ricerca sia condotta correttamente e in conformità alle disposizioni vigenti, nonché eventuali auditor.

\section*{5. DIRITTI DELL'INTERESSATO E MODALITÀ DI ESERCIZIO}

Lei potrà esercitare nei confronti dell'Università Ca' Foscari tutti i diritti previsti dagli artt. 15 e ss. del Regolamento; in particolare, lei ha diritto di ottenere dall'Ateneo, nei casi previsti dal Regolamento, l'accesso ai dati personali, la rettifica, l'integrazione, la cancellazione degli stessi o la limitazione del trattamento ovvero di opporsi al trattamento medesimo (artt. 15 e ss. del Regolamento).

La richiesta potrà essere presentata, senza alcuna formalità, contattando direttamente:
- il Principal Investigator: elisa.dalio@unive.it
- nonché l’Università Ca' Foscari, il Responsabile della Protezione dei Dati all'indirizzo dpo@unive.it ovvero inviando una comunicazione al seguente recapito: Università Ca' Foscari Venezia - Responsabile della Protezione dei Dati, Dorsoduro 3246, 30123 Venezia. In alternativa, è possibile contattare l'Università, scrivendo a PEC protocollo@pec.unive.it.

Gli interessati che ritengano che il trattamento dei dati personali a loro riferiti avvenga in violazione di quanto previsto dal Regolamento, hanno, inoltre, il diritto di proporre reclamo all'Autorità Garante per la Protezione dei Dati Personali, come previsto dall'art. 77 del Regolamento stesso, o di adire le opportune sedi giudiziarie (art. 79 del Regolamento).

\section*{LIBERATORIA PER IMMAGINI E RIPRESE AUDIO/VIDEO NELL’AMBITO DEL PROGETTO "NEW DIGITAL AND MULTIMODAL LITERACIES IN FOREIGN AND SECOND LANGUAGE LEARNING"}

Io sottoscritta/o \(\qquad\) nata/o a \(\qquad\) il \(\qquad\) ,
avendo letto l'informativa che precede, con la presente
\[
\square \text { acconsento }
\]
alla raccolta e utilizzo delle registrazioni ai sensi dell'art. 96 e ss. della Legge n. 633/1941 con le modalità indicate nella precedente informativa nell'ambito del progetto "New Digital and Multimodal Literacies in Foreign and Second Language Learning".

I Ok, perfetto. Allora, intanto, appunto, grazie mille per avermi dato la disponibilità per questo incontro. lo forse - perché avevo già fatto un focus group, in realtà era incentrato sull'altra questione che io sto andando a investigare, cioè - le domande sono sostanzialmente le stesse, però sono in un contesto di Italiano come lingua seconda in Slovenia, e lì ero partita da tutta una serie di domande un pochino più specifiche per poi rendermi conto in corso d'opera che in realtà c'era un problema a monte da considerare, ovvero che il concetto che io sto andando a investigare, cioè quello di Literacy non viene di fatto affrontato in classe. Quindi io comincio dal chiedervi: è un concetto che, diciamo, in primo luogo, voi avete presente, e, in secondo luogo, che viene in qualche modo approcciato in classe? Qui si può andare a ruota libera, io... L'idea è quella di sentire le varie idee, di vedere se qualcuno ha posizioni diverse.

I Assolutamente.

I Ok, quindi la prima risposta è sostanzialmente no. Gli altri sono d'accordo?

5 Buongiorno *1*, buongiorno a tutte. Scusatemi, io lavoro in un posto non tanto vicino a casa e ho fatto un po' tardi.

I Nessun problema, ci mancherebbe, anzi, grazie per essersi collegata. Io adesso stavo un attimo introducendo da dove sono partita, un brevissimo riepilogo è che - non so se ha avuto modo di vedere il PowerPoint che avevo inviato.

Ho dato un'occhiata e, come no, mi è sembrato molto interessante. Sì, avevo dato uno sguardo qualche giorno fa.

Ecco, diciamo che il punto era che stavo cercando di capire, sostanzialmente, visto che una delle cose che per me è interessante investigare adesso nel corso della mia ricerca è il rapporto fra, diciamo, la quotidianità della scuola e il mondo della ricerca, posto che comunque l'ambito in cui io mi sto specializzando è quello della Literacy in generale, era cercare di capire se è qualcosa che generalmente gli insegnanti o conoscono per conto loro, o che hanno modo di portare in classe. Quindi intanto stavamo cercando di capire qual era il rapporto dei partecipanti di oggi con il concetto di Literacy.
lo volevo solo aggiungere, visto che la domanda è un pochino più specifica, penso che la ricerca si lontana dalla quotidianità dell'insegnante, che vive non solo dinamiche di insegnamento-apprendimento con vari approcci, perché l'Inglese ha la fortuna di avere la possibilità di passare anche su Ted, e io ultimamente viaggio solo sul visuale, ma è la quotidianità degli insegnanti è fatta anche di tanti problemi. Esco adesso da un incontro con la dirigente, quando i ragazzi migliori della classe vanno via e il coordina-... la coordinatrice spende tempo e dice: "Perché ci vanno via?", quindi in ricerca penso che non abbiate mai la relazione, che è il problema focale dell'insegnamento. Anche le superiori, dopo la pandemia, noi stiamo vedendo delle situazioni di disagio mentale che impatta anche sul profitto, invece ho letto adesso velocemente il PowerPoint sulla Digital Literacy, è vero, io personalmente ho fatto Epict con l'università di Genova, e quindi abbiamo la possibilità di far lavorare i ragazzi un pochino su vivere la lingua inglese anche attraverso tutte le nuove metodologie e tecniche del digitale.

Sì, allora, Infatti, questi sono tutti aspetti diversi e, per quanto riguarda anche dei commenti che vedo in chat, non abbiate problemi di farli anche ad alta voce, perché così poi io nella registrazione sono facilitata nel - nel trascrivere. Sì, il problema è che io sono d'accordo a - prego, potete intervenire senza nessun problema, quando volete.

Sì, io ho un'esperienza molto simile a quella di \({ }^{*} 3^{*}\), io insegno in un istituto, dal mio punto di vista, difficilissimo, per motivi sociali, di determinazione dei ragazzi allo studio, e ho addirittura la difficoltà che, diciamo, nelle classi ci saranno tre o quattro ragazzi che hanno, insomma, delle basi, una condizione di partenza per così dire "normale", e sono quelli che poi si depotenziano, mano a mano, entrando loro stessi poi in una condizione di disagio in quanto diversi. Tutti gli altri hanno bisogni educativi speciali di varia natura, o hanno, o, insomma - rientrano nella sfera della legge 104, della legge 170, o hanno disagio di vario - di varia natura. Quindi, per quanto io sia - tenga - faccia del mio meglio per tenere presente quello che apprendono, i corsi, ecco, ho fatto anche dei corsi con l'Università di Venezia, molto interessanti, li tengo presenti, ma coniugare la parte teorica con quella pratica è, insomma, complicatissimo, ed è per questo che poi alla fine ci si aggrappa, lo dico anche autocriticamente, ai libri di testo, a delle certezze, a dei punti di riferimento, anche poi per - un po' per sopravvivere, un po' anche per fornire degli strumenti ai agli studenti, nel generale caos, nella difficoltà complessiva di gestire la relazione, di includere il più possibile chi ha problemi, alla fine, ecco, la ricerca, certo, resta uno stimolo, importantissimo, ma, sì, è distante, indubbiamente, dalla quotidianità.

Sì, no, purtroppo questa è una cosa di cui io sono anche piuttosto convinta, è che non posso esprimerla i senza avere diciamo un backup di persone che mi sostengono in questo, è anche uno dei motivi per cui adesso stavo raccogliendo questi dati, perché se lo dico io senza dei dati qualitativi o quantitativi non - non ho raggiunto niente. Il mio problema è proprio questo, che anche in tutti gli studi che io trovo vedo che ci si tende a concentrare magari su un aspetto - non so, tanti studi guardano l'introduzione di un dispositivo, magari del tablet, in una classe di lingua, per un mese, piuttosto che l'utilizzo di una particolare modalità, e stabiliscono che potrebbe essere utile un approccio di un certo tipo, però non tengono conto di quella che è la quotidianità, poi, della scuola, che ha tutta una serie, ovviamente, di difficoltà e di limiti da affrontare tutti i giorni. Quindi, andando con ordine: allora, il concetto di Literacy, quindi, inteso non come alfabetizzazione, ma come qualcosa di un po' più complesso che quindi comporta la capacità di usare diverse modalità, magari, sia per l'insegnamento che per l'apprendimento di una lingua, e che, diciamo, nel ventunesimo secolo va ad ampliarsi un pochino, quindi viene intesa anche come la capacità di comunicare, interagire, usare diversi dispositivi, è qualcosa che viene affrontato nella classe di lingua?
lo cerco di farlo, insomma, sì, è un discorso adesso che con le prime faccio, però spendendo tanto tempo che poi non dedico alla lingua. Ecco, questo per dirle, io ultimamente dedico - per il fatto che c'è stata la
pandemia e abbiamo lavorato tantissimo con le piattaforme, no, Google - io adesso anche in presenza dedico tanto tempo a quest'aspetto di - non so se si riferiva a questo, di Digital Literacy...

I Avete visto... No, prego, prego. relazione magari più difficile.

No, no, no, prego, prego.

Esatto, spiegando che, anche se non parliamo di inglese, poter accedere alla piattaforma e un domani sapere accedere con lo spid ai servizi del comune è la base, però è chiaro che sono scelte di campo piuttosto impegnativa. Nel senso, che in queste classi prime, boh, chissà quando si comincerà a parlare un pochino di inglese a dire: "Come stai? Come ti chiami?", per dirle, no, per fare.. Quindi...

Aggiungo solo, se posso, bring your own devices, dopo la pandemia, io ho visto che tutti hanno il telefonino, usiamo il telefonino, fanno la foto del libro che non portano, io faccio registrare l'audio di uno speaking che non riesco a fare in classe perché il tempo è mangiato da centinaia di altre cose. Noi abbiamo lavorato su Classroom, su Google di Classroom, per la pandemia, è logico che anch'io devo avere gli studenti pronti, perché se dall'oggi al domani ci richiudono devono capire bene come muoversi, è diventato un po' un qualcosa d'appoggio, con la criticità che mi sento di esprimere sulla DAD, o sulla DID, è logico che siamo diventati tutti molto più veloci, e capiamo che non passa più l'approfondimento culturale, quindi, per attivarli, offri anche, ripeto, due video, loro scelgono quello e ne parliamo insieme, però probabilmente non c'è più la possibilità di approfondire i discorsi come facevamo una volta. E invece il mio liceo, al liceo classico, dove i ragazzi sono particolarmente interessati e motivati, però sono all'interno di situazioni di

Ok. Quindi, visto che vedo che stiamo aprendo il concetto del digitale, comunque, anche legato al discorso che, per forza di cose, la pandemia ha cambiato, almeno temporaneamente, si spera, quella che comunque è la didattica, eccetera: quali sono le problematiche che voi avete riscontrato, per quanto riguarda l'aspetto digitale, sia da parte dei docenti che da parte degli studenti?

No, no, ci mancherebbe. Era una domanda successiva, quindi vada avanti.
4 Okay, no, io volevo solo, sì, confermo quello che hanno detto le altre colleghe e - sia su Classroom che sull'utilizzo del cellulare, e anche delle varie, appunto, di, appunto, stimoli che possono venire da Ted Talk, oppure da video, eccetera. E, quello che ho fatto l'anno - diciamo di diverso, l'anno scorso, per esempio, e che ho visto che funziona ed è carino è, per esempio, dare dei compiti - e dare più spesso compiti come realizzare - come per esempio la realizzazione di in piccolo video, magari a gruppi, diciamo, per esempio, l'anno scorso stavamo affrontando il tema del - la unit parlava delle relazioni personali e quindi ho dato come - come compito, insomma, quello di creare delle piccole situazioni, ecco, di - un piccolo video a gruppi di tre o quattro, in cui ci fossero queste relazioni, diciamo. Sono - è stato molto carino perché i
ragazzi - cioè, ai ragazzi piace realizzare i video, e quindi - magari anche brevi, però, ecco. Questo lo trovo uno strumento, cioè, ecco, molto, molto carino, ecco, cioè, quindi diciamo che noi, secondo me, stiamo - la scuola, insomma, sta cominciando a - ad utilizzare questi mezzi, che ci sono stati necessari l'anno scorso, insomma, dall'anno scorso, e forse quello però che, secondo me, dovremmo migliorare, è, diciamo, forse proprio la condivisione della riflessione su questa - sulle nuove modalità, ecco questo penso.

5 Allora, no, con le prime sicuramente si nota una certa ignoranza rispetto al digitale utilizzato, ecco, proficuamente, al di fuori dei giochi, per la questione anche solo degli accessi alle applicazioni, o almeno, ecco, nell'ambiente scolastico dove io mi trovo a insegnare c'è un primo lavoro molto grande da fare su questo, Svolto questo lavoro, devo dire che il digitale certo avvantaggia molto abilità trasversali, nel senso che ragazzini molto svegli e molto intelligenti, il che comunque è, insomma, è qualcosa da premiare, riescono a cavarsela, ad esempio, quando bisogna redigere un piccolo testo, la risposta a un'email, riescono a cavarsela, probabilmente aprendo un'altra sessione di Chrome, di quello che è, e orientandosi con il traduttore molto bene, quindi, da un lato questo sarà un vantaggio per la loro vita, quando dovranno scrivere una lettera di, di... a un amico, una lettera d'affari, d'altro canto, insomma, è chiaro che poi, interpellati al di fuori del web, difficilmente sarebbero in grado di - come si può dire - di organizzare quel tipo di testo. Quindi, come diceva la collega, poi dovremmo riflettere con lei, con chi è appunto in ricerca, sul - sull'utilità. Certo, è meglio che niente, e questo è comunque un'abilità trasversale, sapere appunto mettere insieme testo, anche molto corretto, molto al di sopra delle proprie conoscenze dell'inglese, solo servendosi della rete, non è poco, fa parte di una delle abilità trasversali, se vogliamo. Certo, poi, rispetto alla conoscenza dell'inglese scritto, del dello skill del writing, boh, che dire? Magari il ragazzino molto meno sveglio proprio in questo esercizio - un ragazzino con un borderline cognitivo, ha arrancato, però con una modalità molto, molto comunicativa, come direbbe Balboni, appunto, a parlato, scritto da gran cialtrone, ma si è capito benissimo quello che voleva dire, descriveva la madre, era "people beautiful very", tutto un pasticcio, ma era molto chiaro il contenuto, però è chiaro che poi le capacità erano minori e il testo aveva i suoi problemi, quindi, per dirle, non so quanto sia democratico l'uso di questa rete, sempre prevede ottime capacità di base.

I Okay, allora, la prima cosa che mi viene da chiedere è una domanda molto rapida, della serie, la pandemia in questo senso ha aumentato la quantità di - adesso a parte i periodi in cui naturalmente si è - insomma, la didattica si è ridotta ad essere interamente a distanza, a parte quelle fasi, ha comunque aumentato un utilizzo della tecnologia nell'ambito della classe di lingua? (Annuiscono) Vedo dei "si".

4 Sì, diciamo che nella parte - per quanto riguarda me, cioè nella - ovviamente tranne i periodi di grande, cioè, di chiusura, proprio, lì è stata proprio dominante, comunque a prescindere da quelle - da quei momenti, sicuramente, comunque l'utilizzo della - a me sembra che l'utilizzo della tecnologia sia maggiore rispetto a prima, se non altro perché noi, anche noi insegnanti siamo venuti a contatto con tante nuove possibilità, e quindi adesso ti vengono più idee, ci vengono anche delle idee relative all'utilizzo di quegli strumenti lì, quindi se ne - anche perché le - ci sono fornite molte più piattaforme proprio per i libri di testo, quindi - scusate, ma mio padre che mi chiama.

I Nessun problema.
3 Allora prendo l'occasione io, effettivamente eravamo in GMeet col cellulare vicino, l'iPad, noi stessi insegnanti per portare avanti la lezione di lingua perché passa la comunicazione ma nel GMeet era molto più faticoso far lavorare in piccoli gruppi, avere un feedback orale delle cose che avevamo proposto, proporre un pezzo di video per farne parlare i ragazzi. Quindi c'è stato sicuramente un'implementazione da parte degli insegnanti, anch'io tante volte mi domando cosa rimane a questi ragazzi, perché vedo la l'entusiasmo perché utilizzano il telefonino o qualcosa che per loro è quotidianità e essenzialità, ogni minuto. Ho l'impressione, ma questa ve l'ho già accennato prima, che sia sempre a livello superficiale, che non si riesca mai poi a consolidare e quindi anche in vocaboli, che passano attraverso il cloud, che facciamo - facciamo qualche attività per mettere insieme, che è entusiasmante dal punto di vista di all'utilizzo di queste app, poi ti rimane sempre che non viene fuori il vocabolo quando ne parli, quindi c'è bisogno
comunque di fare un lavoro un pochino più a spirale, e torna - e farlo tornare fuori nei contesti. Probabilmente la ricerca dovrebbe proprio vedere cosa rimane a livello di cervello nelle parti legate all'approfondimento e al consolidamento delle strutture, qualcosa che passa solo attraverso un sistema cognitivo diverso, perché il digitale per noi non nativi è stato un implementazione incredibile, per loro probabilmente non è più così importante, non lo sentono come importante, e quindi vanno molto più veloci, e la velocità, secondo me, non porta mai all'approfondimento, ci vorrebbe lavorarci un pochino sopra di più. Ecco, le listening - scusate, mezza parola sola, le listening forse sono state più attivate perché i video, anche se sa magari un livello più alto, un pochino più alto del loro - della loro capacità di comprensione, era, grazie alle immagini, molto più intriguing, e quindi loro riuscivano probabilmente a capitalizzare le listening meglio in questo sistema.

I Grazie. *2*, mi pareva che volesse dire qualcosa.

I Si, sembra una cosa un po' inversa così, cioè, passare da, da quello che magari può essere un listening e quindi di un materiale, diciamo, autentico, a, in questo caso, un insieme di, di attività diverse che in realtà può essere utile nel senso che fa parte anche di quella che era la parte magari del PowerPoint legata alla può essere utile nel senso che fa parte anche di quella che era la parte magari del PowerPoint legata alla
multimodalità eccetera, però prima di abbandonare il - l'aspetto più legato alla tecnologia, prendendo spunto da varie cose che avete detto, nel senso, diverse di voi hanno citato questa cosa a livello di, magari, che tipo di effettiva ritenzione di informazioni ci sia da parte degli studenti, piuttosto che del tipo di dispositivo utilizzati, ho sentito anche il termine, appunto, "nativi" o "non nativi" digitali. Ora, questa cosa, in ricerca, viene citata spesso, e per molto tempo è stato dato come assodata, e io però vorrei fare una domanda senza dirvi cosa ne penso io prima, ve lo dico dopo: una cosa che viene data abbastanza per scontata è che gli studenti siano in grado di approcciare la tecnologia, e di conseguenza tutto quello che viene legato, quindi in questo caso l'apprendimento tramite la tecnologia, meglio dei docenti per il semplice motivo che essendo più giovani fanno parte della fascia di nativi digitali, mentre i docenti di solito sono considerati immigrati digitali, cioè tutte le persone nate, diciamo, prima del '90, ‘85, ecco. Cosa pensate di questa cosa, è corretta, non lo è, perché? Non concorda. Come mai, *6*?
Sì, gentile, grazie. Sì, sono molto d'accordo con quanto detto da *Nome* sulla superficialità, senz'altro, questo sì, lo vedo lo vedo a scuola, lo vedi in casa, in realtà, anche un po' con mio figlio che fa quinta liceo. No, pensando alla pandemia che ha aumentato l'uso della tecnologia ho però un ricordo molto simpatico durante il primo lockdown, dove ci siam dovute veramente arrabattare, io faccio lezione alle 2 perché non avevo sufficienti computer, insomma, quindi un pasticcio, anche a livello di orario, è stato molto simpatico fare uno scambio con una classe norvegese. Quindi abbiamo usato Zoom, al tempo si poteva usare anche Zoom, e abbiamo fatto queste classroom dove c'era una classe norvegese che incontrava una mia attual-... al tempo quarta e seconda e quindi c'è stato, così, questo incontro diretto di persone della stessa età di nazionalità diverse, l'ho vista come - così, era un po' una cosa diversa, ecco, che ha funzionato abbastanza bene, però confermo, forse, sì, rimane tutto un po' a livello più superficiale e bisogna riprendere sempre molto tutto.
*6*, vedo che ha alzato la mano, prego.

Allora io ho un'esperienza un po' diversa, perché ho iniziato a insegnare in lockdown praticamente, e quindi adesso sto vivendo la situazione opposta, praticamente, perché per la prima volta insegna in presenza, e devo dire che uso molto la tecnologia anche perché in classe non possiamo usare la lavagna con i gessetti e quindi ci ritroviamo a usare la LIM tutto il tempo praticamente, e ho scoperto una nuova cosa che prima facevo con internet, insomma, con il computer, che era fare il listening registrati e farli ascoltare, invece adesso abbiamo iniziato a - io ho iniziato a preparare degli spartiti e fargli fare, diciamo, il listening letto da alcuni compagni di classe, e ho visto che è piaciuta molto come esperienza perché - perché, uno, potevo vedere come parlavano, appunto, in inglese; due, sentivano un inglese, diciamo, parlato da qualcuno che era nella loro stessa situazione, no, conoscenza, livello, e trovo che sia stato molto proficuo, cosa che invece non mi aspettavo proprio. Niente, volevo parlare di quest'esperienza qua.

Allora, penso che la generazione, diciamo, che è a scuola adesso, alle superiori, sia molto molto brava con i cellulari quando si parla di social network e di cose di intrattenimento, diciamo, ma già sono nell'invio di una mail dal cellulare o l'utilizzo del pacchetto Office sul cellulare, o in generale l'utilizzo del computer, io vedo che hanno molte difficoltà. Anche se io ho solo 15 anni in più dei miei studenti, di per sé, vedo già la differenza generazionale, poi, non so, le mie colleghe sicuramente potranno esprimere la loro opinione.

I Mi esprimo appena ho sentito qualche altro parere.
Certo, anzi. di nascita, non so - non so *1*, non so lei che ne pensa, lei che è giovane.

Beh -
lo concordo con quello.. Ah, scusa.
Vai, vai, vai, *4*, parte dei ragazzi.

5 Che dire? Io non sono affatto nativa digitale, ho quasi 56 anni, però a un certo punto della vita, lavorando in un'azienda, mi sono dovuta dare un gran da fare, con il bagaglio tradizionale, e quindi la mia sensazione è un po' sempre quella, che se mancano degli approfondimenti una - un metodo, dopo non c'entra, appunto, sei nativo digitale, però non ti orienti. O meglio, non ti orienti ad applicare quella - quella capacità che hai per il giochi elettronici su altri versanti, tipo l'apprendimento, ma tipo anche solo l'organizzazione del tuo materiale per l'interrogazione, la visualizzazione del registro elettronico, come dire, no, io trovo che sì, insomma, trovo che la differenza non la faccia l'anno di nascita. Piuttosto, magari, quante favole ti hanno letto da bambino, non lo so, quante volte ti hanno portato al parco giochi e ti hanno fatto vedere che c'era il sole e la luna, che le stagioni cambiavano, non so dirvi. Nell'ambiente di degrado dove io vivo, la sensazione è che ai bambini - a quegli allievi che sono alle superiori da bambini sia mancato piuttosto questo, e che il cellulare ne sia stato surrogato, il centro commerciale, forse, perché vicino - io abito a Roma, ma comunque in una zona periferica e vedo tanti bambini piccoli di un anno nel passeggino nel centro commerciale con il cellulare in mano, e allora non lo so, le due cose insieme le vedo un fattore di rischio per una buona evoluzione dopo. Quindi io non farei tanto la differenza tra, appunto, tra - con l'anno

4 ...Con quello che hanno detto le altre colleghe, assolutamente, anche perché magari noi, ok, siamo anche poi, comunque, abbiamo studiato, siamo dei professionisti, sappiamo fare delle - cioè, abbiamo anche un bagaglio culturale, ma anche una formazione diversa, quindi loro, cioè, abbiamo una formazione. Però effettivamente quello che dicono le colleghe lo sottoscrivo, cioè, cioè non vedo una - forse si collega quello che dicevamo prima, cioè, non c'è una - c'è una superficialità nell'utilizzo di queste - della tecnologia da
*5* ci ha fatto uno spaccato di una realtà che veramente deve farci preoccupare, che vediamo anche noi di una certa età, soprattutto sulle generazioni dei genitori di adesso, che hanno i bambini e non riescono più a dare questo scatto, no, sulla cultura o sul vivere bene determinate cose che possono essere semplici e andremo ad affrontare situazioni di anni particolarmente complessi, quelli che abbiamo davanti. lo porto un'altra idea, la netiquette: è vero che sanno usare i Social media, però abbiamo avuto anche noi un episodio di una mail girata su un Facebook della dirigente da parte dei ragazzi che ha scatenato l'inferno dal punto di vista dell'intervento della Polizia Postale, quindi sicuramente mancano, forse perché non ne abbiamo dato noi, come insegnanti, o in generale, perché a noi arrivano dai 15 anni in su, ma la capacità di capire gli effetti delle parole sui social networks, e quindi probabilmente sono ancora più incapaci, nel vero termine del significato di questa parola, di capire la lingua attraverso una semplificazione, perché parlano l'italiano più scarso che possa esserci, anche se sono sollecitati all'interno del liceo classico, e mancano della capacità relazionale di usare le parole in maniera contestualizzata positivamente.

Non so se può essere utile a *1* sapere che esistono - esiste un'associazione di giovani giornalisti che eroga dei corsi si chiama "Dataninja la società" e "Open the box", il progetto che viene proposto alle scuole proprio per la media Literacy in questo senso, in merito alle fake news, al comportamento da tenere in rete, alla manipolazione dei video di fake e al valore, da un lato artistico, creativo, che tutto questo può avere, dall'altro, insomma, al disvalore che questo può causare, e questo da proporre nell'ora di educazione civica, quindi se poi le dovesse interessare le posso dare i riferimenti. C'ho provato, per quanto sono percorsi impegnativi, perché ti devi informare come docente, un bel po'. Loro ti forniscono tutto, presentazione e tutto, e poi devi proporre alla classe questi argomenti, appunto, come diceva *3*, per sensibilizzare gli studenti a tutte le problematiche inerenti alle reti, alle fonti, quello che dicevamo, le modalità di utilizzo dei social e quindi la sensibilità sta nascendo su questi argomenti. Certo, quello che io dico, se noi ce ne dobbiamo fare portatori, ecco, è come se il ruolo cambiasse completamente. Perché
chiaramente se io propongo poi questo argomento in inglese diventa una cosa solo per il quinto superiore. se nel mio ambiente... Quindi alla fine io lo propongo in italiano nelle ore di educazione civica ed è un inizio.

Sì, questa fa parte un po' delle parentesi che, che si possono e che volevo aprire, nel senso che il concetto di Digital Literacy di per sé - a parte che viene usata abbastanza come un termine ombrello, nel senso che finisce per racchiudere tanti termini diversi che comunque poi nella ricerca hanno a che fare con la comunicazione, con i media, come appunto è stato citato adesso, con molte cose diverse. Per quanto riguarda un mio parere in merito, diciamo è che la ricerca adesso, ed era ora, si sta cominciando a rendere conto esattamente di questo, cioè del fatto - esattamente di quello che diceva *5* anche prima, cioè del fatto che non c'è una differenza d'età che può marcare una competenza, non è quello il punto. Il punto sta nel - nell'uso che si fa di certe abilità che si possono e si devono sviluppare, che non sono innate, alla fin fine, e Infatti il problema, molto spesso, è che i ragazzi hanno ottime capacità operazionali se si tratta di un dispositivo piuttosto che un altro, nel senso che nel momento in cui gli viene messo in mano un nuovo cellulare, un nuovo tablet, non hanno problemi a capire come utilizzarlo, soprattutto per, magari, tutta una serie di cose, che si tratti di giochi, che si tratti dei social, in generale. Nel momento in cui devono applicare, invece tutta una serie di quelle che vengono chiamate nuove forme di Literacy, cioè quelle legate al pensiero critico, alla valutazione delle fonti, dei materiali, lì casca il palco. Il problema infatti è che - un suggerimento è che questo tipo di competenze venga dalla scuola, cioè i ragazzi mettono quella che è la loro innata capacità di utilizzare il dispositivo, la scuola debba mettere, diciamo, la formazione nei confronti del l'utilizzo concreto di quel dispositivo nell'ambito dell'insegnamento e dell'apprendimento. E' una cosa che per voi ha senso? Più che altro, che è fattibile, nel senso che oggettivamente non è facile andare ad inserire una cosa che, è vero, alla fine sconfina nella educazione civica, in quella che è una classe di lingua, per cui mi rendo conto che ci siano vari problemi, nel senso che nel momento in cui comunque alla fine dell'anno bisogna avere possibilmente il programma svolto, il tempo è quello che è. il materiale - io non lo so quali siano nella vostra scuola, però io spesso mi sono trovata ad avere a che fare con laboratori che non - sì, erano abbastanza obsoleti, con un WiFi che non funzionava, cioè, può non essere semplice arrivare effettivamente alla fine dell'anno con tutto sotto controllo, quindi io chiedo: è fattibile pensare a una formazione degli studenti in questo senso?

Sì, io ci credo, però, ecco, allora dice - però ritorniamo al discorso di prima, allora, però, per portare avanti il programma mi tengo sulla - sul libro di testo, per farle un esempio, no, allora, media Literacy e poi anche altre, insomma, l'uso della rete per fare rete davvero, per collegarsi con i compagni, per collegarsi con i progetti all'estero, facciamo tutto, però allora poi le verifiche non mi si chieda di inventarle, cioè, allora faccio la mia unità didattica come me la presenta il libro e prendo la verifica dall'editore, che non considero un fiore all'occhiello, però ecco, solo per dire che tutto - non riesco a essere creativa su tutto e mantenere poi anche la salute mentale. Ricordiamoci poi che nelle scuole chi è portato all'innovazione all'impegno ha sempre un carico di lavoro superiore, perché i dirigenti poi chiedono l'aiuto per - chi sa usare la tecnologia, perché si è messo in gioco, allora gli è sempre richiesto di fare Invalsi, no, di aiutare i colleghi con il drive, di - quindi sì, io penso che la scuola lo debba fare, però allora su altre cose stare, insomma, su meccanismi più semplici, almeno parlo per questi istituti difficili, dove insegno io, dove dagli studenti viene - dalle famiglie viene poca collaborazione.
lo aggiungo solo che l'insegnante di inglese si ritrova a fare un sacco di cose perché educazione civica, che era - la mia generazione, noi facevamo, avevamo le lezioni di educazione civica per diventare cittadini, sembra assurdo che dobbiamo insegnare adesso ad essere cittadini, noi di inglese facciamo la schiavitù, il problema dei bambini, la schiavitù attuale, la schiavitù antica, però la collega di italiano invece fa - spiega I'utilizzo di Word e come fare una mail nel - collego al discorso di prima, è vero che sono - non sono capaci di fare le cose semplici che abbiamo dovuto anche noi attivamente imparare velocemente. Loro è come se fossero più lenti, perché qui c'è il discorso dell'impegno, la scuola dovrebbe forse passare solo la passione, però è vero che poi ci scontriamo con i test ingresso all'università ad aprile, per cui l'ultimo anno come non averlo, i livelli linguistici che, vabbè, parlare dal Trentino, che sta calando sugli Invalsi, però è vero, è una realtà più privilegiata, magari rispetto ad altre situazioni, però non sentiamo pressante la richiesta che sappiano parlare inglese, quindi ci sono dei momenti che tre ore a settimana, che sono di 40 minuti, che poi ti ritrovi ad avere se ti va bene 60 minuti in una settimana, magari tutti ravvicinati perché l'orario non è mai fatto in maniera - per le lingue straniere, diventa la realtà quotidiana di difficoltà più che di soddisfazione.

Sì, diciamo che di base avremmo bisogno di - di più ore, cioè, i tagli che sono stati fatti, cioè, non - al, anche al monte ore non - in alcuni, almeno in alcuni licei non favoriscono un approfondimento e la
possibilità di fare tutto. lo ho - per esempio, cioè, quello che potremmo fare è, magari utilizzare, ecco, per esempio, come dice lei, una ricerca nel - cioè, un utilizzo, o una riflessione sull'utilizzo dei, dei media e della tecnologia nell'ambito di quello che stiamo affrontando nella, nella - durante il giorno, per esempio, non so, cioè, se ho capito bene potremmo - invece di dare, diciamo, ecco, di fare imparare solo la letteratura da quello che c'è sul libro, magari dare: "Okay ragazzi, qui vediamo tutti e due gli aspetti, cioè, vediamo un po' che cosa c'è scritto su questo autore, ci sono diversi - diverse fonti, vediamo un attimo quali sono le possibili fonti e poi mi dite, cioè, non so, fare una lavoro del genere e vedere, per esempio, se se non ci sono delle - dei siti dove invece vengono date informazioni sbagliate". Cioè, quindi, come, come poter unire lo studio e anche l'utilizzo critico della tecnologia, cioè, in questo modo qui uniremmo le - entrambe le cose, perché fare le cose disgiunte, aggiungere cose in più a quello che abbiamo effettivamente impossibile.

I Serve, oltre a una diversa formazione degli studenti, una diversa o maggiore formazione degli insegnanti? In che direzione, nel caso?

Sì, soprattutto formazione e confronto, io questo discorso che sto facendo con lei e con voi non lo posso non ho l'occasione di farlo con nessuno, ad esempio il fatto che appunto bisogna dedicare un tempo alla media Literacy, che se dedico un'ora a settimana, come ha chiesto il dirigente, agli Invalsi, appunto, va benissimo, però poi faccio quello allora, un'ora settimana. E' un buon modo di studiare la lingua? Io non lo so, io provo perché la mia dirigenza, in maniera generale, ha detto, ha puntato su quello, perché i concorsi, oggi, sono così, le prove, anche per i docenti, sono fatte così. Quindi, se insegnate, fate fare tante prove Invalsi durante l'anno, il che poi vuol dire anche prepararle, metterle tutte sui moduli Google, quindi tanto lavoro, ma è il modo giusto, poi, per insegnare l'inglese? Non lo so, non so con chi parlarne, e quindi si, tavoli di confronto e - e anche formazione, perché anche questa sarebbe formazione. Quali sono le priorità oggi che c'è tanta scelta data da tanti, tanti strumenti? Come si fa la priorità? Cosa è più utile, cosa meno, e poi anche a seconda dei contesti, no, sennò si va così, un po' a vento, sperando che qualcosa passi, che qualcosa serva.

\section*{I}

2 Ma sì, in effetti, in effetti ci sono la valutazione delle fonti, l'uso della rete, ci sono molte cose da ampliare, forse proprio anche i programmi andrebbero un po' rivisti in questo, e non possiamo fare tutto noi, non si può fare tutto. Bisognerebbe adattare quelli che sono i programmi \(a\), a quello che - a quello di cui han bisogno di più i ragazzi, io cambierei - poi insegnando letteratura, santo cielo, anche la letteratura bisogna un po' adattarla ai giorni nostri, trovare degli agganci col mondo reale, ecco, quello sì. Educazione civica, ne abbiamo parlato, sì, facciamo degli interventi su, sui diritti civili, sulla Costituzione, va tutto bene, abbiamo anche parlato che sarebbe bene avere dei consulenti esterni che fanno - o consulenti esterni o proprio degli insegnanti specifici di educazione civica, perché dobbiamo fare, cioè, tutto, non so, va un po', va un po' compreso meglio questo, e poi concordo comunque con - con quello che si è detto prima, che non necessariamente gli studenti hanno - sono così abili, non lo sono per niente, non lo sono per niente. Ci sanno solo usare molto bene, sì, sì, i Tik Tok, Instagram e quant'altro, ma magari non sanno accedere alla circolare dell'istituto. No, no, poi probabilmente finché non ne hanno bisogno non lo imparano, come abbiamo fatto noi, ecco, però io rivedrei un po', per chiudere, proprio i programmi, in generale, soprattutto, non so, adesso non conosco gli istituti tecnici, ma il programma dei licei andrebbe un po' attualizzato, non so che verbo usare.

I Ecco, in questo senso io ho avuto modo di, diciamo, studiare un po' gli obiettivi di apprendimento che ci si pone sia per quanto riguarda i licei che per quanto riguarda gli istituti tecnici, per quanto riguarda, beh, mi sono concentrata su - sull'inglese come lingua straniera, sinceramente, poi non ho approfondito tutte le altre discipline. Voi avete - a parte che se non ricordo male questi documenti comunque sono di, ormai, una decina buona di anni fa, insomma, però sono appunto documenti con cui avete familiarità? Cioè, se vi faccio una domanda in questo ambito, più o meno, non dico ovviamente saperli a memoria, ma averli presenti? Mi pare che l'ultima sia del 2010.

Se sono gli obiettivi specifici di apprendimento, è logico, noi in provincia di Trento abbiamo anche la provincia che ci dà delle istruzioni in merito ai programmi, quindi evito di entrare in questo argomento, però è vero che vanno attualizzati e soprattutto legati alla contemporaneità. lo sono anni che penso al mio programma di letteratura solo in base a quello che può stuzzicare i ragazzi...

I ...Quindi saluto, e grazie mille per la partecipazione, arrivederci.

I Okay, altri pareri in quest'ambito? (pausa).
Okay, allora, procedo con una domanda leggermente diversa, cioè tornando un po' all'ambito da cui sono partita. Ovviamente, per quanto riguarda voi, poi, se sapete di qualche altro vostro collega a me va bene lo stesso, intanto è per capire se avete familiarità con la ricerca nell'ambito dell'educazione linguistica. Cioè, a livello di studi, teorie, piuttosto che leggere on-line degli articoli o qualsiasi altra cosa. Non mi offendo minimamente se la risposta è "no".

5 Un po' sì, un po' sì, proprio per i bisogni educativi speciali, tramite i vostri corsi di Venezia, perché ho lavorato come tutor per i ragazzi dislessici come lavoro pomeridiano, quindi, sì in questo senso, poi proprio non le potrei tenere un esame di teoria.

I No, no, per carità, la mia era per capire se secondo voi è utile che un docente abbia familiarità con la ricerca che viene effettuata nel suo ambito di studi.

4 Per quanto mi riguarda, e penso, almeno, soprattutto adesso, io - poiché sono, insegno da parecchi anni, però sono di ruolo da 5 anni, però io mi sono sempre trovata un po', cioè, insomma, non lo so, ecco, sto sempre - sembra sempre che ogni giorno sperimento, nel senso che non sono - mi sembra sempre di dover
capire delle cose, perché magari non so insegnare bene, perché comunque qualcosa non è andato, qualcosa... E quindi adesso, cioè, per esempio: come si interroga, perché io non trovo che - per esempio, c'è sempre poco tempo per fare tutto, e magari spesso mi capita di non riuscire a fare tutto, e quindi mi sempre mi interrogo: ma come si fa, come è meglio fare, eccetera, eccetera. Ora, ho capito che è il caso che io vada a studiare un altro po', nel senso, in - per esempio, in rete, oppure con dei libri, di nuovo sulle - o comunque sempre di più sulle strategie di insegnamento, di apprendimento, perché, cioè, io lo trovo fondamentale che uno si - che, che noi ci informiamo, o ci informiamo, che progrediamo e ci aggiorniamo, ecco, cioè lo trovo fondamentale, quindi sono, insomma, sono assolutamente a favore del tenersi aggiornati.

3 E' bello *4*. Secondo me questa è una cosa bellissima che hai detto, manteniamo la voglia di aggiornarci. Nel Trentino noi non riceviamo il bonus docenti, abbiamo iprase che ci fa un sacco di corsi, è vero che poi è la qualità della persona che è interessata o meno. CLIL, tanto tanto CLIL, Flipped classroom, che secondo me è una buona strategia, non so, per recuperare tempo ma nello stesso tempo far lavorare i ragazzi, e poi è logico che, neuroscienze, cioè come ci - come apprendono i ragazzi, e come possiamo dir loro anche di studiare in modo diverso, questo mi sento di poterlo dire. Poi non so se lei \({ }^{*} 1^{*}\) si riferisse a qualcosa di particolare sulla ricerca.

I Allora, io stavo andando in due direzioni differenti, una che era semplicemente per capire quale fosse il rapporto, diciamo, tra il docente e l'ambito della ricerca, visto poi che abbiamo cominciato questo focus group dicendo che la ricerca è molto distante dalla realtà della scuola. Quindi cercavo di capire quanto, dato che comunque sono anche d'accordo, una ricerca così distante venga effettivamente poi approcciata e quanto sia considerata utile per l'insegnamento di tutti i giorni.

3 Le faccio un esempio, l'Università di Trento, hanno fatto un convegno sul CLIL e le cose che dicevano i grandi professori erano lontane mille miglia dalla realtà del CLIL all'interno delle scuole.

I Non ho dubbi. La seconda era invece una direzione un po' più concreta che mirava a capire poi, al dunque, che tipo di possibilità e contesti abbiate per una formazione o un aggiornamento, come è stato appena citato, cioè, c'è una struttura, che sia la scuola, che sia qualcos'altro, che - perché ho visto che non si può, in questo senso, contare su delle indicazioni che siano nazionali, ho visto che è molto diverso il contesto a seconda della situazione della scuola - quindi cercavo di capire che tipo di possibilità ci siano di aggiornamento, se vengono promosse dalla scuola o meno, se l'insegnante sia obbligato a prendere parte o no, se debba arrangiarsi nel cercare fonti di aggiornamento.

Rispondo io, perché poi vi lascio anch'io fra 5 minuti: Trentino, provincia, iprase che è questo istituto di ricerca che fa l'aggiornamento, nella scuola cerchiamo di fare qualcosa, per esempio, io ho invitato una prof dell'università di Bolzano per parlare di CLIL ai miei colleghi che non vogliono fare CLIL, è logico che noi all'interno delle ore dobbiamo fare 20 ore all'anno di aggiornamento, di solito. Poi dipende dal tipo di interesse che ha un insegnante.
\(1 \quad\) Okay. Per gli altri?

No, per quanto riguarda me, in questo Istituto c'è una docente che ci informa di tutto quello che l'ambito, inteso come - come posso spiegare - come realtà anche burocratica, che l'ambito della nostra - in cui ricade la mia scuola, offre in termini di formazione gratuita, e quindi mi arrivano dei file dove la collega dice, non so, "vi interessa un corso di spagnolo, di inglese, di didattica, per competenze..?" N proposte, diciamo, alcune anche valide, educazione civica, e quindi ci viene proposto questo tipo di corsi, appunto, gratuiti, e se no poi si lascia anche alle la scelta personale. Il dirigente però lo ricorda nei collegi che è necessario continuare a formarsi però, ecco, tutto questo poi non ha dei tavoli di confronto, lui lo dice in generale, perché questo poi è valido, se vogliamo, per qualsiasi professione, in un mondo che cambia così velocemente, quindi questo è un po' - non è che - lui propende, appunto, per lato della valutazione, per farle un esempio, no, lui propone di formarsi nella - nuovi metodi valutativi, soprattutto dato il nostro ambiente difficile, didattica per competenze, e lui insiste sempre perché questa didattica venga resa attuale, e su questo si fanno degli esperimenti, come dicevamo prima, poi sacrificando magari altre cose, quindi sì, da noi la formazione è prevista, in termini sia di linee guida, sia proprio di corsi offerti dall'ambito scolastico.

I No, no, c'entra perché comunque anche quando la ricerca presenta tutta una serie di possibilità, di strumenti da attuare, non tiene mai conto della realtà umana poi in cui ci si va inserire, cioè del tipo di casse che ci si trova davanti, che paradossalmente può anche essere tutta dello stesso istituto, magari si prende un liceo classico, ma due classi possono avere due approcci completamente differenti, per il semplice motivo che magari in una ci sono più studenti con delle difficoltà di apprendimento rispetto all'altra, magari sono più - una classe è più tendenzialmente visiva, una più tendenzialmente uditiva, io non so nemmeno quanto ci sia, per esempio, una ricerca poi al dunque, in classe, su che tipo di studenti si hanno davanti a livello di modalità di apprendimento, per esempio, cioè, dubito che venga consegnato un test il primo giorno di lezione per cercare di capire se uno è più tattile, lavora meglio in gruppo piuttosto che individualmente, cose del genere.

4 Ecco, questa, per esempio, questa delle abilità è una cosa che dovremmo approfondire di più, secondo me, anche...

Questa è l'idea in teoria, però dalla teoria alla pratica, è quello sempre il problema, che bisogna avere...
Che poi è sempre - è sempre il problema poi dei bisogni educativi speciali, perché tutti questi strumenti possono facilitare però ci vuole l'insegnante proprio accanto, fisicamente, almeno per le prime tappe, per rassicurare, perché comunque si sentono diversi, più imbranati, più lenti, e alcuni poi lo sono, alcuni solo ci si sentono, poi migliorerebbero velocemente. Ecco, questa è una delle cose anche da cui non riesco a uscire, ad esempio per le prime, io sono convintissima che alcuni ragazzi trarrebbero grande vantaggio da una mia presenza seduta accanto a loro per la preparazione di una verifica, in termini di mappe - io per esempio gliel'ho mandate su Classroom, ma poi servono dei passaggi intermedi, non è che mando la mappa
e la mappa poi viene utilizzata corre- non lo sanno, alle medie non l'hanno - molti non l'hanno fatto questo percorso, e quindi, anche qui, questa è una carenza della scuola, perché bisogna sperare che vengano aiutati a casa, alla fine, dai tutor, perché come si fa? Cioè, un docente da solo - gli altri poi che fanno, mentre io seguo il ragazzino con bisogni educativi speciali, gli spiego...? Ecco, questo.

I Sì, *6*.

I Sì, beh, sarebbe effettivamente l'approccio da manuale, cioè quello di andare a mettere insieme degli studenti con, diciamo, un livello linguistico differente in modo che possano aiutarsi reci- beh, reciprocamente mica tanto, che magari quelli un attimo più avanzati possano aiutare quelli che hanno qualche difficoltà in più, diciamo che non è sempre così facile perché l'idea sarebbe quella di evitare che, per stare dietro agli studenti con più difficoltà, si perda l'attenzione e la motivazione di quelli un pochino più avanzati, però diciamo che - almeno, quello che ho visto io nella mia esperienza è che non è sempre facile avere, non so, un numero pari di persone da mettere insieme a lavorare, piuttosto che effettivamente funzioni, perché tante volte quelli che non hanno, magari, grandi capacità non hanno neanche grandi motivazioni, che poi non si tratta di capacità, è di quello che sono riusciti o meno a
sviluppare. Quindi il loro interesse, almeno in molti casi per me è stato così, è molto relativo, quindi il fatto anche di affiancarli a qualcuno di più capace, non necessariamente serviva da traino. Però intanto era per capire, comunque, se vengono applicate comunque diverse modalità per cercare di spingere i ragazzi a utilizzare diverse modalità di apprendimento, che siano visiva, uditiva, tattile, cinestesica è più difficile, cioè, magari invitarli a muoversi per la classe può non essere semplice, però...

Cinestesica per la prima, nella prima classe, per imparare i nomi, quello proprio me l'hanno insegnato in alcuni corsi e lo applico sempre, però soprattutto in prima, proprio la total physical response, esercizi, giochi, e quello diciamo funziona, perché poi non si possa continuare non lo so, cioè, viene il momento che poi senti che devi passare ad altro, magari anche questo è un condizionamento, non so dirle *1*, forse si potrebbe continuare così, a fare giochi tutto l'anno. Lo chiedo ai ricercatori, magari funzionerebbe ugualmente, chissà.
*4*

4 Io, per esempio, sono sempre - anche in passato, sono sempre stata per una disposizione di banchi diversa, per la possibilità dei ragazzi di muoversi, proprio, anche come - per esempio per imparare i nomi, quindi per il gioco iniziale, di introduzione, di presentazione di sé, eccetera, ma anche per - per esempio, per classi più alte lo facevo per - con dei giochi di lessico, magari vai a - con le collocations, per esempio, andare, vai, vai a trovare quello che ha la parola che - che serve a te, quindi non so, have breakfast, uno aveva have, l'altro aveva breakfast, allora dovevano muoversi per la classe e cercare il loro fogliettino. E questa era molto bello. L'unica cosa è che, appunto, serve comunque una classe possibilmente più piccola del, dei 30, diciamo, cioè, lo puoi fare con 20/21, 25 già diventa difficile, e poi... E poi adesso, con la pandemia, io non mi sento tanto di fare... Perché significa far muovere gli studenti e non è - cioè, non mi sento molto di prendermi questa responsabilità, anche.

Certo. Quindi... Perché adesso è inutile, forse, che vi faccia tutto un discorso relativo a quello che è la mia ricerca, però sto cercando di capire, anche con questi incontri, se c'è un modo per ridurre quello che io sulla carta ho dovuto scrivere che è "l'ipotizzato gap" fra la ricerca e la scuola e l'ipotizzato giusto per carità cristiana l'ho inserito, perché è chiaro che c'è - come si può andare, secondo voi, a ridurre la distanza fra il mondo della ricerca e la quotidianità della scuola? Cosa possono prendere l'una dall'altra? Una domanda semplice semplice.
lo, cioè, se non sono - secondo me una cosa semplicissima sarebbe, per esempio, portare nella - nelle varie scuole un - almeno prevedere nelle scuole dei momenti di confronto di questo tipo qua, magari con il ricercatore e con - e con la - e con gli insegnanti. Cioè, più spesso, organizzare queste cose qui per vedere com'è andata, cioè, con, cioè - non lo so, ecco, come vi trovate, insomma. Ecco, questo, prevedere più momenti di questo tipo.

Momenti di confronto dove, appunto, vedere anche dove casca l'asino, dove casca l'attenzione, e perché poi la volta dopo nessuno sa niente, dove ha sbagliato l'ins(egnante)... anche questo, avere degli osservatori del proprio metro, del proprio approccio, questo anche a proposito della gestione della classe, magari con un osservatore esterno è tutto più chiaro, che ci sono dei punti di debolezza da parte dell'insegnante, o nella didattica, o nella gestione della classe, o entrambe le cose, per esempio, quindi ecco, avere degli osservatori esterni, che sarebbe una cosa buona, e i poi tavoli di confronto, i momenti di confronto. Ecco, lo scambio tra docenti, anche, è una cosa - non lo so, nel mio Istituto è una cosa impossibile, i colleghi sono sempre - si incontrano poco, molti sono stanchi, non sono d'accordo anche a tentare le attività condivise, quindi chissà, creando dei gruppi che si uniscono poi anche un po' su base volontaria, no, come stiamo facendo noi con lei.

Certo, questo a livello quindi di, in senso lato, formazione, perché nel momento in cui si fa un ragionamento, si fa un confronto, si sta anche cercando di capire quale approccio, magari, andare ad utilizzare o come modificare alcune cose. In classe, invece, su cosa si potrebbe andare a lavorare? (pausa) Questa è più difficile.

In che senso? Cioè, per capire se il metodo funziona, o...?

I No, per - oh, anche, per carità, però intendevo più che altro per cercare di capire se si possa andare a cercare di fare un passo oltre... Perché, anche là, bisognerebbe capire che interesse c'è, magari, nell'avvicinarsi alla ricerca, per carità. Però, intendo se ci sono degli approcci, delle attività, che possano, magari, aiutare a uno sviluppo di forme di - diciamo di Literacy, ma nel senso quindi di approccio all'apprendimento un po' più multimodali, un po' più diversificate.

Cioè se in classe vengono utilizzate?

Se vengono utilizzate o su che cosa si potrebbe andare a lavorare per utilizzarne di più.
Sì.

Ma, diciamo, mi chiedo, su, diciamo, sulla ricerca in generale o sulla multimodalità, che sono due cose..?
Alla fine, il punto è - le cose più concrete, perché la ricerca parla di tante cose, adesso quello che sto andando a valutare io è effettivamente lo sviluppo di forme di Literacy che siano più multimodali, diversificate, digitali... Il digitale per forza di cose è aumentato, abbiamo detto, anche solo per il fatto della - della pandemia e di quello che ha comportato. Sul resto, come possiamo - come siamo messi e come possiamo andare a lavorarci?

Forse, essendo, cioè, cercando noi, facendo un lavoro prima di tutto noi, come insegnanti, su - sulla multimodalità, cioè, tener sempre presente, magari, non so, piuttosto, cioè, magari il mondo delle immagini, però già lo facciamo magari.

Sì, e poi quello che dicevo prima, ilibri di testo, comunque, utilizzati pedissequamente - i libri di testo moderni, chiaramente - offrono tanto, da questo punto di vista, tante - tanti audio, tanti video, e anche tante attività già pensate per coinvolgere, quindi, su questo l'esperimento si fa. La difficoltà, però, è come la classe le recepisce perché, appunto, sì, certo, meglio multi che mono, indubbiamente, perché nella grande - nella grande sperimentazione, sicuramente, qualcosa coglierà nel segno, da qui a capire sistematicamente cosa è meglio di qualcos'altro lo trovo molto più difficile trovare una regola...

Ma forse quello che manca...

No, no, prego.

No, dico, forse quello che si potrebbe fare, quello che manca magari è la riflessione, cioè la riflessione condivisa con i ragazzi sulla ricerca. Cioè, sulla multimodalità, cioè - cioè, per esempio: quest'anno, oltre al imparare l'inglese, cerchiamo di capire quali - cerchiamo di riflettere sul nostro apprendimento e su come apprendiamo, e quindi insieme prevederemo dei momenti in cui riflettiamo su, su delle immagini e quindi, cioè, ecco, prevedere dei momenti in cui - in cui, cioè, c'è molta, per esempio, autovalutazione, dovremmo fare più autovalutazione con loro, in modo da - che loro si rendano conto di dove devono o dove possono arrivare, e chiedersi se, per esempio, quale approccio ti ha interessato di più, quale stile, quale modalità? Per esempio, la modalità dell'immagine, oppure quella digitale, oppure quella della spiegazione frontale quale - ecco, oggi faremo così, e poi alla fine dell'ora avremo questo testo in cui valutiamo come abbiamo appreso, cosa abbiamo parlato di nuovo. Cioè, forse si dovrebbe valutare di più, lavorare di più insieme alla classe sull'autovalutazione, sui metodi di apprendimento, cioè, sulla meta - sull'apprendimento della lingua stessa.

Sì, certo, diciamo che forse una coscienza potrebbe - coscienza, per quanto, insomma, poi anche le modalità di apprendimento, ho visto, perché ho fatto anche io dei test di questo tipo, naturalmente possono anche variare. Nel senso che, ovviamente, magari, una classe vi dà una risposta di un certo tipo a settembre, lo stesso identico test rifatto a giugno vi darebbe delle risposte, magari, diverse. Però, chiaramente, potrebbe essere utile anche a loro sapere su cosa andarsi a concentrare, magari, soprattutto nelle prime fasi dell'apprendimento, perché forse è come, un po', imparare un metodo, una volta imparato un metodo per imparare la lingua è più semplice, una volta imparato un metodo di apprendimento in generale è ancora più facile capire come applicarlo, però bisognerebbe fare qualche esperimento in merito,
vedere... Ma, per le classi che avete voi, cioè, secondo voi potrebbe essere un aiuto - un dialogo con loro? Vedo un sì.


Sì, sì. Sì.
Okay. Perché guardate, perché adesso io devo cercare di fare un attimo il punto di tutte le informazioni che ho ottenuto fino adesso, anche perché, tra l'altro, tutto questo si lega ad un questionario che io avevo proposto qualche mese fa ai docenti in cui si andavano a valutare tutte queste cose, a livello di Literacy, di Literacy digitale... Quindi adesso cercherò di mettere insieme le informazioni ottenute, in realtà non in questo ambito di ricerca specifico, perché qua quello che farò è portare dei dati e cercare di trarre delle conseguenze. Quello che mi è stato anche chiesto è di andare però a lavorare su questi dati per capire se è possibile formulare delle linee guida, è anche per quello che io insisto, scusate, su certe cose, perché cerco di capire, poi, al dunque, come si possono andare a tradurre nella pratica, anche se, ancora una volta, farlo seduta su una poltrona è molto diverso che non farlo in classe, purtroppo. Avete qualche osservazione conclusiva? Secondo voi un incontro così può essere utile?

Sì.

Sì, assolutamente, cioè, sì, per quanto mi riguarda sì, assolutamente, è proprio quello che manca, anche.

\section*{E' quello che manca, esatto, quello che prima cercavamo di dire, manca nella scuola.}

Sì, poi, io, appunto, mi stavo concentrando su un filone, però è ovvio che, volendo, ci sarebbero tantissimi filoni di formazione da poter andare ad approfondire, anche solo per avere un confronto, alla fine, che credo possa essere proficuo anche solo per sapere come, magari, un collega si gestisce, magari viene fuori un'idea che a noi non era venuta in mente. Allora, io, a questo punto, se non avete altro da aggiungere, andrei ad interrompere la registrazione, intanto. Okay.

I Inizia, vediamo.
7 Io sento rumore. Beh, io vedo "Rec".
I Perfetto, è partito, ci siamo.

7 Ok.

Ottimo. Sì, in realtà per me va benissimo anche se vuole partire dal commentare, che, appunto, mi stava dicendo che è un termine che sta entrando, ma che magari non è -

7 Si beh, io ho letto un libro su questa cosa, ma ovviamente non mi ricordo nulla. Un attimo che vado a vedere, mi pare che si chiama "Digital Llteracy", una cosa così.

I

7 Eh, di chi è questo libro...?
I Ce ne sono vari.

7 Beh, ma lo cerco su internet, perché, perché, perché, sì, perchè ovviamente poi io quando cerco le cose non le trovo mai.

Certo.

7 Forse adesso - adesso glielo dico perché era per un esame dell'università, di quelli dei crediti extra, diciamo.

I \(\quad 24\) cfu?
7 Sì, mi viene a memoria qualcosa tipo [...] \(]^{1}\),.
I C'è, sì [...], e a volte lavora anche con [...], lavorano insieme, a volte, per cui sì, probabile.
7 Esatto. Allora, libro, vediamo un attimo. E insomma, so che alla fine non avevo ben capito di cosa parlasse.
I Ma perché effettivamente ci vuole un lavoro, io ho creato questa specie di panoramica perché speravo appunto di dare un attimo, così, un'idea di insieme prima di andare poi a concentrarsi su qualcosa di più specifico per il semplice motivo che la mia impressione, adesso lei mi dirà se secondo lei è vero o meno, è che tutta questa terminologia rimanga speso tanto in ambito universitario e che prima di arrivare effettivamente nella realtà della scuola...

7 Assolutamente sì. Allora io confermo che avevo letto [...], "Digital Literacy: cultura ed educazione per la società della conoscenza", che è tutto molto bello, però poi, appunto, il problema è che, secondo me, portare questi concetti nella scuola in modo che sia, come dire, no... Perché la scuola ha un impianto abbastanza tradizionale, quindi anche solo il fatto che, per esempio, durante le lezioni non si possa cambiare il layout dei banchi, anche solo il fatto che... Cioè, io premetto che avevo fatto un corso, prima di iniziare a insegnare, il Celta, quindi ero andata all'estero e mi ero fatta questa certificazione, e loro insegnano modo di insegnare che è totalmente diverso da quello che poi c'è nella scuola in Italia, quindi adesso tutti sanno cos'è una competenza, nel senso che ci stanno veramente uccidendo, ma no, vabbè. che poi, io non condivido tutta questa storia delle competenze. Però ecco, cioè, secondo me ci sono come dei nuclei tematici che - in questo momento c'è ancora tutto il grande tema della competenza, delle competenze, anzi, sicuramente un concetto, cioè, più accademico, ecco

\footnotetext{
\({ }^{1}\) For privacy reasons, some names and titles mentioned by the interviewee are removed by the researcher.
}

I E quindi il problema è che manca un tema in italiano perché non... cioè, di fatto, così come non hanno creato un nuovo termine in inglese, non hanno creato un nuovo termine in italiano, si sono direttamente appropriati del termine inglese e via.

Che è sbagliato, perché non... Secondo me, almeno, io penso che sia sbagliato, perché non è un concetto comprensibile. Comunque se io parlo di alfabetizzazione, le faccio un esempio stupido, io sono referente alfabetizza- quindi dell'italiano L2 nella mia scuola, insegnando inglese, io insegno sia inglese che russo, però, avendo anche insegnato al CPA un pochino di italiano per stranieri, poi mi sono, mi sono, mi sono messa, insomma, mi sono resa disponibile per gestire i corsi italiano per neo-giunti, sostanzialmente, ma non solo neo-giunti, ok, e quindi praticamente a me hanno detto: "Attenzione perché noi facciamo alfabetizzazione, ma facciamo anche italiano per lo studio", cioè, i ragazzi che sono in Italia da qualche anno ma hanno un basso, diciamo, profitto, un profitto, insomma, non soddisfacente, comunque noi facciamo fare delle lezioni perché potenzino la loro comprensione dell'italiano per le materie di indirizzo. Parliamo di un Ipsia, quindi di una scuola, insomma, per ragazzi che comunque vogliono andare a lavorare, si parla sostanzialmente di formazione professionale, ok.

I Ho lavorato anch'io in un professionale, quindi ci sono.
7 Toccante, toccante. Però qual è il problema, che io, quando poi questa collega che, lei è laureata in italiano, penso che abbia il Ditals, insomma, ha il Cedils, insoma, ha qualche - giustamente lei ha quel background lì, mi fa fare come prova d'ingresso per questo italiano per lo studio una cosa che per me era totalmente fuori dal mio focus, io ho detto, "attenzione, io sono qua per fare alfabetizzazione A0, A1, A2. Io non sono qui..." perché è molto, fra virgolette, fazioso il concetto, per esempio, di italiano per lo studio. Che cos'è? Allora quella potrebbe essere Literacy? Cioè nel senso, perché, che cos'è la Literacy? Perché l'alfabetizzazione secondo me è \(A 0, A 1, A 2\). Cioè io ti do gli strumenti per poter interagire in modo... in modo, in modo, in modo decente con la realtà che ci circonda, ok, per poter anche esprimere in modo attivo la tua cittadinanza, i tuoi diritti, i tuoi doveri. Dopodiché lo step successivo è appunto quello di entrare un po' più nel vivo, del - cioè, fra l'altro, secondo me c'è un problema di analfabetismo di ritorno nella gioventù, perché ci sono italiani che fanno errori che noi non facevamo. Quindi a volte mi chiedo qual è il problema. Il problema, cioè diventava... io, come dire, mi sono detta, "attenzione: ma se noi andiamo a fare dei corsi per gli stranieri perché hanno un gap culturale rispetto al nostro perché a casa parlano sempre un'altra lingua, ha senso, ma io non posso andare a fare un corso allo straniero perché è straniero che non scrive bene l'italiano, ma ha già un livello buono", perché allora il problema si allarga anche a, voglio dire, è estendibile agli italiani. Ci sono italiani che vivono in contesti culturali abbastanza stranini. Quindi anche loro sono svantaggiati, quindi io lì ho messo in discussione il concetto di italiano per lo studio, cos'è l'italiano per lo studio, non è l'italiano stesso? Tu facendo sei ore di italiano a settimana, non stai facendo italiano per lo studio? Come dire, no?

I Quindi in realtà il concetto di Literacy di per sé in questo momento, diciamo che si è evoluto per andare a cioè, si parla di Literacy per qualsiasi cosa, si parla di Literacy quando si parla del digitale, di Literacy per qualsiasi tipo di lingua, Literacy non è una cosa che fa parte solo della letteratura ma fa parte proprio dell'insegnamento della lingua, cioè è sostanzialmente quella capacità di andare a interagire con più mezzi diversi di quello che poi è - non solo il processo di apprendimento, in realtà, perché si può parlare di Literacy anche semplicemente per chi è in grado o meno di utilizzare una lingua al di là dell'apprendimento.

I ...tra la ricerca e la scuola che secondo me... Ecco, e quindi io ho bisogno di conferme in questo senso.
Allora sì, infatti, una delle cose con cui io mi trovo a che fare adesso, ed è una delle cose su cui vorrei andare a lavorare in realtà poi con questa ricerca, è il fatto che, secondo me, si cerca sempre tanto di creare definizioni, cercare di capire - anche troppo, probabilmente.

Certo.

Ma quindi attraverso se possibile mezzi diversi, in contesti diversi, con scambi diversi, quindi è una cosa in realtà che non si concentra su un aspetto, ma cerca di prendere un po' l'insieme. Ora, questa è una cosa che sta emergendo molto in ambito accademico, e io, anche se credo di saperla la risposta, stavo cercando di capire: è qualcosa che arriva nelle scuole?

No.

Cioè, viene introdotta ai ragazzi una cosa del genere?

Assolutamente no, nel senso che io potrei dirle... Cioè, lei mi domanda se la parola Literacy compare, se il concetto viene, viene, viene, diciamo, come dire, sì, proposto in qualche modo ai ragazzi?

Si, sia se viene - era un sì per entrambe, nel senso, sia se si parla proprio della - cioè, se viene esplicitato il concetto, se si parla della parola che per sé, sia se, anche senza nominarla, se ne - diciamo, ci si lavora.

Ma, allora, a me sembrava una questione quasi filosofica, nel senso che, come dire, se io le dicessi qual è il mio obiettivo nel.. lo dico sempre a tutti: "Ragazzi, a me non interessa che voi siate... a me non interessa la, come dire, la, la accuracy, a me interessa la fluency, mi interessa il fatto che voi siate in grado di raggiungere il vostro obiettivo a livello linguistico, anche con degli errori", ok, e quindi per me qualunque cosa è un - è un buono spunto, cioè io quando insegno l'inglese dico "giocate ai videogiochi, giocate in inglese, guardate film, guardateli in inglese, collegate alla - le vostre passioni alla materia, di modo che nel vivere la vostra vita vera voi siate - voi troviate già la motivazione e il vantaggio del non dover studiare le cose sul libro", però io questo non credo che abbia a che fare con il concetto di Literacy, quindi per quanto mi riguarda - ma perché io non ho ben chiaro in testa il concetto di Literacy, perché appunto l'ho letto il libro della [...] e ho detto, "vabbè, quindi?" Cioè, ho detto, la Literacy sarebbe appunto quella, non so, capacità di estrapolare... Adesso lei mi ha appena spiegato, ma io continuo a non aver chiaro un concetto, cioè...

Perché, secondo me, la ricerca in questo fa l'errore, e me lo dico da sola, poi io dovrò pubblicarla questa cioè, nel senso, la trascrizione mi servirà, per cui leggeranno quello che sto dicendo, probabilmente, però vabbè. Il mio problema è che oggettivamente, ed è una cosa che io vorrei andare a dimostrare in questa ricerca, è che c'è un divario -

Sì.

No, il divario è, il divario è incredibile, ma, per esempio, anche solo che voi - che si dica "capacità di comprendere e utilizzare le informazioni in molteplici formati da una vasta gamma di fonti quando vengono presentate tramite computer", eh, noi non abbiamo il computer a scuola, cioè, nel senso, abbiamo le Lim e, tanto è, e c'è gente che non le usa e i ragazzi a volte - io - oggi un ragazzo mi ha chiesto: "Ma prof, se venissimo a scuola con un tablet in cui abbiamo caricati tutti i libri digitali e lei andrebbe bene?" Ho detto:
"Beh, è una domanda interessantissima. Secondo me dovrebbe essere un pochino sdoganata la cosa a livello, diciamo, a livello scolastico. Però in linea di massima io non avrei... se quando passo per i banchi vedo che tu non stai giocando ai videogiochi ma stai guardando il libro di inglese, perché no, poi comunque gli appunti per me li devi prendere". Però ecco, da una parte, cioè, la scuola è tecnologicamente - il problema della scuola, secondo me, è che strutturalmente vecchia e la formazione degli insegnanti e randomica, assolutamente, quindi si ha di tutto, e non c'è una visione comune, la visione è calata dall'alto. Noi adesso abbiamo l'incubo delle competenze, assolutamente la Literacy non arriva da nessuna parte, cioè io ho letto di Literacy, l'esame era "Didattica delle lingue straniere", che ho fatto a Ca' Foscari, quindi lì c'era. Però, ecco, io penso che la differenza è come - per me, cioè, insegnare a scuola e invece l'università è stare in trincea e stare al, come dire, no, al comando. Nel senso che quello che viene pensato a livello universitario non ha - non è spendibile spesso a livello didattico, ma perché non c'è una coesione fra... banalmente io, quando ho fatto lingue, col senno di poi mi ha dato fastidio che io mi sia dovuta fare il Celta, ok, perché a me nessuno durante il mio periodo di studio di lingue aveva insegnato a - ad insegnare, o a ragionare sull'insegnamento, come non mi hanno insegnato a tradurre, come non mi hanno insegnato a interpretare, sono poi cose che io ho fatto, quindi è stato bellissimo fare lingue, però è stato inutile, cioè, io l'ho fatto perché mi piacciono, ma non perché mi abbiano insegnato a fare cose legate e credo che Literacy, cioè, sicuramente ci sono delle insegnanti che non hanno studiato niente. Cioè, non hanno mai... lo credo che la maggior parte delle mie colleghe non sappia cosa vuol dire Literacy.

I Ma lo capisco, perché in realtà... Cioè, nel senso, sono due anni che lavoro su questa ricerca per farmi un'idea anche io, per cui capisco che uno effettivamente Il tempo - se va conciliato all'insegnamento, uno il tempo di passare tutto il tempo a ricercare - e io ricerco in un ambito, ma ce ne sarebbero altri migliaia, quindi è ovvio che è quello un po' il mio problema, vedere che vengono proposto un sacco di cose, anche ci sono tantissimi studi che appunto si focalizzano su una cosa nello specifico: la Literacy, magari attraverso il tablet. Ok, ma la scuola di oggi non ha, mi risulta, abbastanza tablet da dire, ok, c'è un tablet per ragazzo in ogni classe, un tablet ogni due persone, in maniera che si possa, non c'è questa cosa, diventa un esperimento fino a sé stesso, proprio così, nel senso...
Sì, diciamo che lì, le scuole, le scuole tradizionali non hanno queste possibilità, poi se uno va, non so, a Vicenza, c'è qualche scuola privata, mi sembra che ce ne sia una che si chiama, che si chiama H-Farm, che ovviamente credo sia a pagamento...

I Sì, I'ho presente.
Non so di quanti - di che, di che, insomma, di che rette si parli, e so che a livello didattico sono estremamente diversi da - dalla scuola normale, e mi chiedo perfidamente quanto paghino gli insegnanti, perché poi a volte il problema è che poi, a volte, gli insegnanti nelle scuole private vengono pagati di meno per lavorare di più, cioè, nel senso, parliamo, parliamone, non è che io vengo, cioè, io vengo pagata per le mie 18 ore, ma poi c'è tutto il sommerso dei miei \(5,6,7,8\) pacchi di verifiche che devo correggere per la settimana prossima. Però io credo che, nelle scuole private, per quello che ho visto io, è la... come dire, no, ti danno un metodo che devi seguire, e poi il tempo che ci metti a fare le cose, cioè, il tempo extra non è particolarmente - cioè la didattica fatta di momenti di verifica, di valutazione, tanto cartaceo, poco digitale, è una cosa della scuola statale. Credo che ad una K-Farm - a me interesserebbe andare a vedere come insegnano.

I No, sinceramente anch'io, perché non solo sentito parlare, non ho avuto modo di avere esperienze, quindi si, sarebbe interessante, però è ovvio che io mi posso basare su quella che è la media della realtà e non sul caso specifico.

Certo, poi secondo me la scuola statale un pachiderma, quindi è quello che problema, che poi io sono una precaria, quindi ogni anno sono come Mary Poppins, prendo la mia bisaccia e vado da una parte all'altra, io non riesco neanche a far cambiare i libri, abbiamo libri di inglese che hanno - quest'anno stiamo usando questo "Venture", che fa schifo, secondo me, non è assolutamente adatto al tipo di studenti che abbiamo. lo, quando insegnava al CPA, facevo corsi diciamo pomeridiani in inglese agli adulti, e potevo scegliermi i libri, che era bello. Adesso non si può, quindi non stiamo neanche parlando di - fra l'altro, il digitale: io mi sono chiesta, per esempio, perché certi ragazzi pare che quasi non sappiano usare l'e-mail, a volte.

I Quella del digitale era un'altra parentesi che volevo aprire, infatti, sia per capire che utilizzo c'è del digitale a scuola, ma credo che vari molto a seconda della situazione, quindi non so qual è la sua situazione per
quanto riguarda l'ambito digitale, ma più che altro anche perché c'è questa teoria che si è diffusa, secondo cui i ragazzi sono nativi digitali, e quindi sono molto in grado di eccetera, eccetera. Adesso si sta cominciando a pensare, e io sarei su questa linea, che in realtà poi ci sono tutta la serie di problematiche, ma prima sento cosa pensa lei, poi...

Mah, il problema è che i ragazzi, come dire, saranno anche nativi digitali, ma usano, ma usano il, diciamo... Cioè, nel digitale stanno in un modo... come dire, a livello digitale, quello che abbiamo noi è un compromesso fra l'utile e lo scolastico, che non è quello che vivono i ragazzi, nel senso che i ragazzi vivono su Twitch, vivono su Tik Tok, vivono... Cioè, si può fare didattica anche così, in realtà io qualcuno, qualche insegnante che fa i Tik Tok, però secondo me il problema di queste cose è che, come dire, secondo me diventano più scemi. Cioè, secondo me il digitale è deleterio, perché se non lo - se non lo dosi, cioè, a me fa impressione il fatto di non riuscire più a leggere un libro, praticamente io non riesco più a leggere libri perché - d'estate riesco, quando mi rilasso, ma secondo me il digitale ti - come dire, ti assuefa, quindi... Video, io faccio vedere un sacco di video ai ragazzi, perché quando tutti quanti abbiamo sperimentato ma anch'io, insomma, capita anche a noi, no, uno è stanco, si guarda un film. Il problema è che ho paura che il digitale non aiuti ad allenare la mente, perché anche fare la didattica a distanza, va bene, però, se tutti avessero lo stesso device va bene, ma se uno ha il telefono, un altro ha il tablet, un altro ha il computer, e l'audio che non va... Cioè l'anno scorso è stata una cosa ridicola, perché c'è sempre qualcuno che, cioè, secondo me possiamo parlare di Literacy nel momento in cui, almeno, per come lo capisco io, nel momento in cui c'è - abbiamo delle dotazioni uniformi per fare determinati ragionamenti, non so. Cioè, a livello di scuola è ancora, siamo ancora tanto indietro, io mi chiedo come... Fra l'altro a volte mi chiedo se è auspicabile che effettivamente... Cioè, mi chiedo se sia inevitabile o auspicabile, se si possa fare una didattica un pochino differente. lo ai ragazzi, comunque faccio ancora scrivere, ci tengo che mi scrivano delle cose a mano, perché secondo me è importante. Io sono molto convinta che a livello geografico la scrittura aiuti a organizzare il pensieri, a ragionare, a ripassare, a studiare, quindi mi fa un po' paura l'idea che, come dire, no, che il digitale sostituisca il...

I Credo che siamo ancora... Cioè, oddio, didattica a distanza parte, credo che siamo ancora lontani da una sostituzione effettiva, nel senso... Più che altro, adesso quello che, che stanno valutando alcuni studi è il fatto che, se vede, c'è anche l'aspetto legato alla multimodalità, cioè al fatto che, appunto, ci siano diversi i metodi, nel nostro caso, di apprendimento, ma di approccio, comunque, generalmente, ecco, e di conseguenza che magari si preferisca - il digitale non è neanche un approccio, è un mezzo che favorisce degli approcci.

7 Certo.

I Perché in realtà, appunto, c'è chi, magari, ha un apprendimento con un approccio più visivo, più uditivo, tanti ragazzi adesso ce l'hanno tattile, e secondo me anche per via di tutti i dispositivi che hanno sempre in mano, perché c'è chi ha bisogno di muoversi, chi lavora meglio in gruppo, chi lavora meglio da solo, e l'idea sarebbe quella di riuscire, idealmente, a venire incontro a tutti.

Sì, però fa riferimento ad una didattica diversa che da noi non c'è, per esempio banalmente quando io, non so, insegnavo al CPA, quindi facevo il serale, cambiavo il layout dei banchi, lo facevo a ferro di cavallo, ma lo potevo fare perché avevo 10, massimo 12 studenti. E comunque le bidelle mi dicevano su, cioè, che dici, ma ? Perché poi c'è anche il problema che è cambiato pure il ruolo dell'insegnante, è cambiato ruolo dell'adulto. Adesso c'è meno rispetto, nel senso che io, cioè, se fossi una bidella, non mi permetterei di criticare il fatto che io decido di usare un diverso layout, se vuoi una mano per sistemare i banchi te la do, ma è comunque il tuo lavoro. Se uno non è in grado di spostare dei banchi, allora forse deve cambiare lavoro. Allora, io ho dovuto litigare con certi bidelli per questa cosa, perché dicevo, ok, mi organizzo con gli studenti, però, che io mi debba fare problemi perché per insegnare in un modo un pochino più accogliente, diciamo, un po' più informale, un po'... non voglio far sentire uno studente - io mi rendo conto che anche insegnare si porta dietro delle - delle relazioni e delle modalità che possono essere un po' vecchie, un po' spiacevoli, un po' superate perché adesso comunque i ragazzini ti danno del tu, non hanno... lo vedo quest'anno, penso che sia il Covid, penso che sia il professionale, ma c'è tanta meno distanza che loro percepiscono e non capiscono tanto né il contesto scuola, che non è lo stadio, non è il bar, non è la discoteca, e non concepisco neanche il ruolo, cioè loro non riconosco molto l'autorità, e mi sono chiesta se sia perché magari anche a casa i genitori ci sono e non ci sono, e perché quelli che comunque hanno dei genitori che gli hanno battuti come cachi, in senso buono, non si comportano così. Quindi è una scuola
diversa, io oggi ho fatto fare una verifica di recupero a dei ragazzini e gli ho detto: "Ragazzi, vorrei sempre essere solo con voi tre a lezione", e mi fanno, "Prof, quando ci hanno diviso la classe a metà noi andavamo molto meglio". Certo, perché 27 persone non funzionano, soprattutto non funzionano più in un ambiente in cui, come dire, no, non è - cioè, andare a scuola non è più percepito come un privilegio, una fortuna. E quindi, e quindi non ci sono più i contadini con gli zoccoli che, che, che sono - io ho insegnato anche a degli stranieri che erano arrivati col barcone. Cioè, nessuno mi ha mai mancato di rispetto, è mai stato maleducato, perché comunque credo che fossero grati del fatto che qualcuno si stava occupando di loro, invece i ragazzi di oggi sono veramente a volte fastidiosi, e secondo me manifestano delle esigenze che, che implicano, come dire, adesso sei tu che devi assecondare i loro stili di apprendimento, mentre prima uno faceva il suo discorsetto e basta. Non è che - l'insegnante prima non si - non assecondava lo stile di apprendimento, dovevi prendere gli appunti e stare zitto, cioè, non c'era molto, no? Quindi a me piacerebbe che la scuola del futuro fosse con classi sicuramente più piccole, cioè con 15 persone si lavora abbastanza bene, ma quando già iniziano ad essere 20-25-27, lì... A me piacerebbe una scuola diversa, in cui allora si può parlare di Literacy, perché con 15 persone io posso essere più sensibile, diciamo, no, agli stili individuali di apprendimento, ma quando ne 25 io non posso morire. Cioè abbiamo anche DSA in classe, abbiamo BES, poi in realtà, secondo me, adesso c'hanno tutti dei disturbi generali di apprendimento non specifici, cioè, nel mio, nel mio professionale, io li chiamo tutti DGA, gli dico !ragazzi, vi ho fatto la verifica DGA", perché, cioè, io faccio - io di inglese tecnico fatto una verifica per DSA semplificata, mi hanno detto io sto, tipo, cambiando il layout delle mie verifiche, sto aumentando il font, l'interlinea, perché ho detto, così, poi, nessuno si lamenterà più che non faccio le verifiche - perché a me mi han detto di tutto, i ragazzi. Quindi è interessante. Cioè sarebbe bello parlare di Literacy, però secondo me c'è ancora talmente tanta strada da fare... Cos'è - lei come pensa che si possa inserire nella scuola?

I Guardi, è una bella domanda, nel senso che in realtà intanto secondo me dipende molto dalla scuola, dipende da - allora, non mi sta dicendo niente di troppo diverso rispetto a quello che ho sentito in giro, rispetto a quello che ho visto io, cioè i problemi che lei mi ha detto sono le classi che sono tanto numerose, chiaramente, i mezzi che magari non ci sono, il tempo, mi è parso di capire, che magari è poco?

7 Il tempo della lezione o il tempo extra?
I No, in generale, nel senso che se non sbaglio inglese ha, cosa, tre ore a settimana più o meno?
7 Vabbè, tre ore a settimana, guardi, per esempio io questa, questo - in questo periodo sto facendo educazione cinica, volevano farmi anche fare i corsi di sicurezza, ho detto "ma assolutamente no, perché io non sono una specialista di sicurezza, quindi, cioè, perché devo fare queste cose?" e poi abbiamo inglese tecnico, quindi io ho, cioè, in una settimana mi è capitato di fare un'ora di inglese, un'ora di inglese tecnico e un'ora di civica. E quindi tempo è ancora meno rispetto a prima, perché poi c'è questa cosa, adesso è entrata la civica a scuola, secondo me è una cazzata, scusi, ma... Nel senso che io posso decidere di parlare di temi di civica, ok, però un conto è se fra - una cosa calata dall'alto, cioè, come dire, se io ho uno studente che - che, che in storia su, sugli schienali della - no, come si chiamano, le due parti della sedia dove si mettono le braccia, sui braccioli della sedia?

I Braccioli, sì.
7 Una bestemmia. Parliamo di educazione civica? Bene, io non so, mi sembra un po', come dire, mi sembra una cosa un po', un po' poco... Come dire, io vorrei piuttosto, a volte, ai ragazzi vorrei chiedere "ma perché hai scritto la bestemmia sulla sedia? Cioè ti sembrava una buona idea?" Parliamo di civica, parliamo di rispetto del regolamento. lo faccio dei lavori sul regolamento d'istituto. Cioè, ci sono scuole in cui bisogna lavorare sul comportamento ancor prima che sull'apprendimento, perché l'apprendimento, se non c'è un comportamento decente, non si può avere. Sicuramente avere tre ore a settimana non basta. Dipende dal tipo di lavoro che si vuole fare, però io sento i colleghi di italiano che hanno sei ore e riescono a conoscere le classi e alla fine riescono, secondo me, ad ottenere un clima anche più, più favorevole all'apprendimento, chi più chi meno.

I Certo.
7 Anche questa cosa che adesso a noi viene chiesto di fare questo: io odio la civica, perché secondo me, cioè, io non ho il - la velleità di insegnare ai ragazzi a vivere, e questo non è mio lavoro, cioè, per quanto capisca
che uno non può andare a dire: "Eh ragazzi, io ieri sono andato a bruciare un cassonetto" cioè, nel senso... Ma al di là di come vivo io, della mia vita, io vorrei poter parlare di - della mia materia, e invece questa è una cosa che vedo, negli ultimi anni ho fatto la media l'anno scorso e quest'anno ha fatto l'Ipsia, la... Cioè, le emergenze sono altre, quindi è come se un insegnante passasse, no... Adesso dicono che l'insegnante non è più un una persona che trasmette dei contenuti...

7 Eh, non dico che... però a me piace questo, cioè, noi adesso siamo assistenti sociali, psicologi, perché, perché ti raccontano le cose, si picchiano in classe, bruciano i banchi, cioè, io quest'anno ho visto cose...

I Sì, sì, l'ho visto anche io quello dei banchi, mi è capitato.
7 Dei geni. Sì, poi io mi sento quest'anno un po' come se appunto, no, l'insegnante fosse... fosse, fosse, cioè, loro non - alcuni, non tutti, ma, come dire, hanno altre idee riguardo a quello che, cioè, come se non stimassero tendenzialmente l'insegnante, ecco. Cioè, come se venisse visto come una figura un po' - un po' degli sfigati, da un certo punto di vista. Perché per esempio delle mie classiche c'è molto la dinamica di seguire il cattivo esempio, non di seguire il buon esempio. Parliamo di un professionale, non ho - non ho una femmina eh, in questo momento.

I Ecco, sì, no, lì, esatto, credo che dipenda anche dal tipo di scuola oggettivamente, dal tipo di indirizzo eccetera, però, almeno, mi sono resa conto anch'io, ovviamente quando si cominciano ad avere tanti, cioè, delle classi molto diversificate, anche a livello magari di bisogni educativi, o quello che è, naturalmente questo aumenta anche le problematiche a livello di - almeno, io mi ricordo che ero in difficoltà a cercare di capire come fare delle verifiche che andassero bene, che però fossero adatte a tutti, e che allo stesso tempo, per il discorso della privacy, non facessero capire chi aveva - diventa complicato, nel senso...

7 Guardi, io l'ho detto ai miei ragazzi, ho detto: "Ragazzi, avete tutti la verifica per DSA, quindi più facile di così no". E ai DSA gli ho detto: "Tu puoi scegliere un esercizio che non farai". Cioè, io non mi faccio tanti problemi a dir loro che quello che faccio con loro è molto semplice rispetto a quello che potremmo e che vorremmo fare, ma non ha senso, quando uno va un anno a fare un lavoro, darsi obiettivi fantasmagorici cioè, noi non cambiamo il mondo, comunque è un lavoro, e uno deve anche capire in che ambiente è, quali sono le priorità, perché a noi l'hanno detto, la priorità la sorveglianza. Cioè, purtroppo è questa anche una brutta cosa, che, che, che io ho visto soprattutto da quando sono andata alle medie, la priorità è la sorveglianza, e l'obbligo di sorveglianza è inversamente proporzionale all'età degli alunni. Quindi bene perché gli alunni delle medie sono, cioè, sembra che non possano fare un passo senza essere sorvegliati e questo mi mette un'ansia tremenda perché secondo me in realtà li stiamo rendendo noi ancora più, più inesperti di quello che dovrebbero essere.

I Per certi versi.
7 E d'altra parte devo dire, quando vado alle superiori e penso ok, questo l'anno prossimo va a lavorare, dico "oh mio Dio". Vabbè, oggi mi dicevano i miei alunni che - quelli di quarta, "sa, noi siamo 2004, e già quelli del 2008, sono già diversissimi, vogliono bruciare le tappe, insomma, siamo preoccupati". Vabbè quindi purtroppo - cioè, la mia sensazione di fare la pastora di anime, cioè di fare la, non so, la mandriana quando salgono su per le scale, io già l'anno scorso, mi immaginavo io con pastore tedesco che gira attorno alla mia classe, li raduna e li porta in classe. Quindi devo dire che mi dispiace che l'aspetto didattico vada in secondo piano.

I Cosa potrebbe aiutare a rendere l'aspetto didattico più predominante?
Ottima domanda.

I Sto parlando di una cosa proprio completamente - cioè, se lei avesse carta bianca, quindi anche ipotesi dell'irrealtà, intendo.

7 Classi più piccole, sicuramente. Io ho lavorato - poi dipende dalla scuola, perché appunto io ho insegnato inglese alle medie, ma posso dire anche all'Ipsia, perché stiamo rifacendo le stesse cose, anzi, con persone meno, meno invogliate, meno motivate, ok? E poi ho fatto, due o tre anni fa ho fatto russo alle superiori,
cioè, stiamo parlando di due mondi totalmente, che non si toccano, paralleli, e lì, per esempio, la mia esperienza più soddisfacente è stata con una classe di 10 persone. lo ho insegnato anche agli anziani, e anche gli anziani quando sono 20 fanno casino e mi viene il nervoso eh. A me personalmente fa, fa - dà fastidio il fatto di non riuscire a concentrarmi, per esempio - io ho fatto il Celta, è una certificazione che comunque ti insegna a, come dire, no, a, a mettere in atto una lezione come se fosse una, una play, ok? Quindi io li andavo a gestire ogni singolo minuto della mia lezione, tutto quanto, ecco, per me, poi, nella vita io sono una persona che divaga molto, quindi sarebbe veramente una cosa impossibile, mi farei violenza, però l'idea di sapere esattamente perché facevo una cosa mi piaceva. Sicuramente questa è una cosa che con un gruppo piccolo si riesce a gestire meglio, a prescindere. Io penso che i ragazzi hanno bisogno di attenzione, e per averla, cioè, nel momento in cui sono con tre, quattro ragazzi della classe, siamo assieme a fare il compito degli Angeli, poi ci siamo messi a parlare di cose interessanti che piacevano a noi e ho detto, che bello. Non è che io non possa avere il rapporto coi ragazzi, ma nel momento in cui io creo un rapporto, un clima positivo o comunque tranquillo, riesco a mettere in atto l'azione didattica, cioè, perché loro sanno che: ah, ok va bene, ti seguiamo, no, collaboriamo con te. Nel momento in cui non riesco a fare questo (si sente una suoneria)... idraulico. Quindi, nel momento in cui io non riesco a fare questo, io perdo la motivazione a lavorare sulla didattica. Perché obiettivamente quest'anno io vado a braccio, non potevo sempre permettermi di farlo quando insegnavo russo, perché comunque io di russo sono un B 2 , di inglese, boh, un C1 abbondante, anche forse un C2, non lo so, comunque sia, di inglese non ho nessun problema, il russo dovevo studiarlo io stessa, beh, a me questo piaceva molto, mi stimolava molto, lo trovavo una sfida, no? Purtroppo quest'anno in questa scuola non mi capita quasi mai che mi facciano domande interessanti, ma perché sono sempre impegnati a fare qualche, qualche - non dico tutti, però spesso sono impegnati a fare qualche marachella. Sicuramente la loro attenzione è altrove e, come dire, chiaramente la motivazione e la quantità giocano ruoli importanti nella, nella qualità dell'azione didattica. lo potrei portare dalla mia parte persone non motivate, ma devo attirare la loro attenzione: nel momento in cui si ha un effetto un po' gregge su dinamiche un po' stupidine, ma parliamo di adolescenti, io faccio fatica anche a gestire la cosa con calma. Cioè, a volte riesco a stare tranquilla, magari li prendo un attimo in giro, ma senza andarci troppo pesante, a volte mi arrabbio, urlo, li devo minacciare, li devo punire, e, ok, mi sembra un po' di essere tipo loro madre più che un'insegnante.

1 Manca la figura, forse, un po'. Cioè, nel senso, almeno, quello che ho visto io adesso è che l'insegnante finisce per essere tante cose: docente, per certi versi psicologo, magari, si, magari, persona di famiglia se la famiglia c'è poco.

Sì, infatti, quello secondo me è un po'... Cioè, io sono sicura che a volte si ottiene di più con dei no, molto di più con dei no che con delle concessioni, però allo stesso tempo non deve essere un no che pesa. Cioè, dovrebbe essere un no sereno, un no tranquillo, e io sono un po', come dire, un po' perplessa su questo, perché quando dico no di solito mi arrabbio, nel senso che un po' come se dicessi: "Ma come, non ci arrivi?". Difficilmente riesco a dire no e poi andare avanti, che forse è l'opzione migliore, e a volte è come se mi desse fastidio l'idea di dover essere anche una mamma, un'assistente sociale, un'educatrice, oltre che un insegnante, perché mi rendo conto che il mio lavoro di essere insegnante non è così importante per loro. Ho questa percezione. Magari è sbagliata, e quindi sicuramente però il lavoro che io posso fare in un liceo linguistico è diverso rispetto a quello che faccio all'Ipsia, poi io apprezzo il fatto che si possa essere molto schietti con questi ragazzi, cioè, sono tutti maschi, non sono - non hanno - alcuni, alcuni sono insidiosi, cioè, alcuni i loro trucchi le loro trappole, sì, però in generale, insomma, si può parlare abbastanza a cuore aperto, non ho problemi a dire quello che penso, e anzi voglio essere più diretta possibile. Secondo me con loro - ma non solo con loro, in generale, secondo me essere diretti, essere onesti non è una brutta cosa. Però ecco, io mi rendo conto che, cioè, quest'anno è stato un po' triste da questo punto di vista perché io insegno la sera russo agli adulti e lì sono felice. Cioè, dopo un'ora e mezza sono felice. Quando torno da scuola, sono stanca, cioè, ho bisogno di silenzio.

I Che differenze vede?
7 La motivazione e l'interesse. Poi vabbè, io, appunto, la Dad - io in Dad mi sono trovata abbastanza bene in realtà. Cioè, secondo me l'interazione - per esempio qualche giorno fa ho mutato una classe, gli ho detto, "bene", visto che stavano continuando a fare gli scemi, tipo, cantavano canzoncine, così, ho detto "bene, ragazzi, vi muto, fra 2 minuti, quando, quando, insomma, quando vi calmate un attimo, poi allora riaccendo i microfoni" e poi erano calmi. Eh, io a volte a scuola avrei vorrei avere tipo il telecomando e dire "ok, calmatevi", quello, cioè, comunque gli adulti, le persone motivate, cioè, secondo me l'adulto ha scelto, la
persona motivata ha scelto, la persona motivata può essere anche giovane, ma è più facile essere motivati più - da più grandi, e poi la quantità, cioè quelle sono le cose che fanno la differenza.

I Diciamo che credo che una delle cose che possa essere utile, eventualmente, estrapolare da tutto questo concetto di Literacy in senso lato è che andando a lavorare su approcci diversi, che coinvolgano stili di apprendimento diversi, forse, si possa riuscire - adesso, il miracolo no, eh, ma magari a catturare un pochino di più qualcuno a livello di motivazione. Però, appunto, non so che margine ci sia di utilizzo di diversi metodi, di diversi stili da voi.

I Sì, anche perché adesso comunque sono cambiate alcune cose, mi pare di capire che di fatto non ci siano più i programmi nello specifico, ma ci si concentra su obiettivi di apprendimento, cioè si sa che entro il secondo anno, il quinto anno, bisogna essere arrivati a saper fare tot. C'è una conoscenza di questa documentazione tra gli insegnanti?

7 Beh, a livello di dipartimenti, si, nel senso che ci sono dipartimenti di, non so, di inglese, per esempio, che si - poi ecco, però tutto - non tutto, molto è demandato al buon senso del coordinatore dei dipartimenti. Cioè, nel senso, del, del gruppo, diciamo, della, della task force per materie che si occupa di questo, quindi per esempio a me han detto quest'anno, "guarda, noi lavoriamo su luoghi tematici, li abbiamo sviluppati". II problema qual è, il grosso problema, è anche che noi siamo legati ai libri, cioè nelle scuole ci sono ancora i libri. Questo è un problema nel senso che i ragazzi non capiscono, cioè io posso portare anche la mia esperienza quando ero al liceo e la professoressa di storia, che io odiavo con tutta me stessa, ha fatto anche filosofia, persona molto vanitosa, e lei a parlarci di sé e non mi parlava della materia, a me non me ne fregava niente, io volevo fare storia, non volevo fare tanta filosofia, e questa invece continuava a parlare delle femministe, cioè, vabbè, vabbè. Comunque sia, questa ci ha fatto comprare libri che non abbiamo mai aperto: io lo trovo un insulto nei confronti dei soldi che genitori spendono, cioè, al di là del fatto che mio padre - e della mia schiena che porta 12 kg di libri, ok? Quindi no, io ero abbastanza rompipalle come studentessa, ma lo sono ancora, voglio dire. Quindi cosa succede, che io mi sono comprata un dizionario di storia, ho detto, invece di comprare un libro che per l'ennesimo anno non userò, compro un dizionario di storia che mi rimarrà, e infatti è lì che mi saluta, ok? E quindi se questo concetto di "ok, ma i libri li vediamo o no?" ce l'avevo io, adesso cosa fanno questi, quando finisce l'anno, senza neanche aspettare di capire se hanno finito o no il libro, questi se lo vendono il libro. Quindi c'è anche il problema di questa sorta di interregno fra il cartaceo e il digitale: per me se, se le scuole si adottassero di - a volte mi chiedo se non sia una questione di una lobby, cioè, la lobby della carta, del libro di testo, perché se tu inizi a fare solo versioni digitali... Cioè, sarebbe bello che uno potesse scegliere se portarsi il tablet oppure se portarsi il libro cartaceo.

Certo.

7 Chiaramente, allora se hai il tablet dovresti avere una sorta di quelle penne grafiche per poter completare dovrebbe essere non solo un libro digitale, ma un libro compilabile digitalmente. Con le correzioni...

I Sì, o dei file in maniera da poter tenere aperte due pagine e potrei prendere appunti, sì, bisognerebbe pensarla.

I Sono priorità, suppongo.
7 Sì, però, secondo me il modo di imparare dipende anche da, appunto no, da, da cosa ha un peso preponderante. Cioè, se la scuola vuole diventare digitale oppure no. E secondo me è impossibile che lo diventi fintanto che...

I Ma non penso che voglia infatti diventare digitale a tutto tondo, credo che voglia cercare di unire più approcci, metodi e strumenti differenti, per ora.
\(7 \quad\) Il problema è che così facendo si crea tanta confusione, perché per esempio l'anno scorso in una scuola avevo sia il registro cartaceo che quello digitale, che è una cagata, nel senso, io devo ricordarmi di fare la stessa cosa due volte con un maggior rischio di sbagliare.

I Sì, è vero.
7 Cioè. non ha nessun senso, quindi o le cose vengono fatte - banalmente, io, non so, abbiamo Drive, benissimo, io adoro Drive, l'ho sempre usato, anche per i cavoli miei, ma in una, in una scuola fanno le classi già - allora, le classi vengono fatte, non so, 1C inglese e l'anno prossimo quella stessa 1C diventa 2C, e l'insegnante dell'anno prossimo può guardare quello che ho fatto l'anno scorso, che mi sembra interessante, ok. In questa scuola dove sono adesso sono io che devo farmi la classroom. E io ho detto, "sì, ok, però se io vado via non avete più accesso alla classroom". "Ah, vabbè, non importa". Ma non dovrebbe esserci una - cioè, a maggior ragione in, in - quando insegniamo a ragazzi che sono più in grado di gestire le cose a livello digitale che non sul libro, ha senso questo? Cioè, mi chiedo quali cose dovrebbero essere centralizzate e quali cose dovrebbero essere - perché c'è confusione, secondo me.

I Si, ognuno fa un po' a modo suo, mi pare di capire.

7 Sì, sì, sì, quindi - poi io ho colleghi che stanno per andare in pensione che sono in grande difficoltà, perché quella è un'altra generazione, quindi... Non lo so. Ma lei cosa, cosa pensa quindi? Cioè, come, cosa - nel senso, il suo studio è mirato a capire quanto la Literacy sia nella scuola o come comunque inserirla in qualche modo?

I Allora, sostanzialmente, quello che io stavo cercando di capire - in realtà, stavo cercando di capire varie cose. La prima era proprio a livello normativo. Cioè, qual è la situazione, e va bene, diciamo che lì lo saprà anche lei se ha letto gli obiettivi di apprendimento e tutto il resto, non si parla ancora né di Literacy né di tante altre cose.

7 No.
I Sinceramente anche l'aspetto digitale viene toccato in modo molto marginale.

7 Certo.

1 Quindi quello che intanto volevo fare era un confronto fra quella che è l'organizzazione della scuola e quella che è la ricerca. E infatti parte di questo, diciamo che va a finire lì, anche in queste conversazioni, nei focus group eccetera, per cercare di capire se mi si può confermare che c'è un grande divario fra i due mondi.

I Cioè, che va bene pensare, fare, brigare, però bisogna anche cercare di capire come effettivamente intanto se ha senso, perché secondo me non tutto quello che la ricerca va a indagare - non necessariamente tutto può, può o deve venire portato nella scuola.

I E, nel caso, come, perché andare a dire "sì, il tablet ha funzionato in quella scuola per quel mese", ok, e? Nel senso, hanno fatto tantissimi studi di singoli strumenti, quindi, appunto, che siano tablet, computer, cellulari, di singoli dispositivi o anche di applicazioni, cioè, nel senso, hanno fatto degli studi, magari con una cosa particolare, con Facebook, con Twitter, con quello che è. Si, sono tutte cose che secondo me sono interessanti, ma non nel senso che si possa poi andare a pensare di creare davvero un percorso o qualcosa che funzioni con la scuola se la scuola ancora deve, non lo so, rinnovare i laboratori linguistici, per dire, magari non hanno i computer.

I La Literacy viene - viene prima, la Literacy in realtà è quello che si può usare per moltissime cose, uno può usare il concetto di Literacy legato a tante cose, nel senso che, secondo me, se uno dovesse cercare di - sto per usare una parola che secondo me a lei non piace, però se dovessi riassumere in modo molto, molto banale...

Competenze?
I Sì, in modo molto banale il concetto, secondo me è "competenza" è la prima che mi viene in mente, perché alla fine la si intende come competenza in un settore, competenza nell'insegnamento, competenza in un apprendimento, competenza che sia nello scambio di informazioni, cioè, è un insieme, ecco, di competenze forse, non una, molteplici, però sì..

7 Ok, no, perché appunto, sennò allora uno dice, qual è la differenza tra, non so, digital Literacy e digital skills, o competences. Cioè, nel senso...

I In realtà, questo è uno dei problemi che mi sono trovata ad affrontare perché tanti ricercatori usano tanti termini diversi, quindi in realtà manca anche un accordo a monte.

I No, non lo so, nel senso che, in realtà, per esempio, io che comunque ho provato - poco eh, ma ho provato l'insegnamento, per carità, io per ora resto in ambito universitario, nel senso che a me in questo momento l'insegnamento, soprattutto - forse peggiorato un po' anche dalla situazione della pandemia, per carità, però è una cosa, secondo me, che richiede tantissima energia, tanta - onestamente tanta passione, credo, soprattutto se uno non lo fa per un periodo ma conta di farlo a vita, insomma, e in un momento in cui non c'è stabilità - per carità, non c'è neanche all'università, eh, non nel senso che prima di riuscire a ottenere
un posto fisso o qualcosa del genere passano molti anni in cui si passa da ricerca a ricerca, quindi da contratto a contratto, per carità. Però, anche voi, prima di uscire a dire, ok, sono in questa scuola, il che vuol dire che riesco a vedere una classe dalla prima alla quinta...

I Non è che magari - chiedo eh, non lo so - io ho visto che questa è una cosa comune tra i giovani, cioè, tra chi sta cominciando, però non so se è il suo caso, insomma.

7 Beh questa ragazza non è - non è da tanto che insegna però, ecco, diciamo che ci vogliono certe caratteristiche, come per tutti i lavori. lo per esempio se dovessi farmi vedere delle idee per scrivere un saggio accademico penso che andrei in depressione, perché io quando dovevo fare la tesi non avevo mai voglia. Cioè io non sono una - a me non piace scrivere, mi annoio. Cioè, mi annoio perché non credo di essere un genio, quindi non credo di avere... Però sono d'accordo che se si trattasse di collaborare affinché uscissero dei libri - perché io ho letto \([\ldots]^{2}\) e posso dire che non mi ricordo nulla, cioè, non mi è rimasto mezzo concetto, mentre ho, non so, ho letto "Stare bene insieme a scuola", che è un libro per la gestione dei conflitti nelle classi elementari, lo uso ancora adesso, oppure "L'insegnante efficace". Ma se ci fosse anche un libro di digital Literacy che mi dà delle - digital Literacy a scuola, cioè, il lavoro, la ricerca, deve essere comunque calata nel contesto, quindi...

I Sì, che è quello un po' il mio problema, esatto, parlare un pochino meno in teoria e cercare di arrivare un pochino più nella pratica, perché...

7 Perché in realtà, guardi, io qualche tempo fa ero a Verona e parlavo a questo educatore, ex educatore, ex insegnante, che adesso ha fondato una, una piccola - un piccolo team, quindi ha creato un piccolo team di psicologi, educatori, insegnanti, che vanno nelle scuole, quindi lui sta su Verona, e vanno a osservare, dare supporto, a scuole specifiche. Quindi vanno a - se c'è un problema di, per esempio, adesso, parlo della mia, di criminalità e di atti di vandalismo, allora si va a lavorare sulle classi, si va a osservare - vanno, vengono ad osservare i ragazzini, danno supporto ai genitori e danno supporto anche al dirigente e agli insegnanti. Quindi loro - secondo me è interessante, devo capire poi come gli va - io lì ho detto: "Credo che nessuno sarebbe contrario a essere osservato per essere aiutato", perché la scuola è cambiata, quindi le cose che noi - cioè, io entro in classe, dopo 20 anni che non faccio le medie, e mi vengono i brividi, perché dico "oddio, è cambiato tutto". E noi non sappiamo tanto gestire questi cambiamenti, quindi avremmo bisogno di aiuto.
I Sì, che è esattamente quello che stavo pensando, cioè che secondo me servirebbe una formazione, secondo me, dei docenti proprio perché sono cambiate tante cose...

7 Certo.
I E non parlo solo del digitale, onestamente, di tutto il resto, parlo proprio del fatto che è cambiato - sono cambiate le persone. Cioè, non è che solo cambiata la scuola, sono cambiate le generazioni, secondo me. Rispetto a quando abbiamo fatto le medie noi, adesso - i ragazzi di adesso ovviamente hanno un approccio differente.

\footnotetext{
\({ }^{2}\) See note 1 .
}

7 Sono cambiati anche valori, secondo me, perché io da quando - da qualche anno a questa parte, quando insegno, gli dico: "Ok, tell me about your hobbies, tell me about yourself". E loro *imita risatina*. "Do you have any hobbies?" "No. Sleeping". No, dormire - muori, se non dormi, dico, dormire non è un hobby ragazzi, muori, quindi non è un hobby, se muori non è un hobby, ok?

I E' una buona teoria questa, "se muori non è un hobby", mi piace.
7 No, cioè, quindi io sono abbastanza... Ok, per carità, se io penso a 16 anni anch'io non è che fossi tutta sta voglia di vivere, però avevo gli amici, il judo, la danza, cioè, avevo delle cose.

I No, è vero che è calata questa - vabbè, a parte che probabilmente l'ultimo anno e mezzo in quel senso ha dato una botta.

7 Sì, poi sono un po' di discorsi da vecchia, cioè io faccio questi discorsi e dico "sono diventata vecchia, basta". Però sicuramente mi piacerebbe fare formazione - perché, per esempio, hanno fatto questi corsi allucinanti sulla didattica per competenze, il problema è che io alla fine non - io ho fatto il Celta, ok, e dal Celta ho preso tanti trucchetti che uso ancora adesso, perché lì ti insegnano a, come dire, no, a gestire, cioè, se tu pensi che la tua presenza in aula sia come - è come, è un po' come essere in un palco, con degli attori, e si tratta - dovete fare una - dovete inscenare, no, una - fare una recita in cui tutti avevano le loro parti e deve esserci un certo risultato. Allora se tu inizi a pensare, ok, è un processo, voglio che abbia questo obiettivo, penso all'obiettivo, faccio le cose di conseguenza, ok, può funzionare, anzi, funziona, cioè, più uno lo fa, magari col pubblico giusto, ok - perché se si lanciano gli astucci mentre spieghi non è proprio il massimo della vita, ecco - però le cose funzionano, cioè, io ho bisogno di cose che mi - mi aiutino a a gestire meglio la situazione, e questo al momento, insomma, è un po' - cioè, io, comunque, in questi ordini, quindi non con - non con ragazzi motivati, non in classi piccole, faccio un po' fatica a gestire la situazione. E che non sono neanche quella messa peggio, però, voglio dire, quello che mi ha dato della sfigata, della stupida, e che quindi ho preso e ho trascinato dal vicepreside incazzata come una biscia, oppure quello che mi prende il compito me lo scaglia per terra, anche lui portato dal vicepreside, cioè, io ho detto, ma io mi sono neanche mai permessa di comportarmi così.

I No, esatto. Sì, sono cambiati un po' i valori, poi, sono convinta che dipenda dalla scuola, nel senso che, comunque, non tantissimi anni fa che ho fatto un tirocinio ed ero, però, lit, in un liceo classico, era molto diversa la situazione, quindi suppongo che dipenda molto anche dal tipo di scuola.

7 Certo. Sì, sì, sì, sì, sì.
I Però sicuramente questo è il mio problema, cioè che appunto la ricerca sta procedendo sul suo binario senza tener conto di tutto questo, nel senso che...

Ma per esempio, se si facesse una ricerca su una - se lei andasse in una scuola a fare una ricerca, ma, per esempio, a me cosa interessa? Mi interesserebbe aumentare la motivazione i miei studenti, e parlo di studenti che sono a rischio dispersione scolastica, comunque, quindi se si facesse una ricerca sul campo con i - quindi a scuola, sia per gli insegnanti quali - esempio, appunto, noi facciamo questi corsi strazianti di didattica per competenze e di piani di lavoro, io le odio, le odio. Ho un problema con queste cose, le odio, le trovo inutilissime, e non capisco che cosa me ne devo fare alla fine, perché poi, quando sei a lezione, nessuno - cioè, nessuno, non è vero, però, io non - cioè, come dire, l'UdA non è che non la facciamo già. Se io mi metto d'accordo - se mi metto d'accordo con un collega, facciamo il CLIL. Ok, giustamente, uno si può dirmi: "Allora dacci una dignità, a livello - a livello, come dire, no, scritto, mettila giù, la sviluppi meglio", però questa è una cosa che può fare uno è che di ruolo. lo ho bisogno di cose un po' veloci, pratiche, perché in realtà tutti gli anni io cambio, e quindi io più che, diciamo - cioè, c'è la didattica che nel breve e nel lungo termine secondo me è sicuramente diversa, ma sicuramente quello che invece resta, quello che è importante, soprattutto per un - per un insegnante, ma io penso anche per uno che dall'università poi va a scuola, di essere preparato a capire che cosa funziona e che cosa non funziona con gli studenti, che tipologie di studenti puoi avere, quali sono i problemi che puoi trovarti da affrontare, e a me farebbe piacere che una persona dell'università venisse a parlare - venisse a fare delle, come dire, no, venisse a chiedere agli studenti che cosa si aspettano a livello digitale.

I Per tanti aspetti. Chiaramente non per gli stessi aspetti, magari, per cui servirebbe ai docenti, però...

7 Poi i ragazzi, secondo me, dovrebbero essere formati anche loro, per esempio, adesso abbiamo - cos'è, abbiamo il, come si chiama il - quella carta che i ragazzi devono firmare, il patto - come si chiama...

I Il patto formativo?

7 Esatto, formativo. Insomma, ci sono delle cose che fanno un po' ridere, perché sei sempre questo distacco fra la teoria e la pratica. lo a volte vorrei che anche i ragazzi fossero, in qualche modo, un pochino più preparati a cioè, io, io non posso necessariamente prendermi da sola l'onere di far capire i ragazzi che le regole vanno rispettate. Cioè, non è che se glielo dico ho risolto il problema.

7 Quindi dalla scuola mi aspetterei anche, se necessario e se possibile, un aiuto in più da questo punto di vista, cioè, io non sono una psicologa, io mi trovo spesso a fare questo a scuola, cioè cercare di capire come risolvere i problemi per avere un ambiente di lavoro più sereno. Però questo a me mangia, mangia tempo.

7 E quindi insomma i problemi sono vari, però sicuramente se, se qualcuno venisse a sporcarsi le mani e a cercare - cioè, lei che si pone questa domanda sta comunque, appunto, no, interessandosi di qualcosa che sta a cuore a chi ama il suo lavoro, penso.

I Sì, è che appunto, secondo me, tante volte si lavora veramente su piani che non sembrano veramente paralleli, non incontrarsi mai, cioè ci sono questi binari veramente che lavorano per settori con, tecnicamente, lo stesso interesse in comune, però poi in pratica.

7 Sì, il divario c'è ed è grande, però io mi auguro che ci sia una... Il problema è anche che a volte certe riforme arrivano da - certe riforme arrivano da, secondo me, da visioni politiche che non hanno niente a che fare con la scuola.

I Si, però, appunto, dicendomi: "Guardi che la Literacy sostanzialmente in classe non arriva, che il materiale c'è quello che c'è, le classi sono numerose, la ricerca è troppo distante", mi ha già risposto a tutto, nel senso...

7 Lei sa già - ha capito, ha capito.

I Sì, e, fra parentesi, non è diversa dalle risposte che ho tenuto da altre persone, nel senso che, appunto, mi state dicendo, pur venendo da ambienti diversi, ma più o meno tutti la stessa cosa.

7 Sì, poi il problema, secondo me, è che, se andiamo avanti così, è demotivante, cioè, lei sicuramente, immagino, spero - spero che venga pagata più di me, però non lo so...

I Ho i miei serissimi dubbi, perché col discorso del - del fatto che la mia è una borsa di dottorato, ho dei seri dubbi. Dopo, a registrazione spenta, glielo dico.

7 Ok, però io penso che, in generale, non dare importanza all'istruzione sia un suicidio, e stiamo tutti buttandoci giù dalla rupe come i lemming, i lemming. Come si chiamano quegli animaletti che si buttano giù dalla rupe?

I Si, ho presente, anche se in realtà sembra che sia una mezza leggenda metropolitana, ma io spererei che fosse corretto, perché almeno - almeno Darwin qualcosa avrebbe azzeccato.

7 Sì, quindi diciamo che è quello, secondo me, il problema. Comunque io - al di là del fatto che non prendo tanti soldi, ma quello non è, non è - il problema è che io vedo all'Ipsia, in Veneto, comunque, ti dicono: "Eh prof, ma tanto io quando esco da qua mi danno subito \(€ 1400\), quindi che me ne frega di studiare". Tu dici: "Bravo, bravo, continua così, diventerai un perfetto cittadino Veneto, va bene, in bocca al lupo". Poi, poi si svegliano tardi, perché io ho avuto tanti, tanti alunni che, cioè, dopo, da vecchi, vengono fare i corsi di inglese perché mi dicono: "Eh, prof, mi sentivo un cretino", dico: "Eh sì, ci sei arrivato anche tu che è pure importante quello che magari non è strettamente, no, legato al tuo lavoro". In ogni caso, a me dà un po' fastidio questo, che mi sento un po', come dire, un po', un po', un po' - allora, supportata sì, io ho una dirigente bravissima, ma è un'eccezione. Se no, alle medie, la dirigente quando ho messo una nota mi ha detto: "Perché ha messo una nota?" Gli ho detto: "Eh perché il bambino si comportava male, che dovevo dirgli, dagli una pacca sulle spalle e dirgli bravo?" perché ci sono i genitori dietro.

I Eh, lo so.
7 Quindi adesso certi genitori mettono in discussione che tu faccia delle buone scelte, come i - nel senso, è un mondo che secondo me sta andando a male, però - nel senso che non è più importante essersi preparati e avere esperienza per dire una cosa, e quindi igenitori mettono in discussione quello che fai tu, non sempre, ma capita. I ragazzi mettono in discussione quello che fai tu; i dirigenti mettono in discussione quello che fai tu. Lo stipendio è sempre lo stesso, le ore aumentano. Adesso c'è questa formazione di 25 ore obbligatorie per chi ha studenti H in classe, e anche lì, dico, io non la sto facendo, perché se io ho uno studente H in classe, ho un - c'è il sostegno, e quindi, al di là di umanamente essere in grado di gestire l'interazione con tutti i miei alunni in modo civile, non mi sembra che io debba fare altro, perché nessuno mi paga in più per farlo, cioè, c'è questa cosa di essere disponibili perché il digitale ci ha reso disponibili più a lungo. Allo stesso tempo lo stipendio è sempre quello è questo, chiaramente, non motiva, e c'è questo interregno di digitale e fisico che crea un po' di confusione. Quindi, secondo me. è più difficile e anche un po' più demotivante. lo è come se sentissi che la professione è meno rispettata, cioè, mia nonna era prof di italiano ed era una persona rispettata, adesso mi sembra quasi che insegnante sia un pazzo esaurito.

I Il ruolo è sicuramente cambiato.

7 Mentre, ancora, io penso ad un accademico e dico: "E' un accademico". Poi magari se entriamo nella realtà del mondo accademico non è proprio così.

I Dipende, dipende da tante cose.

7 Bene.

I Bene, allora io la ringrazio intanto, e interrompo la registrazione.

Intanto mi presento, sono *Nome*, sono una dottoranda del terzo anno, la professoressa Bazec è la mia corelatrice, in realtà, perché il mio è un dottorato in co-tutela tra l'università di Ca' Foscari a Venezia e l'Università di Capodistria. Non so se abbiate avuto modo di dare un'occhiata al PowerPoint che avevo mandato - erano giusto due o tre definizioni base di quello che è il lavoro che io sto facendo per non dovervi dare troppe informazioni adesso, insomma. Di fatto io mi sono organizzata con varie domande di ricerca a cui rispondere. I Focus Group che devo organizzare, che saranno sia per quanto riguarda I'Italiano come lingua d'ambiente in Slovenia che per l'Inglese come lingua straniera in Italia, mi servono per rispondere un po' alla mia terza domanda di ricerca. Sostanzialmente nella prima sono andata a fare un po' un confronto fra quella che è la documentazione che regola l'insegnamento di queste lingue all'interno del sistema scolastico, quindi di fatto una differenza fra qual è la quotidianità della scuola e quello che è il mondo della ricerca, cioè se le due cose si stanno muovendo di pari passo o no e quali sono i divari, eventualmente, che si possono venire a creare. Nella seconda ho fatto un questionario che ho sottoposto - e magari è arrivato anche a voi, in realtà, non lo so. No? Comunque è un questionario che ho sottoposto sia in Italia che in Slovenia per quanto riguarda, appunto - sì, non solo l'insegnamento, in questo caso, dell'Italiano come lingua seconda in Slovenia, però era un po' in generale, cioè sul concetto di Literacy, se e quanto si conoscono gli obiettivi di apprendimento che vengono formulati per gli studenti, qual è il rapporto del docente con la tecnologia. Insomma, c'erano varie cose che venivano prese in considerazione. Alla fine di tutto questo sto cercando di tirare un po' le somme e di partire con la mia terza domanda di ricerca, che, di fatto, cerca di capire che approcci si possano introdurre in classe per aiutare gli studenti a sviluppare quindi delle forme di Literacy che siano più plurali, multimodali, e se possibile un po' anche digitali e tecnologiche, e come andare a ridurre il divario fra, diciamo, in sostanza, quella che è la realtà degli approcci che vengono introdotti in classe e il mondo della ricerca. Più o meno. Vi torna, ci sono domande? È una cosa un po' strana, mi rendo conto, però... No, okay. Di fatto, il concetto di Literacy, io partirei chiedendovi questo, posto che la mia idea qui è quella di parlare abbastanza tutti a ruota libera, cioè io non ho intenzione di fare uno di quei Focus Group un po' più statici in cui si va in ordine, io vorrei che chiunque avesse un'idea parlasse liberamente. Intanto mi interessava capire se il concetto di Literacy è un concetto che in qualche modo arriva in classe.

B Se posso: prima di tutto, Literacy non è un'espressione italiana no, cioè, si usa una parola Inglese usata in Italiano. Ho capito bene che in questo contesto Literacy significa alfabetizzazione, cioè la capacità di esprimersi, di capire e di far capire? In parole povere, o no? Ho capito male magari...

No, diciamo che quello è il punto da cui è partita, effettivamente. Non usiamo in Italiano il termine alfabetizzazione perché negli anni il concetto di Literacy si è molto ampliato e così come non è stata creata una nuova terminologia in Inglese, si è semplicemente andata ad ampliare quella già esistente, che voleva dire appunto, di fatto, alfabetizzazione, per, però, andare a inserire tanti altri concetti, quindi, appunto, la capacità di avere a che fare con materiali che hanno anche a che fare magari con la tecnologia, che quindi non si può solo dire che sia un testo in senso di scritto/orale. Ma è molto più ampia come cosa, ed è anche una cosa che non si limita a leggere e scrivere ma interagire con gli altri e saper far parte della comunità. Cioè, ci si mettono dentro tante cose che magari sono anche le capacità del ventunesimo secolo di avere a che fare, magari, col mondo digitale e tante altre cose, ecco. In Italiano non esiste purtroppo un termine che racchiuda tutto questo.

In Sloveno c'è un termine se ho capito bene. Infatti è funkcionalna pismenost, nel senso, essere non analfabeti, il contrario di analfabeti, però in modo funzionale, no, non solo saper leggere, ma saper interpretare, saper magari... Non so, passare agli altri e così via. Quindi sempre, cioè, io magari potrò dire qualche stupidaggine qui perché ancora non è detto che abbia capito tutto bene, però, almeno per quello che mi riguarda, inostri ragazzi hanno difficoltà a cogliere magari il significato non tanto delle parole quanto dei messaggi, perché si viene a sapere magari che le parole le capiscono tutte però alla fine della frase loro non sanno cosa hanno letto oppure cosa hanno scritto. Ancora peggio è quando ci sono grafici, quando ci sono immagini, praticamente loro dicono "a me questa immagine non dice niente", no? Quando invece non c'era una risposta univoca, si poteva capire in diversi modi un'immagine, appunto. Oppure un grafico, se tu inserisci un grafico in un testo loro lo ignorano, cioè, gli fai le domande, e c'è una domanda che magari ha la risposta all'interno del grafico, dicono "non c'era, non c'era scritto, io non ho risposto perché non c'era la risposta a questo", no? Praticamente questa moda-... Come si chiamava, moda-.. Qualcosa.

I La multimodalità, diciamo.
B La multimodalità, se ho capito bene, questo, questa è un problema, no?
I Okay.
B Non so, il focus è su una cosa, è su... Su magari messaggi piccoli, brevi, e secondo me - una delle cause principali è che i ragazzi di oggi, parlo per la maggior parte, non leggono - non leggono i libri, non leggono magari dépliant, niente, no? Cioè, danno un'occhiata e questo è quanto. Danno un'occhiata e se colgono subito il messaggio va bene, altrimenti passano avanti. C'è una superficialità di lettura o di, comunque, uhm...Per vedere di capire le cose, no? Così.

A Se mi posso riferire a - questo problema di lettura è anche che un testo molto lungo per loro è molto difficile da affrontare, e anche, non sanno rispondere perché non trovano, soprattutto se le domande sono un po', diciamo, non tanto esplicite, ecco, non danno una risposta esplicita, hanno qualche problema, diciamo, c'è questo problema, come anche, credo che sia anche un problema di concentrazione, le ultime generazioni hanno, a mio avviso, un problema di concentrazione, cioè la concentrazione se ne va molto velocemente, perciò è difficile da affrontare un testo lungo come anche un testo impegnativo.

B Come è difficile anche produrre un testo lungo, io per esempio in classe faccio degli esercizi così, no, per spezzare un po' il tempo e per, non so. Per esempio gli dico "preparatevi per due - tre minuti, e poi dovete parlare per un minuto". Ma il tema è a scelta, ed è una grossissima difficoltà anche per i ragazzi che padroneggiano abbastanza bene le lingue, no? Cioè, parlare per un minuto, così, senza soste, parlare, è molto difficile, e lo stesso - la stessa cosa succede anche per lo scritto, no, cioè, scrivere un componimento di una pagina - è un'impresa. Quindi sono capaci solo di - adesso non voglio generalizzare, ovviamente ci sono ragazzi che funzionano diversamente, no, però per la maggior parte, almeno nella nostra scuola, funziona così, no, input brevi e magari, non so, ripetuti più volte, e incapacità di leggere un messaggio lungo o di scrivere o di produrre, insomma, anche oralmente un messaggio lungo, che abbia senso.

I Okay, quindi già qui sono emerse in realtà varie cose diverse perché abbiamo parlato di un problema sia nella ricezione, cioè fanno fatica a capire certi input, sia di produzione. Quindi in tutti e due i campi. Ce n'è uno che è più difficile dell'altro?

C Mah, se posso? Allora, io lavoro all'Istituto Professionale di estetisti della scuola media di *posto*, di estetisti e di infermieri. lo ho dato loro l'anno scorso da scrivere un tema, come per esempio per l'esame di maturità - 160 parole per un'ora circa, diciamo, vabbè, qualche minuto in più, qualche minuto in meno. Però quando ho detto loro - sul tema, vabbè, ci stiamo. Però quando ho detto loro "160 parole", si è creato un muro, praticamente, tranne qualcuno che sa I'Italiano, che non gli dispiace scrivere qualcosa, ma quando hai detto quella "160 parole" - ciao, arrivederci, praticamente, perché loro, cioè, dando una limitazione o un qualcosa che li ha bloccati subito, qualcuno mi ha scritto due frasi anche se so che ha un ottimo Italiano. C'è proprio una, non so come - se mi son spiegata, proprio una limitazione di quel 160 parole ha scatenato un qualcosa che li ha bloccati. No? Non solo questo, diciamo, anche come ha detto *Nome* prima, sono d'accordo, con i testi lunghi è difficile lavorare, ma anche con qualche testo più corto e con qualche grafico o qualcosa del genere, loro si bloccano subito, perché tu devi insegnare praticamente loro prima cosa come si legge un grafico. E poi dicono: "Ah, sì, giusto, ma perché non ci ho pensato prima", perché non hanno voglia praticamente di pensare, se possiamo - cioè, di riflettere, di... Quello, quello è il problema: non di portare qualche testo in classe o-o questa multimodalità, è quello il problema, che non hanno voglia.

B Io vedo proprio questa cosa, sì, sono d'accordo, *Nome*, però vedo proprio questa cosa: la maggior parte dei ragazzi in classe non legge il titolo di un testo, non legge il sottotitolo, va a leggere perché è come se non avessero tempo, è come se, non so, fossero impegnati tutto il giorno, capito, cioè, non è questa... Oppure leggono velocemente senza magari soffermarsi su una cosa che poi li porterà al risultato, no? E saltano, cioè, skip...

C Ma proprio per questa preparazione per l'esame di maturità che vengono sti testi, produzione libera, sopra comunque c'è, non so, un titolo, non so, vado a caso: "I giovani..", non so, "..e la droga", qualcosa del genere, però sotto c'è scritto in tre o quattro frasi quello che si intende per... Ma loro, ha detto una studentessa: "Ma cosa scrivo, come inizio, cioè, non ho idee..." Ma ho detto, se tu leggi attentamente quelle quattro frasi, ma ne produci otto in un secondo, perché riporti quello che c'è sopra, riporti sotto e aggiungi un paio di parole. Detto così proprio, alla veloce. "Ah, sì, giusto, faccio, faccio così, farò così, grazie mille". Mi ha scritto un testo, altro che 160 parole, cioè, proprio, non sanno - non hanno proprio voglia di fare, non so, io attribuisco questo a non hanno voglia di fare, quello, perché son capaci.

D Però - mi scuso - è anche vero che poi anche è un problema di lingua, no, perché molte volte vorrebbero anche dire qualcosa ma non sanno come e allora si fermano, no? Io dico "Dai, dimmi in Sloveno, lo traduciamo insieme", no? "No, no, lasciamo perdere", no, perché sanno che hanno queste difficoltà e non sanno poi come dire, no, perché...

E Io penso, quello che vedo nei miei - nei miei ragazzi a scuola, che loro pensano di non sapere anche perché scrivono meglio, non vogliono parlare, perché hanno paura di sbagliare, non so, secondo me.

A Okay, io prima volevo dire che è un problema generale, non solo di Italiano, secondo me, perché anche i manuali che si usano... Anch'io, anch'io ho un figlio che frequenta adesso l'ultimo anno delle elementari, che sarebbe le vostre medie, e, diciamo, tutti i materiali che hanno anche per le altre materie sono basati su cerchia la risposta, collega, diciamo, minimamente usano la lingua per esprimere, anche i temi liberi per quel che riguarda la madrelingua, che per loro è lo Sloveno, mi scrivono numero minimo, e perciò è anche difficile e non sono abituati già da piccoli, ecco, come eravamo noi, che abbiamo già una certa età, e alle elementari abbiamo scritto non so quanti compiti, quanti temi, non solo per la madrelingua, anche per le altre lingue, anche in altre materie, abbiamo scritto molto, e questo secondo me è la base del problema. Per quel che riguarda la produzione, soprattutto parlata, a mio avviso anche può essere un blocco perché loro padroneggiano molto bene per quel che riguarda I'Inglese, l'Inglese in assoluto gli piace, sono bravi. Invece l'Italiano scarseggia in questo modo, in questo campo, perché non sanno come esprimersi. Se hanno un compito molto breve, allora sì, ce la fanno, ma se devono esprimere un concetto a un livello, che ne so, B2, "esprimi la tua opinione, cosa pensi del problema dell'inquinamento, del problema della droga", che è molto più impegnativo come: "Cosa pensi invece tu..." Non so, non mi viene niente adesso -

D Tempo libero.
A Ecco, "...del tempo libero delle vacanze", allora sicuramente è un grosso problema da affrontare questa questa tematica, ecco.

I Qui si sono aperte in realtà varie parentesi che secondo me sono interessanti, nel senso che ovviamente la difficoltà nella produzione secondo me può tranquillamente anche essere legata a - un po' ai filtri affettivi, insomma, nel momento in cui si ha a che fare con una lingua che non è la propria, un po' di difficoltà, un po' di blocco, soprattutto nella produzione orale, ci può anche stare, nel senso, questo funziona sia nella lingua straniera che nella lingua seconda, suppongo. Una domanda che non c'entrerebbe tanto con la mia ricerca ma che sono interessata a porre a questo punto è, che mi ha un po' sorpreso sentir dire che magari padroneggiano meglio I'Inglese rispetto all'Italiano. Cioè, è una cosa che condividete?

D lo credo di sì.
I Tutti? *Nome* no.
A Ah, tu no.
B Io non condivido, adesso, adesso spiego perché. Sì, ci sono tanti ragazzi che l'Inglese lo parlano, lo capiscono benissimo, davvero, e ci sono anche ancora per fortuna dei ragazzi, quelli che avevamo vent'anni fa, fino a vent'anni fa, che da piccoli avevano guardato i cartoni animati sulle televisioni private italiane e parlavano e parlano tuttora Italiano perfettamente, diciamo, benissimo. E la stessa cosa con I'Inglese: io ho notato un'altra cosa, sono stata presente agli esami orali di maturità in Inglese - di Inglese, molte volte, e ho notato un Inglese molto scarso in loro, però sono molto liberi, diciamo, parlano così, spigliati, parlano come se lo conoscessero, "yes, because i, just..." Capito?

I Sì, magari più maccheronico, ma si buttano.
B Introducono quella lingua parlata che sentono nelle serie su Netflix e così via: "Like I was, just..." Cioè, così, no? Però poi di sostanza grammatica terribile, sostanza perché io ho studiato anche l'Inglese, cioè, vedo anche gli errori che fanno, no? E io mi sono resa conto che tanti dei miei ragazzi parlano l'Italiano allo stesso livello in cui parlano l'Inglese, però se tu gli chiedi, cioè, loro stessi dicono "no, no, io l'Italiano proprio non capisco niente, non so dire niente", invece dicono "no, no, l'Inglese lo parlo bene" capito? lo questo lo sto notando da un paio di anni, che l'apprezzamento - e qua magari, sto pensando, non so se adesso lo posso dire o no, che forse è un po' colpa o... Non colpa, che siamo noi un po' la causa di questo, noi insegnanti, noi sistema, o comunque il fatto che l'Italiano è la seconda lingua, perché se noi insegnassimo l'Italiano come lingua straniera, allora probabilmente i nostri ragazzi verrebbero considerati bravi a livello uguale in Inglese e in Italiano, ma visto che l'Italiano si dovrebbe comunque già parlare, no, quando si entra a scuola perché è la seconda lingua, la seconda lingua è una lingua che tu parli quasi come la tua. E qua le aspettative forse sono più alte, no? E poi ovviamente non c'è input da - da altri media, no, non viene da fuori, I'Italiano solo quello che si studia a scuola. Perché se parliamo di Inglese, quando viene chiesto ai ragazzi dove lo imparano, lo imparano soprattutto sul telefonino, su YouTube, su Netflix, e così via, qualcosina a scuola, anche, no? Ecco, I'Italiano non è così.

C Ma io - io penso a quello che vedo, cioè, alla scuola media di *posto*, che allora qua, al Litorale, tutti quelli che finiscono le medie e vanno alle scuole medie superiori, quelli del Litorale vanno subito al livello avanzato. Tutti gli altri vanno al livello base. Almeno così dovrebbe essere. E quelli che vanno al livello avanzato, quello che ho visto io a scuola, poi, potete anche non essere d'accordo perché il ginnasio è tutta un'altra cosa, però, quello che ho visto io, molti mi chiedevano, quelli al livello avanzato, se possono andare al livello base, anche se provenienti dal Litorale, non padroneggiano, cioè non sanno, non hanno imparato l'Italiano, o a causa loro, dell'insegnante, lasciamo perdere - e volevano andare al livello base, e questo non è possibile, perché è previsto così e così̀ è. E io penso, è la mia opinione, che loro perdono anche molta - perdono la voglia, perché sono molto pessimisti, sono abbastanza pessimisti, io penso che son capaci, però sono molto pessimisti. Subito dopo partono, mettono un muro. E poi se tu riesci a smuovere quel muro, come insegnante, cioè, va bene. Però se tu non riesci a smuovere, perché alcuni non te lo permettono proprio, dopo diventa un problema. Questo è
uno, una parentesi, cioè, uno tra i problemi che potrebbero, cioè, causare questa cosa. La differenza tra l'Italiano e l'Inglese.

D Ma secondo me questi ragazzi cercano una strada più facile, molte volte, no, perché io dico, guarda, alcuni hanno difficoltà con la matematica o con la fisica e devono studiare di più, altri - altri con l'Italiano, però è anche vero che arrivano così, con un odio, per l'Italiano, secondo me, molte volte, e devi saper farti, cioè, voler bene come - prima come insegnante, e poi come lingua, che almeno capiscono che non sei lì per fare la guerra ma, cioè, cerca almeno imparare qualcosa in 70 ore che abbiamo a disposizione, o 63, impara qualcosa, che si può fare, no, qualche - qualche miglioramento, perché arrivano, sinceramente, e non sanno niente. Però è anche vero che poi ad un certo livello diventa I'Italiano già così difficile anche come temi, che non sanno più. lo per esempio dico, qua ho - mia figlia è dalla professoressa *Nome*, che l'altra volta ha detto "Guarda, *Nome* si è arrabbiata perché noi non collaboriamo, ma non è che noi non vogliamo collaborare, noi non sappiamo collaborare perché i temi sono già così difficili che non è come parlare delle vacanze, del passatempo, parliamo dell'inquinamento..." Ha detto, "abbiamo difficoltà a parlare di questi temi perché non abbiamo le parole giuste, non sappiamo come esprimerci, e non è che non vogliamo".

A Okay, ma li ho-li ho smossi un pochino, poi, mi sono arrabbiata ma poi hanno cominciato a collaborare.
D Sì, ma volevo dire che non è - non è un fatto che dicono "No, non vogliamo", ma molte volte non sanno come, perché proprio non hanno quelle parole che invece in Inglese le sanno, loro parlano automaticamente in Inglese -

E Perché nelle elementari e nelle medie, adesso che seguo mio figlio, in Inglese imparano queste cose. Nelle ore di Italiano si parla del tempo libero, dei vestiti, della cucina e dello sport, e poi basta.

I Può anche essere che sia, appunto, come veniva detto prima, perché magari hanno un approccio molto diverso anche all'Internet, eccetera, che ovviamente fornisce tutta una serie di materiali differenti?

A Sì, sì, sicuramente, sicuramente questo è, ma anche diciamo che proprio oggi ne abbiamo parlato, durante la pausa, con le colleghe che hanno bambini alle scuole elementari, che adesso - diciamo più piccoli del mio, che adesso stanno, stanno - hanno un approccio diverso. Diciamo che anche nelle scuole elementari, così mi hanno detto almeno, stanno cambiando le cose perché prima si ripetevano sempre gli stessi temi, e adesso un pochino il programma sta cambiando, così mi ha detto una collega che ha un bambino che frequenta la quinta.

E Ed è anche vero che l'Inglese ce l'hanno quattro volte o tre volte a settimana, l'Italiano due.
D Quattro, penso.
I Okay, quindi sicuramente una problematica è il tempo.
Collettivo Sì.

I Una seconda problematica, che è emersa prima, è, forse, l'inadeguatezza dei manuali, materiali, che non sono abbastanza stimolanti, può essere?

A Diciamo che noi partiamo da un livello, anche quello avanzato, che diceva la collega, A2, nel primo anno, e finiamo nel quarto anno con B2. Nell'arco - almeno noi, prima, adesso è cambiato, no, *Nome*, finalmente avevamo a disposizione 350 ore. Allora, 350 ore da A2 a B2, sicuramente, secondo me devi essere, non so, avere molta magia perché questi ragazzi - questi ragazzi riescano a raggiungere un livello così, e sicuramente nel manuale B2 ci sono temi, c'è lingua a questo livello, ed hanno difficoltà ad affrontarli.

E Non so, no, volevo dire che mio figlio nella terza media non ha un libro, non ha niente, ha delle fotocopie, alle elementari, si. Non so, *Nome*, tua figlia, nell'ultimo anno avevano dei libri?

D Sì, io mi ricordo che avevano - non mi ricordo, non mi ricordo quale libro, sinceramente, però ce l'aveva, questo me lo ricordo.

E \(\quad\) Nella scuola di mio figlio quest'anno niente.

D Però̀ è anche vero che io mi ricordo lei nel quarto, quarto anno, che è un po', secondo me, per le lingue, no? Però le ho detto, "Dai, dimmi una frase in Italiano" e non mi sapeva dire una frase in Italiano, cioè, mi sono arrabbiata, ma non con lei perché, cioè, ma proprio - voleva dire una cosa semplice, e non sapeva un verbo. Ma veramente non sapeva un verbo, dirmi una frase, niente. E lì mi son detta, oddio, questa qua dopo, dopo quattro anni non sa dire tranne "io mi chiamo", "abito a" e "ho, non so, 10 anni" non sapeva dire una frase.

E \(\quad\) Il presente cominciano a farlo alla fine del settimo anno.

D Cioè, non è normale che dopo tanti anni tu non fai neanche, cioè, neanche un pochino di grammatica, sinceramente, no, no è è logico che non sanno dire una cosa, e vedo che mio figlio è uguale. Il peggio è che lui non è per le lingue, figuriamoci cosa sarà con questo Italiano, no? Veramente, cioè, proprio non.. Non so. Non sono contenta con la scuola elementare, devo dire, no?

I Quindi il problema non è solo probabilmente nei ragazzi, è anche in come viene gestito e organizzato il corso.
E Sì.
D Sì, perché non possono essere tutti, cioè, se sono bravi in Inglese che poi in Italiano, no, non lo so, no, cioè
E No ma mio figlio non so una, cioè, un, niente, e ha sempre il voto - i voti alti. E' questo che, no, mi manda in.. Figuriamoci gli altri, perché mio figlio è portato per le lingue, come hai detto tu di tua figlia, *Nome*.

A E poi, quello che dicevo prima, no, noi siamo stati - alle superiori siamo stati secondo me costretti ad abbassare il livello, e perciò abbiamo cominciato con il livello A2, è un paio di anni che lo facciamo, prima partivamo da un livello B 1 , ed è stato più facile in 4 anni, 350,420 ore, partire da B 1 e raggiungere B 2 . Adesso invece..

B Solo in pochi raggiungono un B2 alla fine del quarto anno.
A Sì, adesso, adesso, ma prima, prima, *Nome*, quando...

B Quelli che entrano al liceo con un B2, ne escono con un B2, almeno, la mia esperienza.
A Sì, va bene, ma sono in pochi. Sinceramente, tra i miei studenti, adesso, attualmente, in quest'anno non c'è nessuno che sia entrato con un B2. Mi dispiace.

E

A No, con B2. *Nome* ha detto che uno entra già con B2, sono quelli che per esempio hanno fatto le elementari italiane, no?

B Si, oppure che hanno vissuto con la lingua, hanno guardato o guardano la televisione, e allora...
A Sì, ma sono pochissimi. Per quel che mi riguarda, per quel che mi riguarda non - da noi, almeno tra i miei studenti, non c'è chi è entrato..

B Invece secondo me non c'è mai stato, oppure almeno negli ultimi vent'anni, uno studente che fosse entrato a livello A2 e fosse uscito al livello B2, non credo, cioè, in 4 anni non succede questo miracolo.

A
Ma ho detto che è impossibile, anche se i manuali che abbiamo, no..

B Appunto, confermo.
D Uno è un manuale, poi di fatto, non - difficilmente producono per un B 2 , no?
A No, quello sì, però è il materiale che almeno un pochino - siccome tra loro ci sono anche quelli che poi vanno all'esame di maturità, allora deve affrontare testi di questo livello, secondo me.

Viene mai inserita in qualche modo all'interno comunque del percorso la tecnologia?
Certo.
Con qualche esempio. Cioè, sulla quantità in cui effettivamente viene utilizzata, nel senso, all'interno di una settimana, che, alla fine, in una settimana avete due - due ore di lezione, giusto?

D Tre.
A Due, tre.
B Dipende dall'indirizzo.
I Okay, in una settimana, quanto e come viene utilizzata mediamente?
A Mah, dipende cosa intende come tecnologia.
I In effetti è una domanda abbastanza ampia: intendo sia in classe, a livello di - non so se abbiano modo di avere a che fare con strumenti, che sia.. Beh, la LIM suppongo di sì.

A No, noi non abbiamo la lavagna interattiva, abbiamo il proiettore e il computer, non abbiamo - la lavagna interattiva non ce l'abbiamo.

Okay, ovviamente gli studenti non utilizzano, suppongo, tablet, o cose del genere.
B No.

I
E No, io gli lascio usare il telefonino quando lavorano con un testo per cercare nei dizionari, questo sì.
A Oppure, oppure quando c'è - si affronta qualche lavoro in gruppo, sì, allora è fattibile che usino anche il telefonino. C'è chi li lascia usare il telefonino.

E Se no, lavorare con la tecnologia vuol dire anche, non so, vedere i video.
I Sì.
E Si, questo lo facciamo, sempre, cioè, no?
A Va bene, proprio sempre no, ma diciamo (risata) - ma diciamo una volta a settimana sicuramente, almeno ascoltando una canzone, guardando qualche filmato, io credo di sì. O almeno una volta ogni due settimane, sicuramente, ecco, perché dipende, perché se c'è il periodo che devi fare un po' di esercitazioni nella grammatica non è che uno usi proprio la tecnologia. Ma va bene, poi non è che..

E Appunto, cioè, se fai il congiuntivo non...

A lo sinceramente - sinceramente no, no, pochissimo.

E No, ma soprattutto negli ultimi due anni che tutti ci stiamo occupando di altre faccende.

A \(\quad\) Aule virtuali.

D lo devo dire che anche una è la teoria, e poi la pratica, no? Non so, io mi ricordo alla facoltà abbiamo, cioè, 15 alunni, io ne ho 34, no, principianti, 30. Parliamo di miracoli, cioè, uno ti dicono: "Sì, devi avere un gruppo di 10. Li metti così davanti a te, no, potete parlare.." Poi di fatto hai 30 persone lì dentro, succede anche 34 , e fai quello che devi fare, soltanto se voglio fare l'interrogazione per un voto orale, quanto tempo ho bisogno per 30 persone, cioè, sinceramente, no, così che una è teoria è poi un'altra cosa la pratica, secondo me, no? Per quelle teorie mi danno fastidio, perché, no, vedo che in realtà è impossibile.

I Sì, sì, no, sono assolutamente d'accordo, anche perché prima di mettermi a fare il dottorato ho insegnato anch'io, so benissimo che non funziona così. Quindi è anche quello che volevo andare a vedere, sono andata apposta a vedere quelli che sono anche gli obiettivi di apprendimento, so che ci sono dei testi che regolano l'insegnamento dell'Italiano come lingua sia seconda che straniera, sia per i licei che per gli istituti professionali e tecnici, e ho letto entrambi, o meglio ho cercato di leggere entrambi perché io devo ammettere che non vivo in un'area bilingue, quindi io lo Sloveno non lo so. Quindi sono andata a tradurmeli, e a cercare di capire che cosa venisse detto in quei testi e ho visto che ci sono delle cose che comunque sono migliori rispetto, per esempio, al panorama Italiano, perché si cita, nel testo per esempio che regola i licei, l'alfabetizzazione digitale, cose del genere, da noi questa cosa non c'è. Però secondo me sono tre step: c'è lo step della teoria, che secondo me è completamente irraggiungibile. Lo step degli obiettivi di apprendimento che si pone la scuola, che è una via di mezzo, e poi c'è la realtà della classe. Volevo capire se per voi questa cosa funziona, se se ha senso, se ci sono delle cose che sono veramente completamente irraggiungibili anche semplicemente negli obiettivi che ci si pone. Abbiamo già capito che arrivare a un B 2 è molto difficile per esempio.

A Mah, in una classe così grande, perché noi abbiamo classi grandi, è anche difficile soltanto fare un esercizio, per esempio: "dimmi tu la tua opinione su..", cioè, cose molto brevi, io spesso, cioè spesso, no, ogni volta, desidero che ognuno mi dica qualcosa. Però, ecco, lo ha detto prima *Nome*, e allora va.. Nella classe di sua figlia ce ne sono 27 , no, e allora, cioè, mi va un'ora, no, di lezione, ma comunque vale, vale la pena, io sono - sono molto contenta quando faccio anche questo tipo di esercizi, anche se poi perdo molto tempo, nel senso, un'ora mi va. Però secondo me i ragazzi poi alla fine capiscono molto di più e apprendono molto di più rispetto a un esercizio scritto tipico - di grammatica, ecco.

I Okay. Allora poste - allora, calma, con ordine. Quali sono secondo voi i problemi principali che vi dovete - beh, forse ragionerei a parte la situazione del Covid al momento, cioè, ragionerei come se fossimo intanto in una classe normale. Quali sono i problemi che vi trovate ad affrontare per riuscire ad arrivare alla fine dell'anno, con un programma più o meno svolto, secondo quelli che sono gli obiettivi che vi ponete all'inizio dell'anno? (Pausa) Bella domanda, insomma, okay.

A Eh, sì.
। No, nel senso che la prima cosa che verrebbe in mente a me, non so, è il tempo, per esempio, che a me sembra sempre poco, tenendo conto anche magari del numero di studenti e tutto..

C Numero di studenti ma anche il gruppo, diciamo, la predisposizione del gruppo, siamo qua, cioè, posso parlare di emotività, della motivazione, delle persone come sono, se sono predisposte a qualche cambiamento, non so, io ho dato durante questa fase di Corona, eccetera, ma anche in generale, i filmatini da guardare su YouTube, non so, perché comunque per le estetiste ho dato da guardare i filmatini, per poi fare qualche riassunto, parlarne, eccetera eccetera. E c'erano solo 6-6 persone a livello avanzato, no? Ed è un gruppo abbastanza omogeneo, con voglia di fare, perché sapevano, se facevano bene, eccetera eccetera, che dopo hanno, non dico un premio, però, comunque, che si tolgono un pe- non so, mi davano la sensazione come se dopo si togliessero un peso di dosso, perché ce l'hanno fatta, praticamente, "Wow, ce l'abbiamo fatta", e in questo modo, cioè, dipende davvero dalla classe, dal gruppo di persone. Questo, cioè, io dico che questo è il punto base, il gruppo di persone.

D Ma poi io penso che molte volte inostri ragazzi sono abituati soltanto a scrivere. Cioè se hanno una lezione che loro scrivono tutto il tempo, hanno l'idea di aver fatto qualcosa. Se tu parli con loro "Beh, tanto non abbiamo fatto niente di intelligente". Mi sembra molte volte così, che, no? Cioè, molte - molte volte sono abituati che il professore mette qualcosa e quelli scrivono..

E Questo è anche comodo, loro non devono pensare, no, scrivono e basta.
D Qualche volta gli dai gli esercizi di grammatica, tutti contenti a fare gli esercizi di grammatica; quando devono dire, no so, qualche loro opinione, "Oh, di nuovo", cioè, ma dovete essere contenti, perché..

A Sì, perché è una produzione no? Per esempio, io attualmente sto facendo il periodo ipotetico, no, e allora quando devono produrre, no, e ho fatto un dialogo, dovevano chiedere, no, e produrre da soli i due tipi del periodo ipotetico, era molto più difficile, no, e lì anche si vedeva se hanno capito no, tranne che scrivere solo il verbo, no, e allora quando - quando devono, come ha detto *Nome*, fare un lavoro non tanto comodo, protestano un attimino, no?

E Ma già nel periodo ipotetico, non so se voi fate quel gioco: "Se fossi un albero..", quello a catena, no, già finire la frase è difficile per loro.

A Sì, sì, anche, ma diciamo, diciamo lo devono fare da soli, non è scritto.
E Appunto.
A Sì, sì, lo facciamo.
I Okay. Quindi se aveste campo libero a livello di mezzi, di possibilità, di tempo, a proposito di periodo ipotetico, (risata) che approcci andreste a introdurre per cercare di renderli un po' più, beh, magari più partecipativi, ma anche più in grado di riuscire a comunicare, cioè a raggiungere quella che, chiamiamola come vogliamo, ma è il concetto un po' più ampio di Literacy che c'è oggi?

E La motivazione manca in loro, la voglia di imparare l'Italiano, combattiamo con questo noi, o no, ragazze, colleghe?

B lo se avessi campo libero...

D Sì, loro non vedono l'utilità di sapere Italiano, cioè, io anche ho, tipo, indirizzo, non so, installatore e così via, no, informatico, e ho detto "Ma ragazzi, ma andata a Trieste lavorare e avrete uno stipendio migliore che qua in Slovenia". "Ah, no: preferisco lavorare per 500 euro ma resto qua". Cioè, ma, ho detto, ma, "Voi potete veramente anche guadagnare meglio, cioè, pensate al vostro futuro, non soltanto all'Italiano, no? Poi un giorno andrete a fare un corso di Italiano e pagherete tanti soldi perché avrete bisogno dell'Italiano", no, però non si smuovono, cioè, soltanto due: "Mi basta una sufficienza e son contento". Elì rimaniamo.

I *Nome* stava dicendo che se avesse campo libero--?
D Ah, scusa, *Nome".
B No, no, io dicevo, periodo ipotetico dell'irrealtà, insomma, no, perché se io avessi il campo libero in tutti i sensi, inviterei \(4-5\) ragazzi e ragazze italiani coetanei in classe, perché quando capita che nella nostra scuola per uno scambio Erasmus o qualsiasi altro progetto vengano a visitarci i ragazzi dalla Sicilia, dall'Italia, insomma, io li prendo sempre e li porto in classe e faccio dei gruppi, quindi ci sono 4 nostri ragazzi e un Italiano, ed è tutto interessante quello che c'è da studiare, no, è quello che c'è da magari discutere, perché poi loro discutono anche di altre cose, e non possono, non so, non possono, prima di tutto, usare lo Sloveno e dire: "Senti, io non so cosa dire, cioè, non so cosa..", no? Quindi è un... È un approccio come se fossero, come se stessero magari in Italia, no? In una situazione in cui sono costretti a parlare, forse non si vergognano tanto davanti a un coetaneo che sicuramente apprezza un qualsiasi livello da parte loro, diversamente dall'insegnante, che, secondo loro, non vede l'ora di beccarli in errore, il che non è vero, però, no? Quindi, se io avessi la possibilità, questo, però questo.. Non credo sia - si possa esaudire questo desiderio.

I Oggi forse è un po' difficile, però effettivamente stiamo parlando di, alla fine, una situazione il più possibile reale e significativa di scambio linguistico.

B Sì.
I Ma una cosa del genere intanto non si potrebbe tentare con la tecnologia? (Pausa) Chiedo, magari anche no, la risposta magari è no.

B Io so di colleghe che hanno cercato di instaurare magari rapporti tramite i social, tramite, non so, messaggistica e cosi, però sempre con il fine di andare a visitare quel posto, no, praticamente scambiano - c'è una corrispondenza tra ragazzi sloveni e quelli italiani, che poi un giorno si incontreranno, è un po' per loro, come sarebbe anche per me, no, discutere con qualcuno - cioè, per me è diverso perché sono grande. Però parlare con qualcuno che non conosci, non conoscerai mai, cioè scelto così a caso, parlando - usando una lingua che non sai, non vedono, capito? lo vedrei qui il profitto, no, cioè il modo di imparare una lingua da un native speaker, invece loro no, cioè, non credo che.. Non riuscirebbe, secondo me, non riuscirebbe una corrispondenza così, magari si fermerebbe ben presto.

A E' una situazione troppo artificiale, fatta, no, non è spontanea, la cosa sarebbe - avrebbe successo se fosse spontanea ed è molto difficile

E Ma noi abbiamo avuto un paio di progetti, l'ultimo adesso finirà, non so, l'Europa comincia a Lampedusa, non so, ci sono varie scuole italiane, però sono dei volontari che si offrono, poi, e adesso andranno a Lampedusa a fine mese, la settimana prossima. Però sono sempre quei più bravi che si offrono, no, in questi progetti, quelli.. No? Questo.

। Sempre con l'ipotesi di avere campo libero, secondo voi che strumenti andreste a, non lo so, c'è qualcosa che pensate che potrebbe migliorare il rapporto dello studente con la lingua, dello studente con l'insegnante..?

I No, no, non parlo necessariamente di tecnologia, può essere anche un manuale diverso, magari, che sia più adatto, può essere..

B Secondo me, una bacchetta magica, cioè una capacità da pa-dell'insegnante di coinvolgerli, cioè di dare senso a quello che si sta facendo, ed è difficile, io non sto dicendo di avere questa capacità, anzi, sono sempre più frustrata. Più andiamo avanti con gli anni, sempre più frustrazione c'è, perché, cioè, non c'è interesse, eppure quando gli chiedi: "Quali sono, in teoria, quali sono i vantaggi di imparare una lingua o più lingue straniere, quali vantaggi ti porta la conoscenza di lingue straniere?", uh, loro ne sanno tanti, e dico: "Quali sono gli svantaggi, quali sono le cose brutte, magari, i lati negativi del conoscere una lingua straniera", ovviamente non ne trovano neanche uno, no, però questa è la teoria, perché, non so, non si rendono conto..

A Io sarei più positiva perché sinceramente vedo, almeno nella nostra scuola, ragazzi che a un certo punto, anche con tutto l'odio che hanno, purtroppo, per questa lingua, vedono - vedono che migliorano. E comunque, vabbè, non è che siano entusiasti, per carità, no, però un po' di positività io la vedrei, comunque. Sinceramente non sono ancora tanto frustrata, e spero di non - di non esserci. Ecco, sinceramente, no, io vedo nei nostri alunni comunque la volontà sia nei principianti, soprattutto per esempio poi, dopo un primo, un secondo anno, quando c'è quel blocco e si sbloccano e capiscono che sono capaci di dire una frase, di dire qualcosa in Italiano, io vedo - vedo miglioramenti ecco, e sinceramente sono più positiva, ecco.

D Ma io devo dire che negli ultimi anni preferisco insegnare ai principianti, cioè, sono molto più contenta, vedono il risultato, loro sono tutti felici, io dico "Wow, anch'io son brava", cioè (risata) vedi che c'è con un livello avanzato qualche volta - oggi ho avuto il quarto anno, tre più due, che sarebbero di Italiano insegnamento 9 più 4 , allora, 11 anni e mi chiedono cosa significa "noi", cioè, mi posso buttare giù? (Risata) Cioè, dici, ma mamma mia, ma cosa abbiamo fatto in tanti anni? Che poi chiedono ma veramente alcune parole basilari. Non dico che parliamo, non so, dell'inquinamento, ma proprio cose basilari, e dici, "ma dove abbiamo sbagliato, cioè, tutti, no?

B Adesso mi è venuta un'idea di cosa vorrei se avessi risorse illimitate: vorrei più soldi, cioè più insegnanti per poter differenziare le classi, perché, appunto, come ha detto *Nome*, è una gioia insegnare agli - ai principianti, perché tu vedi un progresso, vedi.. Cioè, loro sono felici tu sei felice, praticamente scegliendo magari un vocabolario limitato riesci a comunicare e comunicano anche loro in poco tempo, no, sempre su temi molto molto elementari. Invece il grande problema nelle classi di livello diciamo avanzato, ma avanzato solo tra virgolette perché avanzato non è, è che questi gruppi sono molto eterogenei, che ci sono ragazzi di genitori italiani, e ci sono ragazzi che hanno frequentato la primaria e la superiore del primo grado in lingua d'insegnamento italiana, e ci sono quelli, come appunto dice *Nome*, che veramente non capiscono neanche "Come ti chiami?", almeno, negli istituti professionali, perché *Nome* dice tutto il tempo "i nostri, i nostri," ovviamente, no, è l'élite. Cioè, il ginnasio in cui insegna *Nome* e poi anche *Nome*, beh, lì ovviamente ci sono gli studenti migliori, no, e non può accedere chiunque, invece in una scuola dove c'è l'Istituto Professionale, tre anni, praticamente vengono ragazzi magari anche di 20 anni che sono stati in prigione un anno, poi, non so, con problematiche a casa, e non sanno niente. Oggi uno mi si è offerto volontario, voleva essere interrogato, è venuto e ho detto, cioè, come temi principali, no, primo anno, la prima cosa per introdurre questa materia, perché l'Italia è conosciuta nel mondo, quali sono questi aspetti dell'Italia che tutto il mondo apprezza e conosce, ma io non gli ho fatto la domanda in questo modo no, e lui non sapeva.. Tipo, non sapeva, non ha saputo rispondere, non so, "Conosci qualche piatto famoso Italiano?" No. "Conosci qualcuno, non so, che si occupa di moda, uno stilista?" No, cioè, veramente, zero, no, zero. E per questo il problema più grande è cercare, capito, quelli che - quelli che parlano Italiano si annoiano da morire, io mi scuso con loro all'inizio del primo anno, dico: "Voi vi annoierete, io cercherò di portarvi ogni tanto qualcosa, qualche attività, cercherò di coinvolgerli magari per - in modo che aiutate i compagni di classe, così". Però io non posso preparare per ogni lezione, per ogni classe, tre ore, tre lezioni diverse, capito, e differenziare, non è possibile. Invece, fare più gruppi, cioè, almeno due gruppi, quelli che parlano e quelli che non parlano, no, perché così è frustrante per tutti: si annoiano quelli bravi e sono frustrati quelli che non capiscono, cioè, neanche quel minimo che serve, no.

I Okay, qualche idea fattibile? Ci provo..
B Beh, è molto.. II CLIL, per esempio, no, si è verificato, queste cose un po' più interessanti, diciamo un po' diverse dalle lezioni classiche, tradizionali, almeno nella mia esperienza, si sono verificate abbastanza interessanti, abbastanza utili, no, cioè, hanno dato magari qualche risultato, perché, non so, si è fatto un - una lezione di storia, di Cristoforo Colombo, ma poi alcune cose, le - non so, le cose che Cristoforo Colombo ha portato dall'America, quelle in Italiano, quell'altro in Sloveno, per loro è stata un po' un'esperienza, capito, un po' diversa, perché c'era.. E poi la professoressa di storia parlava in Italiano, e, no? Dicevano, "Come, lei che non ha studiato l'Italiano parla I'Italiano e noi no?" Cioè, no? Così.. Ma per tutte queste cose ci vogliono soldi e ci vuole volontà, anche da parte della direzione, no?

A E degli altri colleghi.
I E si riesce ogni tanto a fare? La volontà c'è?
B Sì, sì, sì sì, volendo, si.

A Si fa, sì.

I Sì, però suppongo che ovviamente non si possa fare ogni due secondi perché ognuno ha il suo programma da portare avanti, perché il tempo è quello che è, perché ci sono un sacco di limiti.

A Appunto.
B Dipende dalla politica della scuola, la scuola di *posto*, penso ginnasio, oppure si chiama *Nome*, non so, dove insegnava *Nome*, la nostra coordinatrice prima, loro, cioè, hanno questa politica proprio della scuola che quando fanno l'orario già prevedono, tipo, I'Italiano un'ora a settimana si fa autonomamente con l'insegnante di Italiano, l'altra lezione, cioè l'altra ora, si fa con un altro insegnante e l'insegnante di Italiano, cioè in due, no. Una volta il tema è economia, una volta il tema è geografia, una volta educazione sportiva, che si fa in Italiano, comunque, ed è - sono stata presente ad alcune di queste lezioni, veramente.. Veramente una bella cosa. Però sempre lì siamo.

I Avevo sentito un "però".

B Eh, però, dico, ci deve essere volontà da parte della direzione, perché queste ore ovviamente le deve pagare e me le deve inserire nell'orario, no? Cioè, io, insegnante di Inglese o di storia non posso - non posso essere presente alla lezione della collega che insegna Italiano o Inglese se io allo stesso tempo ho un'altra lezione. Eppure - un altro aspetto, ovviamente, no, noi non lavoriamo per soldi diciamo, perché altrimenti avremmo fatto un altro mestiere, però, però fino a un certo punto, cioè, io lo posso fare una volta di venire ospite magari alla lezione di geografia o di psicologia, ma non lo farò ogni settimana in ogni classe, no?

I Secondo gli altri è qualcosa che può essere utile?
E Sì, certo.
A Sì, noi abbiamo aderito a un programma, anche tu, *Nome*, no, diciamo un esperimento per un paio d'anni ed è stato..

E Sì, noi abbiamo iniziato, sì, abbiamo - a quello dell'insegnante di Italiano madrelingua, che lavorava con me e poi anche con \({ }^{*}\) Nome*, era in classe. Sì, però è durato due anni. Troppo poco..

A Poi ci sono dei progetti, no, fatti dall'istituto..
I Ma poi si è fermato perché?

\section*{APPENDIX 15 - ISL Focus Group transcription}

E Perché è finito il progetto, basta
A Sono finiti i finanziamenti, credo che anche se fosse stato - fossero state risorse dell'Unione europea, probabilmente sì.

I Secondo voi serve una diversa o maggiore formazione degli insegnanti?
B Che rispondano le giovani. (Risata e commenti sovrapposti) Probabilmente non nuoce, no?
C No, non nuoce, sicuramente no, però comunque, cioè, dipende.. Dipende in quale senso questa formazione, cioè, nell'ambito delle tecnologie o in generale?

In generale, poi se ci fosse una cosa anche specifica..

C Ma, io penso che ogni tanto qualcuno, cioè, ognuno di noi, degli insegnanti, dovrebbe fare qualche aggiornamento, eccetera eccetera, comunque, per stare un po' al passo con i tempi, con le tecnologie, ma non solo le tecnologie, in generale, no, giusto per essere un po' aggiornati. Però c'è molta - la volontà di un insegnante, cioè.. Non serve avere tante cose, tanti materiali, tanta roba. Molte volte basta poco e saperlo come si dice, saperlo, eh, adesso non mi viene la parola.. Cosa?

B Sfruttare.

C Sfruttare, brava, ecco. E saperlo sfruttare. Sì, perché, non so, anch'io molte volte sono entrata in classe con i libri o qualcosa, qualche materiale che mi sono preparata: "Oh, oddio, cosa facciamo oggi? Cosa dobbiamo fare, scrivere? Cosa si fa?" E qualche volta sono entrata con solo un mazzo di fogli bianchi: "Oh, oggi non si fa niente!" Eh, ma non è vero, perché dovevano scrivere, no? Però comunque lo - diciamo, abbiamo fatto un gioco, una specie di mappa mentale, cioè, mind map, abbiamo fatto una cosa molto carina, e diciamo che aveva avuto successo. Cioè, comunque la formazione, sicuro, cioè, si deve stare al passo con - con tutto, perché sennò, cioè, uno - cioè, ha una sua visione di insegnamento, un determinato libro e va avanti con quello, perché io comunque sono stata al ginnasio di *posto*, e avevo un'insegnante bravissima, non dico niente, però avevamo quel libro e lei andava proprio per filo e per segno, tutto di quel libro, cioè, un po' di, di.. Ma non, non dico video, eccetera eccetera, però un po' di - spostare l'attenzione fuori da quel libro.

E Io - mio figlio non ha neanche 14 anni. La - due settimane fa hanno ascoltato alla lezione di Italiano Gino Paoli.
I Okay.

E E ho detto tutto.

A Ma, "Quattro amici al bar", che cosa c'è di male?

E Ma per me e te sì, ma non per loro! Non so..
A Ma sto scherzando, dai, sto scherzando. No, ma quello che diceva la giovane collega, sicuramente si dovrebbe fare a un livello istituzionale, che ogni insegnante ogni due anni dovrebbe essere presente a qualche aggiornamento, secondo me, perché ci sono - c'è qualche insegnante che forse non è stato presente a qualche aggiornamento, anni, anni, anni, no?

C Sì però anche questi aggiornamenti, cioè, almeno la mia esperienza, ce I'hanno poco - poco tempo dedicato alla pratica, cioè, alla discussione, allo scambio di idee. Cioè, avevamo quella mezz'ora, sto anno, non so quale cos'era, era mezz'ora, che in mezz'ora, praticamente, eravamo in sette o otto, abbiamo fatto lo scambio, non so, di quattro/cinque idee, cioè, niente, praticamente.

A No, forse mi sono espressa male. Ci sono stati seminari, che ha organizzato l'Università del Litorale, veramente ottimi, no, io pensavo a - io pensavo a, diciamo, a questi, no, che sicuramente sono stati invitati dei docenti che hanno - che si poteva imparare, o almeno ricevere delle idee e degli spunti da sfruttare, ecco. Okay, io pensavo a quello, anche.

C No, quello sicuramente sì, sì, però comunque all'interno di qualche seminario, eccetera, dedicare un tot tempo di fare domande, di fare uno scambio di opinioni, eccetera, comunque gioverebbe a tutti, penso, perché..

I Si, no, io l'ho chiesto anche perché.. No, son d'accordo, ma infatti io l'ho chiesto anche perché, sì, nel questionario avevo qualche domanda molto breve, però insomma, anche relativa a questo passaggio, che è stato, diciamo, forzato nell'ultimo anno e mezzo per via della pandemia, insomma, quindi, cercavo di capire quanto il passaggio al digitale forzato avesse impattato, come le scuole avessero reagito, se ci fosse stata, sì, diciamo, un'organizzazione abbastanza fluida, che quindi avesse aiutato i docenti.

E Noi l'anno scorso, a marzo, venerdì abbiamo finito in presenza e lunedì abbiamo cominciato la DAD, e avevamo due giorni e mezzo per organizzarci, da soli.

A Ah, ma stai parlando del 2020?

E Dell'anno scorso, a marzo, quando questo è, no? E poi sono venuti, cioè, ognuno - ci siamo arrangiati, almeno da noi.

A Sì, ma diciamo - io, la mia esperienza, diciamo, non mia, mia personale, ma per esempio la collega, non insegnante di Italiano, che ha usato - non dico di quale materia, perché non voglio entrare nel personale - ha usato sempre la lavagna luminosa, no, e anche il nostro tecnico aveva problemi, no, perché non c'erano i pezzi di ricambio, no, perché non, non esistono. Ma adesso la pandemia ha fatto sì che sta usando il computer, ecco, diciamo che non aveva altra via di mezzo, no, perciò secondo me molti sono stati costretti a diventare più digitali, ecco.

I Ma in questo c'è stato un sostegno da parte della scuola?

B Sì, certo, sì

Collettivo Sì.

E Poi, no, dopo, anche quest'anno ad agosto noi avevamo..

A Si, ma, ma, ma diciamo c'era un appoggio anche - per quel che riguarda la nostra scuola c'era un appoggio..
E ..di un informatico.

A Sì, sì, questo sì.
C Anche da noi c'era l'appoggio, diciamo che la prima settimana, come ha detto *Nome*, eravamo tutti spaesati, facevamo quello che potevamo, e dopo, cioè, dopo una settimana o due praticamente ci siamo un po' stabilizzati, perché anche comunque i ragazzi erano abbastanza spaesati. Quindi diciamo che dopo due settimane di tempo, per dirla così, all'ingrosso, abbiamo cominciato il lavoro a distanza "come si deve", tra virgolette.

B Mah, "come si deve" è una parola grossa.
C E' tra virgolette, sì, tra virgolette.
B Okay, tra virgolette sì, certo.

I Sì, no, beh, suppongo che - almeno, quel po' che ho sentito fino ad adesso è che quasi nessuno pensa che sia stata - cioè, si è fatta di necessità virtù, ma non è una valida alternativa.

Collettivo No no no no no.
B Non per questo pubblico. Funziona perfettamente all'università, perché io nell'ultimo anno ho insegnato all'università, ed è tutta un'altra cosa, non c'è differenza praticamente, no, tranne che non c'è - non senti l'odore, non c'è il tatto, e non c'è bisogno della mascherina, però è tutto uguale, come noi adesso, no, perché c'è una disciplina, diciamo, nella - nella comunicazione, sono tutti presenti e tutti partecipano, perché sono motivati, no?

A C'è anche una maturità.
B No, assolutamente, però vabbè, un anno di differenza non.. No? Cioè, tra il nostro quarto anno e il primo anno di università non passa.. Cioè, comunque. Ovviamente sono studenti universitari motivati, sono preparati, hanno diversi - anche diversi approcci allo studio e tutto, no, quindi funziona benissimo per loro, potrebbe funzionare. Lasciamo stare adesso il contatto, no, la socializzazione, l'altro aspetto sociale. Però per quanto riguarda l'insegnamento non c'è - non ci sono grandi difficoltà, mentre per un istituto tecnico oppure una scuola professionale, di quelli che dicevo prima, è un'impresa impossibile, perché non funziona il microfono, non funziona la videocamera, non funziona la chat, non si sente la voce, non riceve le mail, tipo, no? Ha mandato la mail che io poi non ho ricevuto, cioè, veramente da uscire pazzi, no.

D Ma io devo dire che avevo molti che dovevano essere interrogati e proprio quel giorno non funzionava l'internet, è andata l'elettricità, mi scuso, non potevo venire, e poi mi son detta: "Va bene, chi ha problemi di Internet sarà interrogato a scuola". Zitti, e da lì abbiamo smesso tutti con l'Internet perché sapevano che a casa potevano sicuramente barare un pochino di più che a scuola, e abbiamo finito, tutti avevano poi l'Internet, avevano l'elettricità. Abbiamo smesso con problemi, no, però con quelli, veramente, non volevo interrogarli fino alla..

E \(\quad\) Alla fine.
D Fino a quando sono tornati a scuola, ma proprio a scuola, e me li son messi come ciliegina alla fine, perché mi sono detta, se l'anno prossimo ripartiamo così, almeno sarà di lezione a tutti, e la smettono con questo, no? Perché poi non mi sembra anche giusto, no, non puoi interrogare un altro, se - tipo, tre avevano la data e quei tre non arrivano. A me non piace poi dire: "Ah, adesso sarai tu interrogato", no. Allora poi non andavamo da nessuna parte, no, specialmente con i ragazzi dell'indirizzo professionale, no. Così, Sicuramente un altro - altra mentalità che da *Nome*.

A Ma va bene, va bene, dai, anche noi avevamo dei problemi, dai, per carità..
E Anche noi.

A Sì, sì, sì, c'era - c'era sempre, no? Però diciamo che purtroppo quelli che non hanno collaborato come avrebbero dovuto, poi alla fine, almeno, nella mia classe, non ce l'hanno fatta a superare l'anno, no, sono stati anche bocciati, no? Diciamo, cioè, hanno avuto questa esperienza, non tanto positiva, no?

I Un'idea un po' discussa è che gli studenti sappiano approcciarsi al mondo tecnologico meglio degli insegnanti. (scuotono la testa) Ho detto che è discussa infatti, c'è chi è d'accordo e chi no. Voi da che parte state?

A Dipende da cosa, dipende da cosa, diciamo, no?
I E' vero, è vero, ma siccome non posso rispondere io...

E Mah, no, loro sanno trovare qualche gioco, giocare, che ne so, queste robe qua, se gli dai da cercare qualche informazione: "Ma non c'è niente su Internet", no? Questo.

B Oppure: "Ma c'è scritto su Internet, eh, I'ho trovato in internet, quindi è vero", questa, no? L'approccio non critico. No, no, loro non sono - cioè, non sono - nativi digitali è una, una cazzata, scusate, non.. Vale per qualcuno, come prima parlavamo di Inglese, no, però moltissimi - capito, loro.. Se un ragazzo sostiene di aver mandato una mail, e l'indirizzo è giusto, cioè, come fa una mail a non arrivare, non è un piccione, no, portalettere. Come fa a non arrivare e come fa lui a non capire di - che sta facendo una gaffe, no, che veramente.. Loro sono abbastanza - sono utenti passivi. Loro sanno scrollare, sanno mettere filtri su Instagram, sanno condividere le foto e i video, queste cose qua, ma solo pochi, sempre parlando di ragazzini, non so, della media, no, dell'élite, e - non sono - non capiscono, tipo, non sanno scrivere in Word, non sanno, non so, usare un foglio di calcolo. Non capiscono la differenza tra uno spazio, due spazi.. Capito? E non solo a livello di scrittura, non - hanno avuto anche parecchie difficoltà ad accedere magari all'aula virtuale, no, avendo il codice e tutto, le modalità di entrata. Però, "No, io non riesco", poi magari in tua presenza ci riesce, no, perché..

A Ma, spesso si nascondono, no, okay, perché non vogliono, no, okay, perché se devo entrare nell'aula virtuale allora poi dovrò anche collaborare, dovrò anche fare qualcosa, allora questa è la mia esperienza, che fanno finta di non saperlo, questa è una. Sono molto veloci, quando loro hanno, scusate, il telefonino, io non sono capace di scrivere così velocemente qualsiasi cosa, no, questa è una. Poi sicuramente, per quel che riguarda la comunicazione, no. No, non sono abili, no, la loro comunicazione è meno zero, scusate, no? Diciamo, perché quando ti scrivono una mail, quasi quasi ti dicono "Ciao bella", no? Cioè, siamo a questo livello, no, okay, allora anche, anche qui..

B "Quando sarò interrogato? Quando sarò interrogato?" Né chi sei, né salve, né niente, cioè, no?
A Lo so, però è una - è una cosa che dobbiamo insegnarglielo, secondo me, no?
B Sì, sono d'accordo.
A Non solo per l'Italiano, sfruttiamo, no, affinché poi raggiungiamo altri obiettivi, no?
I Ecco, ma di fatto quindi può servire una formazione in questo senso? Parlo per gli studenti.

A Senz'altro, perché le mail - io gli dico sempre: "Mi dispiace, io sono virtualmente morta, no, perché non sono né su Facebook, né su Instagram, né, non so su quali social, però ragazzi quando - quando si parla, per esempio, come si cerca il lavoro, quando affrontiamo questo tema, questa tematica, ho detto quando avrai il colloquio di lavoro sicuramente non ti contatteranno tramite Facebook, Instagram, non ti manderanno una foto da condividere su Instagram, no, e allora dovrai sapere scrivere una mail come si deve.

D A me per esempio è capitato che, tipo, nell'e-mail, l'oggetto, mi hanno scritto tutto il contenuto, che ho aperto, ho visto.. Ma cos'è? Cioè, tutto quello che dovevano dirmi me l'hanno detto sopra, no, tipo oggetto, trrrr. Ho detto, oddio, no? E veramente - anche non - neanche non controllano l'e-mail, anche, rispondi o mandi qualcosa, non sono abituati a guardare l'e-mail, allora anche alla mia classe ho detto quest'anno: "Ma scusate, ma vi ho scritto, ma avete visto?" Cioè, almeno mi dite, insomma, vaffanculo. Una cosa, rispondete, cioè, "grazie", no? O, non so se avete ricevuto, se avete letto, cioè, una parolina, no? Così che - e veramente non controllano, no? Perché poi scopro che non hanno letto quello che ho mandato, molti di loro.

A Si, loro hanno Messenger su Facebook, loro hanno, Snapchat, no, Viber, e perché l'e-mail, l'e-mail è vecchia, è antica, perché..

D E poi è vero che scrivono - come scrivono ai propri amici scrivono anche ai professori, di solito, no, senza punti, senza virgole, non sai - o fa una domanda, o cosa vuoi, cioè senza la firma, poi sopra il nome, non so, X-Men, che ne so, ma chi sei, ho scritto a due: "Ma scusa, ma chi sei?" Cioè mi fanno domande: "Posso essere
interrogato?" Ma, cioè, ho 12 classi: ma chi sei? Cioè, fa un nome e un cognome, a parte che noi abbiamo messo che dovevano avere, tipo, l'e-mail scolastico: nome, cognome, no?

E Anche da noi.

D Ma poi si trovavano anche quelli che non avevano quel - l'e-mail scolastico, al che ho detto: "Guarda, non ti rispondo finché non mi scrivi dall'e-mail scolastico, almeno so con chi comunico", no?

E Ma è interessante che, ad esempio, io gli insegno già nel primo anno come si scrive, cioè, la forma della mail e poi quando la devono mandare non rispettano queste regole, cioè, la fanno così, come dicevate voi adesso.

D Sono anche abituati - io penso che anche, no, cioè, loro vedono, "ah, scrivo così agli amici, scriverò così", sono abituati senza punteggiatura e niente, cioè, no, poi io mi arrabbio anche con i miei figli, no, mi puoi mandare, se mi scrivi un messaggio normale, cioè, so che sai scrivere, me lo puoi mandare così che capisco subito, no? Però, non so, si scrive così, dicono, oggi - tipo, che sono all'antica, no, all'antica, no, non capisci che si scrive così, ma va bene, ma scrivilo in un modo normale o non ti rispondo, cioè..

B No, no, si scrive così quando si messaggia tra amici, no, nella corrispondenza personale si scrive così, quando si scrive a un professore non si scrive così, neanche quando scrivi un ricorso alla banca non scrivi così, quindi è indiscutibile, no.

E Appunto.

C Ma loro lo fanno solo se fa parte di un voto o qualcosa del genere, se gli conviene. Quello sì. Tutt'altro, non ci interessa. Va bene così, tanto capirà, quello che deve capire capirà, senza virgole, senza tutto, però con un ciao, alla fine.

A Sì, noi professori siamo materiale flessibile, no?

C In tutti i sensi.

D Quando scrivono i temi liberi, per esempio, dico: "Ma, ma mi puoi fare i paragrafi, almeno capisco?" "No, ma li devo fare anche qui, non è soltanto nello Sloveno?"

E Sì io dico, anche oggi ho detto, non è un - un cruccio, un problema nazionale Sloveno, i paragrafi, è globale, no? No, ma neanche per idea.

D E poi collegano paragrafi = Sloveno. In Italiano, ci devo - li devo mettere anche in Italiano? No, ma quando mai, cioè?

E E' vero, è vero.

I Quindi scusate la scuola non fornisce una formazione di questo tipo per gli studenti?
A Come dicevo prima, alle elementari le nostre generazioni scrivevamo, scrivevamo, scrivevamo, adesso non sono abituati nemmeno nella lingua slovena a scrivere molto. E allora, diciamo, c'è - c'è un grande problema anche, anche con loro, anche - anche nella lingua slovena, diciamo.

B La scuola insegna, sia la scuola primaria che la scuola secondaria, insegnano - c'è nella scuola secondaria anche una materia in cui - almeno negli istituti professionali e istituti tecnici, comunque, che insegna la corrispondenza: come si scrive e come si prepara, non so, una tesina e tutte queste cose. Come si scrive una mail lo imparano anche - imparano e reimparano, anche durante le lezioni di Sloveno, perché è una delle - uno dei testi che loro devono saper produrre. Solo che poi, quando si arriva a dover scrivere una mail a una professoressa, loro fanno differenza. Scrivono in un modo a un professore, ma scrivono in un altro modo a un
altro professore, c'è da dire anche questo, perché se tu non rispondi a un - a uno scarabocchio così, oppure se rispondi, non so, qualcosa tipo NON CAPISCO, qualcosa così, allora magari penseranno. Pure io non rispondo alle mail che non sono - di cui non si sa comunque chi sia l'autore, oppure mail di cui non posso capire il contenuto, come non correggo i temi che non sono leggibili, che sono scritti con un, con una calligrafia che non si riesce a leggere. Se io devo sforzarmi a leggere, non leggo. Praticamente, tu hai scritto questa cosa per me. Cioè non l'hai scritta nel tuo diario, I'hai scritta per me, io sono il destinatario, mostra un po' di rispetto, e sono sicura - cioè, i ragazzi imparano, non sono cocciuti. Cioè, loro fanno così perché sono abituati a fare così, no, e se noi li salutiamo: "Ciao! cos'hai fatto, cosa non hai fatto" e ci abbracciamo con loro sul corridoio non possiamo neanche aspettarci, magari, una corrispondenza formale, però se tu chiedi la corrispondenza formale loro impareranno, faranno ancora errori, ma io sono sempre dell'opinione che non possiamo solo esigere, ma dobbiamo prima dare, prima dire, anche se a noi sembra scontato che magari a 15 anni ci si debba sapere come si scrive una mail formale, però, se non lo sanno adesso ve lo dico, se non sapete, no, però mi aspetto che d'ora in poi magari rispettiate questa cosa.

A Sì ma, scusa, *Nome*, non correggi per il voto se è illeggibile la calligrafia?

B Se io non posso leggere, ovviamente no. Se io non riesco a leggere, neanche per la maturità. Certo che no, come, se non riesco a leggere? Se non riesco a leggere, *Nome*?

A Sì, sì, sì, sì, sì, ti capisco però da noi, eh, vabbè, ma i genitori verrebbero subito, scusa.
B A fare cosa? Gli faccio leggere a loro, leggete voi. Se non riesci a leggere.. Se io non posso leggere perché è scritto - non capisci che parola sia, ma non una, che magari puoi individuare. Ci sono dei componimenti scritti in modo illeggibile: se io non posso leggere, non - non leggo. Non posso correggere una cosa che non ho capito, che non ho letto. Ovviamente.

I Per quanto riguarda sia produzione che comprensione, vedete una differenza fra licei e istituti tecnici o professionali?

B Certo.

D Sì.

A Non rispondo. (Risata)

A No, non rispondo perché io non ho istituti tecnici.

B C'è una differenza eccome, c'è.

E Anch'io, quindi io non lo so.

B C'è, c'è, perché all'istituto tecnico oppure scuola professionale si iscrivono in genere i ragazzi con un profitto più basso nelle elementari, no, con preconoscenze più - più piccole, più deboli. Di solito non sono così bravi, no, come quelli che vanno al liceo. Sicuramente in tutte le materie. Il programma è più semplice, poi. Però ci sono, ovviamente, all'Istituto tecnico, per quanto riguarda I'Italiano, quelli che, avendo guardato i cartoni animati da piccoli, sono bravissimi in Italiano e superano sicuramente quelli del liceo che magari non hanno non si sono impegnati, no?

I singoli, chiaramente, possono esserci ovunque, dico, singoli a parte, dovendo fare una media, vedete una differenza?

Sì, sì, al liceo vanno meglio.

C Sì, c'è la differenza, sicuro.
D Ma sono anche più motivati, no? Non è soltanto una conoscenza dell'Italiano che sia migliore, ma loro sono più, cioè, motivati, vogliono voti più alti, vogliono andare alla facoltà, vogliono iscriversi e sanno che anche l'Italiano lo devono avere, cioè, un voto buono, se vogliono raggiungere quello che desiderano. Invece quelli della scuola professionale più o meno è: "Finisco i tre anni e vado a lavorare, ho l'Italiano due o ho cinque, io vado a lavorare", e già lì partiamo, no, io non posso dire: "guarda se avrai un voto migliore potrai, non so, andare a studiare medicina", no, quello finisce, 3 anni, va a lavorare, o avrà due o avrà cinque, no, in quel..

E Nessuno glielo chiederà.
D Sì, in quel - non vede che forse avrà, non so, clienti italiani, che gli servirà, perché ha 15 anni, 16. Neanch'io pensavo, a 15 anni, "Wow, che bello, devo studiare perché mi servirà". No, perché sei giovane, perché non ci pensi, perché pensi al sabato che uscirai, e adesso neanche questo non possono, no? Cioè, ci sono altre priorità.

C \(\quad\) Non gli interessa proprio.
D E quelli del liceo sanno, perché - cosa vogliono, quelli che sanno, però sanno che non gli serve, no, un voto migliore, almeno, io - da una parte li capisco, cioè sanno che andranno a lavorare e basta, no. lo vorrei un po' più di motivazione perché sinceramente una lingua ti serve sempre, ma non ci riescono a capirlo, sono troppo giovani, no, penso che sia soltanto una questione di età, di altre priorità.

C Solo che il problema dopo diventa quando queste persone, cioè, che sono all'istituto professionale di *posto* ci sono parecchi stranieri, no, che comunque già con lo Sloveno non ci siamo, figuriamoci con I'Italiano. E però la metà della classe di solito è quella motivata, con un obiettivo da raggiungere, no? Perché si sono per esempio iscritte per diventare estetiste, e quello vogliono farlo, e ce l'hanno voti buoni. E poi c'è la metà della classe così, e l'altra metà, come diceva *Nome*, senza obiettivo, proprio non vogliono saperne niente, giusto per passare quei tre o quattro anni per andarsene via e lavorare, eccetera, e poi qua ci sono due, diciamo, due parallele che proprio non - sono molto difficili anche da gestire in classe, e, non so se riesco a spiegarmi, però comunque quelli più bravi e motivati, diciamo, una parte di quelli, molte volte passa dall'altra parte. Molte volte, perché scende la motivazione, vedono che comunque ma, chissenefrega, tanto quello ha ragione, dobbiamo solo andare a lavorare, eccetera eccetera. Quello che io ho visto in questi - un paio d'anni che sto qua, è proprio questo. Questo è̀ il problema.

E Ma è anche perché noi insegnanti tendiamo a occuparci sempre con quelli più deboli, come ha detto prima *Nome*, che si scusa all'inizio anno, no, con quelli che..

B Sì. Anche perché - scende il livello, come diceva *Nome*, no, giustamente, perché ci sono quelli che veramente non, non arrivano al livello soglia, e poi ci sono quelli bravi che, a priori, si rendono conto di essere molto superiori a tutti gli altri. Quindi, "Io, che sono la più brava, mi devo impegnare per l'Italiano?" Son quattro anni di riposo. E ovviamente, no, quelli poi hanno voti eccellenti, ma magari in un'altra concorrenza, in un altro contesto, con un altro gruppo, loro si impegnerebbero, perché vorrebbero magari imparare di più, invece così sono di gran lunga, veramente, molto, molto più bravi di tutti gli altri, no, quindi.. Allora a me dispiace sempre per quelli che arrivano nella nostra scuola già magari buoni, una buona pasta da poter modellare, da poter impastare, invece li lasciamo lì, no?

E Sì, io ho uno studente, oggi - ha il papà fiorentino, faceva le barchette di carta, perché si annoiava, no?
A Chiaro.

I Un'altra cosa che volevo approfondire un attimo, ma questa, più che altro, dovete aiutarmi voi nel senso che è una cosa che in Italiano è leggermente diversa, proprio qui, come scuole, c'è una situazione di formazione differente, quindi, dicevamo prima ma poi abbiamo cambiato argomento in corsa, gli insegnanti abbiamo detto
che ricevono formazione? Perché non avevo capito se è un "ricevere" o "dovrebbero ricevere", ipoteticamente ma poi al dunque non si sa se avviene o meno. Cioè, la formazione dei docenti c'è, è costante?

B Sì, molte, sì sì, sì, viene offerto veramente molto, vari tipi di seminari, online, in presenza, tra noi insegnanti, con professori, docenti Italiani, con quelli dell'università, c'è di tutto, solo che la partecipazione è molto bassa da parte degli insegnanti..

I Perché non sono obbligatori?
B Non sono obbligatori, se magari anni fa - non so, parliamo di dieci o più anni fa, queste cose si svolgevano durante - in mattinata, durante le lezioni, e c'erano più persone, devo dire..

E Mamma mia..

B Perché poi la politica delle scuole, non so, da parte del ministero, e comunque, non ha più concesso, no, tutte queste assenze, quindi magari se c'era un approfondimento, un seminario, si faceva andare un insegnante di una scuola, e non tutti, non quattro o cinque ma uno, no, come rappresentante che poi avrebbe passato, no, avrebbe magari detto quello che ha sentito. E quindi si è cominciato ad organizzare questi eventi il venerdi pomeriggio, sabato mattina, martedi pomeriggio, e, mi sembra, di là in poi, non - sempre pochissimi quattro gatti, no, pochissime persone, veramente..

B No, dalle scuole no, perché siamo in pochi, no, l'Italiano, cioè, siamo in pochi, non so quanti, \(20-20\) insegnanti in tutta la Slovenia, forse 30 al massimo, non so, però siamo in pochi.

E No ma le scuole organizzano altri, no, tipo per..
B Sì, sì, sì, sì, per altre - altre tematiche sì, altre cose..
I Ma quindi da chi vengono organizzate se non dalla scuola?

A Dall'Università, per esempio, del Litorale, dall'Istituto..

B Sì, I'Istituto per l'educazione e l'istruzione poi anche dal - dall'Istituto di Cultura Italiana a Lubiana, parecchio, ogni anno, almeno una volta, sì, sì..

I Sono più teorici che pratici?
B Poi anche scuole di lingua italiana, online c'è tanto, veramente ci sono tanti seminari no, la scuola di Mondavio, la scuola di..

A Anche diverse case editrici, no, che - italiane, no, chiaro, per quel che riguarda l'Italiano, ecco.
B Sì, sì. Dipende, no, dall'interesse della persona, se vuoi puoi stare ogni giorno a fare qualcosa, no, cioè, veramente succede tanto, cioè, c'è un'offerta - l'offerta è vasta, però la partecipazione no, l'interessamento no.

I Okay, perché non vengono considerati utili? O semplicemente perché, giustamente anche, magari è una perdita di tempo nel momento in cui uno ha già un lavoro, una famiglia, altro da fare?

B Non è una perdita di tempo, perché questa sarebbe una grossa presunzione, no, pensare di sapere già tutto e pensare di, magari, poter partecipare a una cosa da cui non potrai trarre niente, no? In ogni cosa, anche la più mal organizzata, anche la più scarsa, sicuramente ti può dare qualcosa, ti può insegnare qualcosa. Se
nient'altro, ti può insegnare cosa non si deve fare, come non dev'essere, magari, una presentazione oppure un - no? Cioè..

C Sì, però comunque molte persone che io conosco hanno detto: "Che cosa andrò a fare lì, tanto si dicono sempre le stesse cose".

B Questo non è vero per niente.
C Però questa è la presunzione che hai detto tu, *Nome*, questa è la presunzione. Molte persone dicono così perché non sono - io dico che queste persone non sono aperte, proprio, sono proprio come i cavalli quando gli metti il paraocchi, che non possono vedere. Ed è vero, sono così, vanno per la loro strada, sanno tutto..

E E poi fanno ascoltare Gino Paoli a un tredicenne.

D Non ci passi su!
C Sì, sì, ma è così, è vero, è vero.

I E' utile che un docente si tenga aggiornato per quanto riguarda la ricerca che viene svolta nel suo campo?

A Certo.

B Sì, certo.

E Sì, certo.
I Okay, ma -
A Io dico sempre ai miei studenti che non devono avere la coscienza che dopo aver finito la facoltà finiranno di studiare, si inizia, e allora..
\(E \quad\) Sì, è vero.

I Ma, secondo voi, quella ricerca va di pari passo con la scuola o no?

A Dipende.

1 Da?

A Per esempio, io sono stata, forse adesso esagererò, però, sono stata molto critica per quel che riguarda la ricerca che è stata fatta, come è stato svolto, come sono state svolte - come è stata svolta la didattica dopo il primo periodo di Covid, la didattica a distanza. Secondo me dopo un paio - fare una ricerca è stata molto presuntuosa, e poi, far vedere i dati, non so su quali basi, e su - su un questionario svolto da noi - da noi insegnanti, non lo so, secondo me sono state svolte delle ricerche sulle basi, non molto, diciamo - così soltanto per far vedere che qualcosa è stato fatto. Ecco, io sono molto critica per quel che riguarda quella pubblicazione, che è stata fatta dal nostro ministero, o meglio, Istituto per l'educazione, perciò, ecco.. A volte poi qualche professore - me compresa - è un po' scettico per quel che riguarda queste ricerche.

I Okay. No, nel senso che io sto cercando di capire - adesso stavo cercando un pochino ditirare le fila, diciamo, e oggettivamente - ecco, se io dovessi fare tutta una serie di domande "Si" - "No", ecco, sarei interessata anche a quello, a capire, alla fine, se doveste propendere per un lato o per un altro su alcune - su alcuni argomenti, da che parte propendereste, nel senso che.. L'idea che io mi sono fatta da questa conversazione è che tutto, per esempio, anche solo il concetto di Literacy, legato alla pluralità, alla multimodalità, all'ambito digitale, sia poco applicabile nel concreto. Cioè, è tanta teoria, poca pratica.

\section*{APPENDIX 15 - ISL Focus Group transcription}

\section*{Collettivo Sì.}

I Questa è una cosa con cui siete d'accordo?
Collettivo Sì.

I Perfetto, quindi di fatto io ho lavorato due anni per andare a distruggere questa cosa, bene.

\section*{Collettivo (Risata)}

I Okay, ottimo. Quindi, sì, possiamo dire che non è qualcosa che viene già promosso nelle classi di lingua. Più no che sì. (Pausa) Mi serve qualcosa di vocale, perché non posso tradurre poi nel testo "hanno scosso la testa".

\section*{Collettivo (Risata)}

B No, adesso ci dispiace, no, dare 'ste risposte.

I No, ma io - no, no, ma preferisco una risposta chiara, mi serve, anche perché tutto sommato era dove stavo già andando io, quindi okay.

B No. No, si fa poco, cioè, non si può - o non siamo in grado di farlo, o non abbiamo la materia giusta per farlo, no, ripeto, in gruppi di, non so, corsi di lingua, università, forse il liceo, è un discorso. Però in queste classi di ragazzi con problemi in famiglia, con problemi - problemi con la legge, con problemi di concentrazione e di disciplina, tutto quanto, Literacy e multimodalità e cose, no? Siamo molto soddisfatti se loro sono lì, che non sono sulla strada, che trascorrono quell'ora, diciamo, in Italiano, no, che riescono a capire, che speriamo che magari qualcosa imparino per un futuro, no, lì poi non ci sono esami finali, magari, no? Non ci sono programmi rigidi da seguire. Lì si cerca di sopravvivere, diciamo, no? Si cerca di fare, di fare - non è una cosa poi sicuramente, al cento per cento negativa, no, si cerca di fare quello che a loro interessa di più, se a loro piace più il calcio, una classe di ragazzi, non parleremo di inquinamento, parleremo di calcio, no? Sempre - capito?

I No, ma io sono totalmente d'accordo, anche perché quello che la teoria solitamente richiede è che si tenga conto degli stili di apprendimento e di tutto questo tipo di cose qua, che, secondo me, sono anche utili, però non è che ogni classe che arriva la si può sottoporre a dei test per capire chi apprende meglio con una modalità, chi con un'altra, eccetera, quindi mi rendo conto che ovviamente non sia fattibile. Però in tutto questo la mia impressione è che la ricerca tenga molto poco conto poi..

B Della situazione reale.

I Della situazione, sì, cioè di chi ci si trova davanti..
Collettivo Sì.

I ..Del tempo che si ha e non si ha a disposizione, dei mezzi, perché per esempio moltissime ricerche ormai fanno, diciamo, più che altro casi studio con I'utilizzo del tablet, I'utilizzo del cellulare, I'utilizzo di Twitter, I'utilizzo di.. Per, magari, una classe di livello, che ne so, B1, eccetera. Però non è concreta come cosa, nel senso che non è quello che la scuola ha a disposizione tutti i giorni.

E Appunto.
I E quindi io quello stavo cercando di capire: è troppo, secondo voi, se io mi spingessi a dire che effettivamente c'è un gran divario fra i due mondi?

Collettivo C'è, sì, è vero.

I C'è? Perché io, alla fine, quello devo cercare di dire, effettivamente, se, secondo me e secondo le persone con cui parlo, lavorano di pari passo o no.

B No. C'è questo divario, c'è questa..

A E' evidente.

E Sì.

I Siete più o meno tutti d'accordo su questo?

\section*{Collettivo Sì.}

I Perfetto, okay. No, perché mi hanno già detto: "Bene, nel caso, esci con qualche idea che magari possa aiutare a ridurlo, questo divario". Uh-uh, sì, facilissimo. Non so da dove partire neanche io, perché stanno lavorando con, veramente, due mondi diversi a due velocità diverse, cioè, è molto difficile andare a capire su cosa lavorare per ridurre questo divario, se avete idee, sono aperta.

A Secondo me è molto utile anche se gli insegnanti si - cioè, sono più - cioè, è utile quando un insegnante è più più giovane.

E Sì, questo è vero.
A Ma c'è - mi dispiace, ma.. Diciamo, come persona anziana, adesso, un pochino scherzando, ma comunque. Sicuramente, no, si dovrebbe avere insegnanti più giovani, perché, anche se io ho avuto molte studentesse che hanno fatto pratica nelle mie - cioè, hanno fatto pratica, cioè, nella mia scuola e hanno fatto anche delle lezioni da sole, no, ma comunque erano più vicino a loro, cioè, avendo, non so, 22 anni, io ho 55 , è chiaro che il mio mondo è un mondo diverso dal loro. Allora, questo sicuramente potrebbe essere, però non è che tu puoi scegliere e aver solo insegnanti giovani, no? Okay, però sicuramente un ringiovanire il corpo insegnanti, secondo me sarebbe una cosa da fare.

D Io non sono proprio d'accordo, perché noi abbiamo anche qualche giovane che invece non sa controllare la classe, cioè..

A Noi non ce li abbiamo, mi dispiace.

E No, ma io sono d'accordo con *Nome*, perché, quando ho iniziato, 22 anni fa, mi sembravano carini, spiritosi. (Risata) Adesso mi stanno sulle - tantissime volte, no? Non li capisco.

D Ma poi dipende, perché molte volte, quando hai una certa esperienza, no, non è - sai anche, forse, gestirli meglio.

E Questa è una cosa, sì, sì.

D No, i giovani, molte volte - io mi ricordo me da giovane, no, molte volte, se, non so, facevano una cosa, la prendevo sul personale da giovane, cioè, come è possibile? Adesso so che non è niente di personale, non so, vogliono andare via l'ultima ora, non lo fanno perché non gli piaccio io come persona, ma, non so, Natale si avvicina, l'ultima ora e loro vanno, no? Molte volte, da giovane, reagisci, forse, in un modo inappropriato, che non gli piace, perché ho visto adesso, abbiamo una giovane di Inglese, e sono arrivata in due classi, "oooh", tutti! Ho detto: "Ma scusatemi, giovane, bella, cioè, se non altro state zitti e la guardate" - "Eh, no, perché poi lei si arrabbia, cioè, non possiamo dire la propria opinione, ci butta fuori", no? Da giovane forse non sai gestire qualche situazione che da un po' più vecchiotto sì, per esempio, no? Anche, reagisci male, non so, poi dipende. Non son proprio - non so, è vero che poi quando sarò vicina alla pensione, non so, tre anni, che avrò 60 anni,
sicuramente non ci capiremo per niente, perché proprio.. No? E spero di non sentirci bene in quel periodo. (Risata)

B Io sono dell'opinione che non tutto quello che si fa a scuola debba per forza piacere. Nessuno ha mai chiesto ai ragazzi se gli piaccia o meno la storia, se gli piaccia o meno la matematica, io non so perché stiamo così tanto svalutando I'Italiano, no, che per forza tutti i contenuti devono essere piacevoli, e si deve parlare del loro mondo, quando noi leggevamo, non so, Dostoevskij e così via, non c'entrava niente con il nostro mondo, eppure l'abbiamo letto tutti, abbiamo, non so, fatto le analisi dovute e tutto quanto, no? L'Italiano già da - ha uno, ha una posizione diversa da tutte le altre materie, anche musica ha una posizione più importante nel cioè, nel ragionamento degli insegnanti, del preside, anche delle elementari. Come se, cioè, non lo puoi bocciare in Italiano, no? Per dire, stiamo scherzando? Ha voti positivi in matematica, in storia, in Sloveno, in Inglese e lo vuoi bocciare in Italiano? Non esiste. L'Italiano è come - come una lingua secondaria, come una materia secondaria, no?

A E' una cosa superflua.

B E tutto quanto gli deve piacere, gli deve piacere l'insegnante, giovane e bella, gli deve piacere il contenuto, gli deve piacere tutto.. No, questo lo deve imparare, punto e basta, e devi lavorare, punto.

A Chiedo scusa, *Nome*, ma..

B Possiamo fare anche delle attività piacevoli, io adesso non sto difendendo una - un'educazione, un'istruzione rigida e tutto, si possono fare delle attività ovviamente piacevoli, ma anche da anziani, cioè, non è che.. Non condivido questa.

A Okay, mi stavo riferendo a Gino Paoli.

\section*{Collettivo (Risata)}

C Allora, siccome mi sento tirata un po' in ballo..
B Io gli ho fatto sentire parecchio Sfera ebbasta, per esempio, e molti ragazzi hanno apprezzato tantissimo, però la maggior parte dei ragazzi non - non conosce, no, per esempio, ma anche - anche altri

I Ci possono essere, appunto - perché poi avevamo parlato di qualche approccio, magari il CLIL, che può essere interessante, ma quello è un approccio che richiede, ovviamente, un diverso tipo di organizzazione e sostegno da parte, magari, della scuola, di altri progetti. Volevo capire se c'è qualche attività singola o di una, due ore, qualcosa che può essere stimolante e funzionare particolarmente bene, magari per una classe che abbia, non so, scarsa motivazione o..

A Secondo me amano molto, almeno, le mie classi, lavorare in gruppo. Amano molto lavorare in gruppo e se poi possono usare anche il telefonino - questa non è la mia idea, ma, per esempio, no, quando si fa la tematica dei mobili, dell'arredamento no, proprio in uno di questi seminari, diciamo, hanno, cioè, l'idea è partita da lì, che hanno preso la pagina di lkea, no, e hanno dovuto - i gruppi hanno dovuto arredare una stanza, no? Sicuramente gli è piaciuta molto, ecco. Per esempio, un'idea, no, che non è mia. Ma questo tipo di lavori sicuramente vanno bene

I Okay.
B Competizione - premio. Funziona.

A Sì, anche, perché alla fine poi il gruppo che ha ricevuto il voto - voto, nel senso, degli altri, dell'arredamento migliore, no..

B Quando io per esempio ho fatto questo - quest'ora con l'insegnante di storia, e si è parlato della scoperta dell'America, e c'era un dibattito, non so, tra 4-5 gruppi, o 3, non mi ricordo, non importa, ma comunque il premio erano questi prodotti americani, donuts, non so, patatine, no? Per il premio loro hanno - hanno stralavorato per ricevere quella - quella confezione di patatine, capito? Anche se è una cosa - adesso io non dico che noi li dobbiamo comprare con premi, ma qualsiasi tipo di premio, no, premio nel senso, non so, una lode, un voto, un lecca-lecca per il miglior gruppo, qualsiasi cosa, cioè, no? Il premio funziona, perché le generazioni di adesso sono così, no, io ti do, però tu mi devi dare il doppio.

A Sempre c'è la domanda "cosa ottengo da questo".
B Sì, sì, sì, lo faccio se otterrò profitto, altrimenti, sì, proprio così.
C Io sono d'accordo con *Nome*, però comunque, quello che vedo qua al Litorale, diciamo, che mi dicono i colleghi, i conoscenti, comunque io penso - sono d'accordo con loro, però penso che al di fuori di questi istituti professionali, eccetera, come avevamo detto prima, c'è, esiste sicuramente un'attività o un qualcosa che si possa fare, comunque da parte dell'insegnante, per avvicinare, diciamo, al tema di cui stiamo parlando, perché comunque sicuramente c'è, però comunque ci sono un paio di scuole qua al Litorale, istituto tecnico, questa media - scuola media di *posto*, scusate, e non so quale - che cosa ci sia ancora, e comunque, diciamo, tre, diciamo, quattro scuole medie, che, diciamo, hanno uno scarso livello di conoscenza, di competenze, eccetera, però comunque in generale, in generale se posso parlare, io penso che sono ottimista, penso che ci sia.

I Okay, qualche idea pratica da parte degli altri, magari? Qualche attività, qualche strumento che possa stimolare?

A Amano lavorare di fantasia.
I Okay, che concretamente significa proporre..?
A Per esempio, per esempio, c'è nel libro, c'è nel manuale che credo usiamo tutti, l'Intervista impossibile, okay? Per esempio: "chi vorresti..", almeno, nel nostro liceo ha funzionato: "Chi vorresti intervistare?" Diciamo, una persona che non è più viva o che non hai. E le domande che hanno posto, devo dire che sono risultate molto carine. Hanno molta fantasia.

Okay. Qualche ultima riflessione?

C Non so, la creazione di qualche - di qualche video o qualcosa del genere, però comunque sulla scelta del tema non da parte dell'insegnante, no, da parte loro, quello che gli interessa, creare qualche video o qualche sketch, o qualcosa del genere. Questo sicuramente gli darebbe una motivazione, penso, anche senza avere un premio alla fine, perché comunque penso che sia abbastanza vicina a loro come tecnologia.

A Secondo me anche devi conoscere - devi conoscere le loro capacità e attitudini perché alcuni amano filmarsi, e altri no. Non deve essere una costrizione, no, anche se diciamo - no, no, ma io ho avuto, diciamo, forse qualche anno fa. Queste sono generazioni che, va bene, amano farsi dei selfie, oppure anche no, no? Dipende, ma anche cogliere - per esempio, io ho avuto una classe dove erano - anche, adesso studiano - sono registi, attori, che sono diventati, poi hanno proseguito, no, che era - diciamo, per loro, no, fare un filmato in Italiano, no, ma devi conoscere abbastanza bene anche i loro interessi, no? Non è sempre fattibile quando hai 200 , non so, 120 alunni, no? O di più, non so nemmeno quanti ne ho.

B Di più.
A Sì, sì, non lo so, guarda, ho detto più o meno prossimamente un numero.

I Bene.

APPENDIX 15 - ISL Focus Group transcription

B Bene.

I Allora io intanto vi ringrazio. Vado a interrompere la registrazione intanto. Okay.

The aim of this appendix is to gather information regarding the context in which the present research took place and the normative references that regulate language teaching and learning in our areas of interest. The introduction (§) mentioned that this study sets out to analyse the concept of Literacy and its main facets in a formal language education environment. Since the general scope of language education can still be extremely vast, even when focus is on a specific concept such as Literacy, the area of investigation of the research was therefore limited to the teaching process within upper secondary schools. The languages involved are English as a Foreign Language (EFL) in Italy and Italian as a Second Language (ISL) in the bilingual area of the province of Koper in Slovenia. The following paragraphs provide an overview of the normative references that regulate English teaching in Italy and Italian teaching in that specific area of Slovenia, as well as the specific learning objectives established for both languages.

The reasons why this information can provide interesting and relevant insights into the research carried out are the following:
1. provides an overview of the context in which the present research took place, outlining the organization of the Italian and Slovenian school system, with particular attention to upper secondary schools;
2. describes the documents that regulate the learning of English as a Foreign Language in Italy and Italian as a Second Language in Slovenia. The definitions provided for some terms, as well as what they entail (such as the concepts of "indications" or "curriculum"), together with the organization of the documents themselves, can be helpful for readers to understand which aspects the normative references focus on. This provides a more precise framework for our documentary analysis;
3. reports the specific learning objectives established for English as a Foreign Language in Italy and Italian as a Second Language in Slovenia. This allows readers to obtain a more complete overview of the first research question (§3.2), which verifies whether the school system establishes specific learning objectives vis-à-vis literacy for foreign and second language learning, which ones, and consequently analyses the relationship that exists between said objectives and the conclusions drawn from the most recent language education studies in the field, especially when it comes to the development of multilayered, digital and multimodal literacies.

\subsection*{2.1 The Italian context}

In Italy, the school system is organised into two main cycles of education. The first cycle of education is organised into two consecutive and compulsory school levels:
- primary school ("scuola elementare"), lasting five years, for pupils aged 6 to 11;
- lower secondary school ("scuola media"), lasting three years, for pupils aged 11 to 14.

At the end of lower secondary school, pupils have access to the second cycle of studies, also referred to as the upper secondary school. This cycle, which is the one we that will be focussed on, is composed of two strands: the five-year strand with Licei and technical and professional schools, lasting five years, and the three-year strand for vocational training (which contemplates an additional fourth year, should students choose to continue their studies). To fulfil the right and duty of education and training, it is necessary to obtain a qualification lasting at least three years by the age of eighteen. It was decided to focus on the first strand, for students aged fourteen to nineteen.

\subsection*{2.1.1 Licei in Italy}

The Licei aim to provide students with the cultural and methodological tools to understand reality, face situations, phenomena and problems with a rational, creative, planning and critical attitude and acquire knowledge, skills and coherent competences suitable for the continuation of higher-level studies, insertion into social life and the world of work. All Licei last five years and are divided into two two-year periods followed by a fifth year, at the end of which students take the state exam, and subsequently decide whether they want to pursue their studies further at university or not. There are six types of Licei, some of which are in turn organised into various curricula or provide different options (i.e. study plans that differ from the main one):
- Liceo Artistico (Artistic studies);
- Liceo Classico (Classical studies);
- Liceo Linguistico (Language studies);
- Liceo Musicale e coreutico (Musical studies);
- Liceo Scientifico (Science studies - Applied sciences option); and
- Liceo delle Scienze Umane (Human sciences - Socio-economic option).

\subsection*{2.1.2 Technical and Professional schools in Italy}

Technical schools guide students to achieve the necessary skills to work in the technical professions related to different productive sectors. In addition, the students also develop the necessary knowledge to continue their studies at university level and in the field of higher technical training, should they choose to do so. There are two types of technical schools:
- Istituto Tecnico Economico (Economic studies); and
- Istituto Tecnico Tecnologico (Technological studies).

These are organised into a total of eleven curricula \({ }^{1}\). They all last five years and are divided into two two-year periods followed by a fifth year, at the end of which students take the state exam in order to obtain the diploma of technical education. With the Technical School diploma it is possible for them to continue their studies, especially in scientific, technological and economic degree courses, or to further specialise in higher technical schools.

Finally, professional schools prepare students with the knowledge and skills required for the diverse reference production sectors.

In these schools students acquire the skills needed for a a rapid transition into the world of work and which are certified and recognised at a national and European level. All professional schools

\footnotetext{
\({ }^{1}\) Istituto Tecnico Economico:
- "Amministrazione, finanza e marketing"
- "Turismo"
}

Istituto Tecnico Tecnologico:
- "Meccanica, meccatronica ed energia"
- "Trasporti e logistica"
- "Elettronica ed elettrotecnica"
- "Informatica e telecomunicazioni"
- "Grafica e comunicazione"
- "Chimica, materiali e biotecnologie"
- "Sistema moda"
- "Agraria, agroalimentare e agroindustria"
- "Costruzioni, ambiente e territorio". Ministerial Directive 4 of 12 January 2012, p.3.
last five years as well and are divided into two two-year periods followed by a fifth year. The students take the state exam in the final year to receive the professional education diploma. This allows the students to pursue university studies if they so wish.

\subsection*{2.2 EFL normative references}

Law number 53 of 28 March 2003 introduces "alphabetization in at least one language of the European Union in addition to the Italian language", subsequently indicated with an explicit reference to the English language by Law Decree number 59 of 19 February 2004, from the first year of primary school to which is added "a second foreign language of the European Union" in lower secondary school (Saccardo, 2016).

On 15 March 2010 the Regulations for the reorganization of Licei, Technical and Professional Schools were issued together with the relative National Indications for Licei and Guidelines for Technical and Professional Schools. These regulations \({ }^{2}\), which were then followed by further supplementary documents (see below) serve as the normative references which regulate the specific learning objectives established for Licei and Technical and Professional schools, respectively. The specific learning objectives are contained in the National Indications for Licei, while the learning outcomes for the Technical and Professional Schools are expressed in terms of skills and knowledge, always in line with the respective educational, cultural and professional profile.

The normative documents which regulate the teaching of EFL in Italy were analysed, and what emerged from this documentary analysis, compared with the reference literature presented in Chapter 1, provided us with an overview of the situation regarding EFL teaching in Italy (and allowed us to answer our first research question, see \(\S 3.2\) and 4.1). These documents are the following:
- the MIUR-MEF Interministerial Decree number 211 of 7 October 2010;
- the Ministerial Directive 4 of 16 January 2012

Two more texts, which add to Ministerial Directive 4, were later included in the analysis:

\footnotetext{
\({ }^{2}\) Author's note: Presidential Decrees number 87, 88 and 89 of 15 March 2010.
}
- Legislative Decree number 61 of 13 April 2017; and
- Decree number 92 of 24 May 2018.

\subsection*{2.2.1 Licei and English as a Foreign Language}

The National Indications (INDICAZIONI NAZIONALI - MIUR-MEF Interministerial Decree number 211 of 7 October 2010) describe the specific learning objectives established for upper secondary schools and represent the disciplinary declination of the students' educational, cultural and professional 'Profile' to be reached at the end of the schooling. The use of the term "Indicazioni" signals that the prescriptiveness and rigidity found in to the previously used term 'Programmi' namely programmes to be applied in the same way in all classes throughout the country (Saccardo, 2016) - have been removed. The 'Profile' and said 'Indications', therefore, together with the accompanying 'Guidelines' drafted for each discipline with a description of the skills and learning objectives expected of the students at the end of each year of the school course, constitute the starting point from which schools propose their own educational plan and teachers elaborate their own curricula. Through these, students are enabled to achieve the learning objectives established for each subject as well as to mature the skills and competences associated with the different upper secondary school curricula.

As for the term 'curriculum', which each school has a responsibility to draft, it is seen as the design and implementation of the goals necessary for the development of said skills and learning objectives, taking into account the pedagogical vision, organizational structures and methodologies that best allow effective learning, not so much to pupils in an abstract sense, but to pupils of that specific class.

The decision to highlight the skills that students are expected to develop within the general framework provided for each discipline on the one hand, and to delineate the specific learning objectives to reach by combining the different aspects that come into play when acquiring said skills on the other, comes in continuity with the indications for the curriculum of the first cycle currently in force.

For each discipline, the General guidelines are introduced, followed by the specific learning objectives, articulated by disciplinary units and organised per year.

The first two-year period is aimed at an introductory detailed study and development of knowledge and skills but also at the initial maturation of those specific skills that characterise the
individual sections of the upper secondary school system (Article 3) as well as the fulfilment of the educational obligation, as per the adopted regulation (decree of the Minister of Public Education number 139 of 22 August 2007). The goals of the first two years, aimed at safeguarding the identity of each specific course and at guaranteeing the achievement of an equivalent threshold of knowledge, skills and competences at the end of the compulsory education in the entire training system, are also pursued through verification phases and possible integration of the knowledge, skills and competences achieved at the end of the first cycle of education, when necessary \({ }^{3}\).

The contents of the cultural axes provided for in the annex to the relative ministerial decree, in fact, represent an appropriate attempt at verticalization of the curriculum, aimed at achieving a "base of knowledge and skills" common to all upper secondary schools, from licei and technical and professional schools to vocational education and training. Such a common base, therefore, will eventually be contextualised, integrated and developed according to the specificity of the educational institutions. The national indications have been calibrated taking into account the strategies suggested in the European offices for the purpose of building the so-called knowledge society, as well as the reference frameworks of national and international surveys and their results \({ }^{4}\).

The Profile also indicates the learning outcomes that upper secondary institutions are supposed to share, divided into five different areas (methodological; logical-argumentative; linguistics and communication; humanistic-historical; scientific, mathematical and technological) and, finally, describes the specific outcomes of each upper secondary course. These are partly "transversal" outcomes, which the various disciplines contribute to, and which constitute the ideal framework for the individual offer plans of each school \({ }^{5}\). They therefore establish the fundamental objectives that every educational institution is called upon not only to achieve, but to enrich. The

\footnotetext{
\({ }^{3}\) Decree 22 August 2007, number 139: Regulation containing rules on the fulfilment of the education obligation, pursuant to article 1, paragraph 622, of law n. 296 and article 2 paragraph 4 of the upper secondary school regulations.
\({ }^{4}\) OECD PISA surveys (reading, mathematics and science skills for 15 -year-olds); IEA TIMSS ADVANCED (mathematics and science in the last year of upper secondary schools), INVALSI (national test of Italian and mathematics during primary school and during the state exam at the end of the first cycle).
\({ }^{5}\) Author's note: in Italian, "Piano dell'Offerta Formativa".
}
articulation of the indications for study subjects aims to highlight how each discipline - with its own contents, its heuristic procedures, its own language - contributes to integrating an acquisition path made up of multiple knowledge and skills.

The acquisition of digital skills is also mentioned as the result of work "in the field" in all disciplines. The use of Information and Communication Technologies (ICTs), in fact, is considered instrumental to improving classroom work and as a support to the study process itself, to the verification, research, recovery and personal insights of students.

The Indications do not dictate pedagogical methods, thus leaving schools and teachers free to choose which strategies and methodologies to opt for in order to reach the required skills, and to integrate and enrich what is established on the basis of the specificities of the individual secondary-school courses.

This is what Annex A of the Decree claims, in the introductory note to the National Indications. Annex B then proceeds to describe each type of upper secondary school (with its relative curricula): each discipline is cited individually, dividing between "General lines and skills" and "Specific learning objectives" for the first two-year period, as well as for the second one and for the fifth and final year.

With regard to learning English as a Foreign Language, the pupils are expected to develop linguistic-communicative skills as well as knowledge relating to the cultural universe linked to the target language. The achievement of at least a B2 proficiency level of the Common European Framework of Reference for languages is the goal of the entire upper secondary school course. In the general guidelines, while the basic skills are considered, the word "literacy" never appears, nor do the multiple abilities and competences related to it, or the idea that this set of skills is fundamental for an active and multifaceted participation of the individual within the community. As for digital skills, we read that students are expected to be able to use new information and communication technologies in order to deepen study topics and to use new technologies to do research, expand topics of a non-linguistic nature, express themselves creatively and communicate with foreign interlocutors.

This summary of general guidelines and learning objectives applies to all the various curricula of the different Licei', with the exception of Liceo Linguistico (Language studies), which focusses on language learning and where the description of the gradual skill acquisition becomes slightly more specific and breaks down how, from two-years to two-years, pupils will gradually come to master a B2 level. The guidelines and learning objectives related to the second and third foreign languages taught are also described. If compared, they do not detach excessively from the delineations provided for the first foreign language (which is usually English), except for the fact that the achievement of a final B1 level is expected instead of B2, and therefore of less articulated language skills. The same applies to the Economic and Social curriculum of Liceo delle Scienze Umane (Human Sciences), which provides for the teaching of an additional second foreign language. In both cases it is specified that virtual and face-to-face exchanges, visits and study holidays (either group or individual ones), training internships in Italy or abroad (in cultural, social, productive, professional realities) can be integrated into the upper secondary school course.

\subsection*{2.2.2 Technical and professional schools and English as a Foreign Language}

As regards Technical schools, they are regulated by the Ministerial Directive 4 of 16 January 2012, and, in continuity with the Guidelines concerning the first two-year period \({ }^{7}\), the document is not intended as a prescriptive 'ministerial program', but rather means to support the autonomy of educational institutions, for an adequate definition of the training offer plan and an effective organization of the curriculum. With this in mind, the curricular contents expressed should be perceived as a basis of reference for the specific didactic planning of each school, class and teaching approach; they must therefore be taken not so much as regulations but as a starting point for an in-depth reflection on the part of all the operators involved. The amount of teaching hurs dedicated to the General Education Area (Italian Language and Literature, English

\footnotetext{
\({ }^{6}\) Liceo Artistico - Arti figurative; Architettura e ambiente; Design; Audiovisivo e multimediale; Grafica; Scenografia. Liceo Classico.

Liceo Musicale e Coreutico.
Liceo Scientifico - Standard; Scienze applicate.
Liceo delle Scienze Umane - Standard; Economico-Sociale.
MIUR-MEF Interministerial Decree number 211 of 7 October 2010, pp.3, 32
\({ }^{7}\) Guidelines referred to in the single technical document, an integral part of the following directives, made in application of article 8, paragraph 3, of the Decree number 88 of 15 March 2010.
}

Language, History, Mathematics, Motor and Sports Sciences, Catholic Religion or alternative activities), wider in the first two years (with a total of 660 hours per year), decreases in the second two years and in the final fifth year (495 hours per year), as more time is dedicated to curricula-specific disciplines.

When it comes to EFL, pupils are expected to master a B1 level of the Common European Framework of Reference for Languages (CEFR) by the end of the first two-year period and a B2 level by the end of their studies. The list of skills and competences dictated by the guidelines changes according to the different curricula in the second two-year period and in the fifth year, focussing on curricula-specific skills, whether it is knowing how to use company information systems or designing and presenting tourism services or products, and so forth. The learning of a second (and sometimes third) community language in some curricula of technical-economic (Administration, finance and marketing; Tourism) and professional (Commercial services; Services for food and wine and hotel hospitality; Social and health services) schools is regulated by different sections of the document.

Strengthening of the foreign language competence is recommended, with particular attention to the knowledge of technical English. The English language is approached together with the Italian one as part of the linguistic-communicative skills that students are expected to develop so that they can interact in any context of daily and professional life, identify problems and propose solutions, and, specifically, analyse in depth the main scientific, technological and economic issues related to each curriculum.

An entire paragraph concerns the teaching of a non-linguistic discipline (in Italian, Disciplina Non Linguistica or DNL) in English in the fifth year of the Technical schools, or CLIL - Content and Language Integrated Learning, where the foreign language acts as vehicular language (provided for by art.8, c. 2 lett. b of Presidential Decree 15 March 2010, number 88), calling it a significant innovation. The discipline is chosen by the teaching body on the basis of the resources available. It is explained that it is not simply a question of teaching a subject 'in English' or of a variety of language education that uses sector-specific linguistic material. CLIL works as a "cognitive laboratory" which allows for the development of knowledge and procedures that belong to the two disciplinary fields in a contextualised path in order to improve motivation and project students towards a professional dimension. The methods of carrying out CLIL teaching are
currently entrusted to the autonomy of schools which can, on the basis of the resources available, activate modular or project-based courses, plan them on the entire number of annual hours or on part of it, and provide for the of mother tongue teachers of the DNL to support the teaching activity.

Two successive decrees integrate the previous provisions, in the name of the new organization of study courses. With the Legislative Decree number 61 of 13 April 2017, professional schools have become territorial schools of innovation, conceived as laboratories for research, experimentation and didactic innovation. Starting from the 2018/19 school year, they offer eleven study courses, a new organizational and teaching model and the strengthening of laboratory activities. They train students in arts, crafts and professions that are strategic for the country's economy \({ }^{8}\).

At the same time as the activation of the new professional schools, the previous systems are active for the second, third, fourth and fifth-year-students until the five-year course is exhausted in 2022. The new courses, in line with European guidelines, aim to participate in the training of the citizen in the knowledge society and tend to value, essentially, the person in their working role. Such professional education is supposed to result in a competent person, aware of the potential and limits of the technical tools of transformation of reality, attentive to an ever wider use of technologies. The learning outcomes expected at the end of the five-year study course allow students to quickly enter the world of work, to continue in any higher technical education and training system, in university courses, as well as in the study and work paths planned for the access to the register of technical professions according to the regulations in force. During the five-year period, therefore, a permanent orientation must be ensured that favours well-founded and conscious choices on the part of the students.

A premise is made according to which the didactic model which Legislative Decree 61/2017 is inspired by is based on an overall rethinking of tools and methods, in the awareness that the substantial weakening of the sector in recent years is due not only to the legal structure, but also

\footnotetext{
\({ }^{8}\) a) Agricoltura, sviluppo rurale, valorizzazione dei prodotti del territorio e gestione delle risorse forestali e montane; b) Pesca commerciale e produzioni ittiche; c) Industria e artigianato per il Made in Italy; d) Manutenzione e assistenza tecnica; e) Gestione delle acque e risanamento ambientale; f) Servizi commerciali; g) Enogastronomia e ospitalità alberghiera; h) Servizi culturali e dello spettacolo; i) Servizi per la sanita' e l'assistenza sociale; l) Arti ausiliarie delle professioni sanitarie: odontotecnico; m) Arti ausiliarie delle professioni sanitarie: ottico". Legislative Decree n. 61 of 13 April 2017, p.5.
}
to a partial or lack of innovation in the methodology of approach to the teaching and learning process \({ }^{9}\). This decree confirms the importance of enhancing and developing language skills, with particular reference to Italian as well as to English and other languages of the European Union, also through the use of the CLIL methodology. The importance of the use of networks and IT tools for accessing the web and social networks in the activities of study, research and in-depth analysis is also mentioned.

As for Decree number 92 of 24 May 2018, pursuant to Article 3, paragraph 3 of Legislative Decree number 61, it regulates the output profiles of the eleven study courses of professional education and the related learning outcomes, declined in terms of competences, abilities and knowledge of the different cultural axes, and delineates the timetables articulation. Here the transition to the new organisation is explained, indications for the activation of the new courses as well as the definition of the three-year training offer plans are provided, and an exit profile from each curriculum is outlined. Another interesting aspect concerns the fact that article 2 of the Decree is dedicated to providing a whole series of definitions, including that of "competences", "learning unit" and the distinction between "formal learning", "non-formal learning" and "informal learning".

Reference competences are then proposed, concretised according to the various cultural axes (linguistic, social-historical, scientific-technological) in different skills and knowledge, before going on to enumerate the skills envisaged for the individual courses of study and an overview of the number of hours per axes and subjects in the various courses, divided into the first two years and final three years. However, since the disciplines are merged into cultural axes, the tables provided focus on lists of skills and competences that are not specific, but rather transversal. It is explicitly specified that the objective of this decree, therefore, is not to foresee learning objectives in terms of distinct competences for each discipline, but to start from the competences contained in the Outgoing Educational, Cultural and Professional Profile of upper secondary schools (or PECUP), leaving room for schools to choose specific strategies, methods and tools.

\footnotetext{
\({ }^{9}\) "il modello didattico a cui si ispira il decreto legislativo 61/ 2017 è basato su un ripensamento complessivo di strumenti e metodi, nella consapevolezza che il sostanziale indebolimento del settore negli ultimi anni sia dovuto non solo alla struttura ordinamentale, ma anche ad una parziale o mancata innovazione nella metodologia di approccio al processo di insegnamento e apprendimento". Legislative Decree n. 61 of 13 April 201, p.10.
}

\subsection*{2.3 EFL Specific Learning Objectives}

The aim of this paragraph is to summarise the key points of the specific learning objectives established for EFL in Italian Licei and technical and professional schools. For the sake of our first research question (see paragraph §3.2), particular attention will be paid to whether and to what extent the concept of Literacy is taken into account together with some of its many facets, including multimodality, new forms of literacy and digital technologies.

\section*{a. Licei}

According to the MIUR-MEF Interministerial Decree, the study of foreign languages and cultures must proceed along two interrelated axes: the development of linguistic-communicative skills and the development of knowledge of the cultural universe linked to the target language. The general guidelines and skills that are to be developed in the language classroom are initially outlined for all Licei and for all their curricula, followed by the specific objectives divided into the first two-year period, the second two-year period and the final fifth year.

During the five-year course, students are expected to acquire the ability to understand oral and written texts relating to issues of both personal and educational interest (touching literary, artistic, musical, scientific, social and economic fields); to produce oral and written texts in order to report facts, describe situations, argue and support opinions; to interact in the foreign language in an appropriate manner, adjusting to both the interlocutors and the context; to analyse and interpret aspects related to the culture of the countries whose language is being learned, paying attention to topics which might be common to several other disciplines. The added value consists in the conscious use of effective communication strategies and in a conscious reflection on the system and on linguistic uses, as well as on cultural phenomena. In addition, opportunities for the use of the foreign language will gradually be created for the oral and written understanding and reworking of contents of non-linguistic disciplines \({ }^{10}\).

\footnotetext{
\({ }^{10}\) "durante il percorso liceale lo studente acquisisce capacità di comprensione di testi orali e scritti inerenti a tematiche di interesse sia personale sia scolastico (ambito letterario, artistico, musicale, scientifico, sociale, economico); di produzione di testi orali e scritti per riferire fatti, descrivere situazioni, argomentare e sostenere \({ }^{\text {opinioni, }}{ }^{10}\) di interazione nella lingua straniera in maniera adeguata sia agli interlocutori sia al contesto; di analisi e
}

Learning strategies are briefly taken into account (albeit not in depth), but their role is approached in different ways in the various phases of upper secondary education. During the first two years, learners are expected to reflect on foreign language learning strategies in order to develop learning autonomy \({ }^{11}\). In the second two years, on the other hand, they are supposed to reflect on knowledge, skills and strategies acquired in the foreign language while paying attention to whether, and to what extent, they can be transferred to other languages \({ }^{12}\). Finally, in the fifth and final year they consolidate their foreign language study method in order to be able to approach non-linguistic content, consistently with the cultural axis that characterises each Liceo and according to the development of personal or professional interests \({ }^{13}\).

In the section that follows the linguistic-communicative one, dedicated to cultural aspects, information and communication technologies are also mentioned: without ever getting to the concept of digital literacy, which is not taken into consideration, it is said that students will use new information and communication technologies to deepen study topics and to do research, expand topics of a non-linguistic nature, express themselves creatively and communicate with foreign interlocutors \({ }^{14}\).
interpretazione di aspetti relativi alla cultura dei paesi di cui si parla la lingua, con attenzione a tematiche comuni a più discipline. Il valore aggiunto è costituito dall'uso consapevole di strategie comunicative efficaci e dalla riflessione
sul sistema e sugli usi linguistici, nonché sui fenomeni culturali. Si realizzeranno inoltre con l'opportuna gradualità anche esperienze d'uso della lingua straniera per la comprensione e rielaborazione orale e scritta di contenuti di discipline non linguistiche." MIUR-MEF Interministerial Decree number 211, pp. 15, 47,77, 107, 137, 167, 203, 234, \(288,330,357,398,429\). Translation by the author.

11 "riflette sulle strategie di apprendimento della lingua straniera al fine di sviluppare autonomia nello studio". MIUR-MEF Interministerial Decree number 211, pp. 16, 47, 77, 107, 137, 167, 204, 235, 263, 289, 330, 357, 399, 430, 432. Translation by the author.

12 "riflette su conoscenze, abilità e strategie acquisite nella lingua straniera in funzione della trasferibilità ad altre lingue". MIUR-MEF Interministerial Decree number 211, pp. 16, 48, 108, 138, 168, 204, 235, 261, 289, 331, 358, 399, 430. Translation by the author.

\footnotetext{
\({ }^{13}\) "il quinto anno del percorso liceale serve a consolidare il metodo di studio della lingua straniera per l'apprendimento di contenuti non linguistici, coerentemente con l'asse culturale caratterizzante ciascun liceo e in funzione dello sviluppo di interessi personali o professionali". MIUR-MEF Interministerial Decree number 211, pp. 16, \(48,108,138,168,204,235,289,331,358,399,430\). Translation by the author.

14 "utilizza le nuove tecnologie dell'informazione e della comunicazione per approfondire argomenti di studio" and "utilizza le nuove tecnologie per fare ricerche, approfondire argomenti di natura non linguistica, esprimersi
}

Basically, the decree approaches the teaching of English as a foreign language in the same way for all curricula, with the exception, once again, of Liceo Linguistico (Language studies), where the description is slightly more detailed and followed by the general guidelines and specific objectives concerning the teaching of two other foreign languages.

\section*{b. Technical and professional schools}

As for Technical schools, regulated by the Ministerial Directive 4 of 16 January 2012, the language teacher is expected to help the students achieve, at the end of the five-year course, learning results such as being able to: use the sectoral languages of the target foreign language in order to interact in different fields and contexts of both study and work; establish links between local, national and international cultural traditions both in an intercultural perspective and for the purposes of study and work mobility; identify and use modern forms of visual and multimedia communication, also with reference to expressive strategies and technical tools for online communication; use IT networks and tools in study, research and disciplinary study activities; know how to interpret one's own independent role when it comes to teamwork \({ }^{15}\). The gradual acquisition of sectoral languages is to be guided by the teacher, who will link it appropriately to other linguistic and curricular disciplines, explore the specific vocabulary and the particularities of the technical, scientific, economic discourse, and carry out activities through the Content and Language Integrated Learning (CLIL) methodology. To carry out communication activities related to the different study and work contexts, the tools of multimedia and digital communication are also used. The articulation of English language teaching between the second two-year period and the fifth year is organised by listing expected outcomes in terms of knowledge and skills, generally based on the B2 level of the CEFR, as an

\footnotetext{
creativamente e comunicare con interlocutori stranieri" MIUR-MEF Interministerial Decree number 211, pp. 16, 48, \(108,138,168,205,236,262,289,331,358,400,431\) and \(17,49,78,109,139,169,205,236,262,290,332,359\), 400, 431. Translation by the author.
}

\footnotetext{
15 "utilizzare i linguaggi settoriali delle lingue straniere previste dai percorsi di studio per interagire in diversi ambiti e contesti di studio e di lavoro; stabilire collegamenti tra le tradizioni culturali locali, nazionali ed internazionali sia in una prospettiva interculturale sia ai fini della mobilità di studio e di lavoro; individuare ed utilizzare le moderne forme di comunicazione visiva e multimediale, anche con riferimento alle strategie espressive e agli strumenti tecnici della comunicazione in rete; utilizzare le reti e gli strumenti informatici nelle attività di studio, ricerca e approfondimento disciplinare; saper interpretare il proprio autonomo ruolo nel lavoro di gruppo", Ministerial Directive 4 of 16 January 2012, p.27. Translation by the author.
}
orientation for each teacher's planning, in relation to the choices made in the context of collegiate programming of the 'consiglio di classe \({ }^{16}\). Both the general guidelines and the specific lists of competences vary, however, to better meet the expected learning outcomes established for the different curricula, but generally speaking they concern knowing how to master the target language for communicative purposes; using company information systems; drawing up technical reports; identifying and using the most appropriate communication and team working tools; designing, documenting and presenting tourism services or products; using and producing visual and multimedia communication tools \({ }^{17}\).

The description for Professional schools is slightly different, given that, to the expected results already mentioned, we add the fact that students are supposed to be sensitive to the differences in culture and attitude of the interlocutors, in order to provide a service that, within the scope of each curriculum, takes the recipient into account and is, therefore, as personalised as possible. Also, students are supposed to to develop (and be able to express) their interpersonal, communicative, listening and cooperation skills, as well as a sense of responsibility in exercising their role.

As for Legislative Decree number 61 of 13 April 2017, it describes the didactic structure of professional schools, characterised by the personalization of the learning path, by the aggregation of disciplines within cultural axes, by the prevalent use of didactic methodologies for inductive learning and by the organization of learning units, among others.

The Decree also quotes Article 1, paragraph 7, of Law number 107 of 2015 (also mentioned in the note to article 5 of the Decree number 92 of 24 May 2018). Points a) and h) specify the importance, respectively, of:

\footnotetext{
\({ }^{16}\) Author's note: "Consiglio di classe", or Class council, is a collegial body in which the different school components (teachers, parents and students for upper secondary schools) meet to plan and constantly evaluate educational and didactic action.
\({ }^{17}\) "padroneggiare la lingua inglese e, ove prevista, un'altra lingua comunitaria, per scopi comunicativi e utilizzare i linguaggi settoriali relativi ai percorsi di studio, per interagire in diversi ambiti e contesti professionali, al livello B2 del quadro comune europeo di riferimento per le lingue (QCER) x utilizzare i sistemi informativi aziendali e gli strumenti di comunicazione integrata d'impresa, per realizzare attività comunicative con riferimento ai differenti contesti \(x\) redigere relazioni tecniche e documentare le attività individuali e di gruppo relative a situazioni professionali x individuare e utilizzare gli strumenti di comunicazione e di team working più appropriati per intervenire nei contesti organizzativi e professionali di riferimento", Ministerial Directive 4 of 16 January 2012, p. 27. Translation by the author.
}
a) enhancing and developing language skills, with particular reference to Italian as well as the English language and other languages of the European Union, also through the use of the CLIL methodology;
h) developing students' digital skills, with particular regard to computational thinking, the critical and conscious use of social networks and media, as well as production and links with the world of work. \({ }^{18}\)

The Decree also describes what the students are expected to be able to do at the end of their studies. Some of the most relevant aspects for the sake of our research concern the ability:
- to use the cultural and methodological tools acquired to develop a rational, critical and responsible attitude towards reality, also for the purposes of lifelong learning;
- to use the networks and IT tools for accessing the web and social media for research and in-depth study activities, and master the use of technological-digital tools;
- to be able to actively participate in social and cultural life and evaluate one's skills and interests.

Other aspects, mentioned by the Decree but also by the Ministerial Directive, are dealt with more in depth in Decree number 92 of 24 May 2018, which proposes a whole series of reference competences, presented according to cultural axes, skills and abilities, before proceeding with a brief description of the different curricula. Among the most interesting competences, we see that students are expected to be able to:
- "Identify and use modern forms of visual and multimedia communication, also with reference to expressive strategies and technical tools of network communication", which, in the linguistic axis, translates into using digital technologies for the presentation of a project or product in Italian or in a foreign language;
- "Use the sectoral languages of the foreign languages envisaged by the study paths to interact in different fields and contexts of study and work", which, in the linguistic axis,

\footnotetext{
18 "a) valorizzazione e potenziamento delle competenze linguistiche, con particolare riferimento all'italiano nonché alla lingua inglese e ad altre lingue dell'Unione europea, anche mediante l'utilizzo della metodologia Content language integrated learning;"
"h) sviluppo delle competenze digitali degli studenti, con particolare riguardo al pensiero computazionale, all'utilizzo critico e consapevole dei social network e dei media nonché alla produzione e ai legami con il mondo del lavoro". Ministerial Directive 4 of 16 January 2012 p. 20. Translation by the author.
}
translates into understanding the main points of oral texts in the language, understanding autonomously, in a comprehensive and analytical way, relatively complex written texts, participate in conversations or discussions, write fairly detailed texts, and so forth;
- "Establish links between local, national and international cultural traditions, both in an intercultural perspective and for the purposes of study and work mobility", which, in the linguistic axis, translates into being able to identify and use a range of strategies to communicate effectively with speakers of the target language from different cultures \({ }^{19}\).

In a more specific illustration of the individual curricula, the student is expected, at the end of the five-year course, to achieve the learning outcomes common to all the courses and listed in the reference competences, in addition to the specific learning outcomes of the exit profile, which are listed in terms of competencies, minimum skills and essential knowledge.

\subsection*{2.4 The Slovenian context}

Italian is a Second Language for students from the ethnically mixed environment of Slovenian Istria, an area that allows for people of both ethnic groups to meet in their daily activities. Presence of native Italian speakers, mostly members of the minority ethnic group, creates the conditions for the direct use of Italian outside of school. When the Republic of Slovenia became independent in 1991 it undertook, with the Act of Succession, to continue to observe the provisions of the Treaty of Osimo (1975) which, moreover, also contains essential provisions of the Special Statute, such as additions and appendices contained in the London Memorandum of Understanding of 1954. International regulatory protection has been enriched by new agreements over the years, such as the Italo-Croatian-Slovenian Memorandum of 1992 and by the main international instruments for the protection of minorities, such as the European Charter for Regional or Minority Languages of 1992 and the Framework Convention for the Protection of National Minorities of 1995 (Burra and Debeljuh, 2013). The mixed nationality territory where members of the autochthonous Italian National Community (CNI) reside and where, alongside Slovenian, Italian is also recognised as an official language, includes part of the

\footnotetext{
\({ }^{19}\) Decree number 92 of 24 May 2018, p.20, 18 and 17, respectively.
}

Municipality of Ankaran, the Municipality of Koper, the Municipality of Izola and the Municipality of Piran \({ }^{20}\).

Compared to other schools in Slovenia, the programmes of the Slovenian-Italian bilingual schools include an additional compulsory subject: in Slovenian elementary schools, in fact, students attend the teaching of Italian as Second Language twice a week, while in Italian-speaking schools they have on average three hours a week of Slovenian as L2 (Basic School Act, 2006, Articles 6 and 16; Gimnazija Act, 2007, Article 8; Vocational Educational Act, 2006, Article \(6^{21}\) ) (Zudič Antonič, 2007). As for the rest of the country, Italian is present as a compulsory subject of study from first grade to the end of secondary school (i.e. with students up to 19 years of age). The model conforms to the specific needs of the environment, respecting the cultural and educational tradition of the ethnic group and reflecting the political situation of the minority population. Schools are open to all citizens regardless of their ethnicity of origin, thus enhancing the language and culture of the minority population by teaching their language to the majority population.

In Slovenia, the school system requires nine compulsory years of education, from the age of 6 to the age of 15. It is organised into two cycles of education:
- Primary School, or Basic Education:
- Eight years in two levels (age 7 to 15 ); or
- Nine years in three levels (age 6 to 15);
- Secondary School (age 15 to 19).

\footnotetext{
20 According to the statistical data collected by the official Census of the population of 2002, the people who declared to be of Italian nationality were 2258 ( 701 units less than the previous figure of 1991, equal to \(23.7 \%\) ), while they indicated the Italian as a mother tongue 3762 people ( 120 units less than the previous figure, equal to \(3.1 \%\) ). On the entire national territory (according to the criterion of belonging to a nationality) these figures represent \(0.11 \%\) of the total population. \(81.5 \%\) of the citizens who declared themselves to be of Italian nationality reside in the mixed nationality territory of the Municipalities of Ankaran, Koper, Izola and Piran, or 1,840 people. About 18.5\% reside outside the nationally mixed territory (Burra and Debeljuh, 2013, p.22)
\({ }^{21}\) Zakon o osnovni šoli/Legge sulla scuola elementare; Zakon o gimnazijah/Legge sulla scuola Media SuperioreGinnasio; Zakon o poklicnem in strokovnem izobraževanju/Legge sulla scuola Media Superiore di indirizzo TecnicoProfessionale, respectively.
}

Primary schools establish the compulsory and extended curriculum: a tenth year of training is designed for learners who do not graduate from the cycle or who wish to improve their results by externally assessing their knowledge. At the end of their basic education, pupils have access to the second cycle of studies. This cycle is composed of two strands: upper secondary schools can be professional, aimed at quick entry into the world of work, or preparatory for university, called gimnazija.

\subsection*{2.4.1 Slovenian upper secondary schools}

The Gimnazija offer a basis of general culture and an exam is required at the end of the four-year course, which allows access to university or further professional schools. There are six different curricula:
- Splošna gimnazija (a more general course);
- Umetiška gimnazija (Artistic studies):
- Ekonomska gimnazija (Economy studies);
- Naravoslovna gimnazija (Science studies);
- Tehnična gimnazija (Technnical studies);
- Športna gimnazija (Sports).

As for professional schools, the training they provide varies depending on the qualification that students will achieve at the end of either three (first level qualification) or four years of study, and includes a final exam. There are four different types of professional schools:
- Nižje poklicno izobraževanje (Lower upper secondary vocational education), lasting two years;
- Srednje poklicno izobraževanje (Upper secondary vocational education), lasting three years;
- Srednje strokovno izobraževanje (Vocational education and training), lasting four years;
- Poklicno tehniško izobraževanje (Vocational and upper technical education), lasting four years.

The last two, lasting four years, end with the professional baccalaureate exam, while the first one, with a shorter duration, leads directly to the world of work and can be concluded with an
internal exam. Finally, the second can be concluded with an internal exam or, if some students decide that they want to obtain the professional baccalaureate diploma, it can lead to enrolment in one of the last two schools mentioned in order to attend another two years of study and to take the exam.

\subsection*{2.5 ISL Normative references}

To better understand the context in which the teaching of Italian as a second language takes place, we proceeded by examining the two different texts that regulate it in gimnazija and technical schools, which are, respectively:
- Učni načrt za italijanščino kot tuji in kot drugi jezik: gimnazija (Šečerov and Zorman, 2008);
- Italijanščina kot drugi jezik: izpitni katalog za poklicno maturo (Šečerov et al, 2010).

As the researcher does not possess sufficient knowledge of Slovenian, the two texts were translated into English thanks to online applications for translation. In the next paragraphs we will examine them in more detail, but first we would like to consider the position that Italian as a second language holds in Slovenia at the regulatory level. In the text written by Šečerov et al. we read that, according to the Constitution of the Republic of Slovenia, the state protects and guarantees the rights of the autochthonous Italian and Hungarian national communities, which, among other things, are guaranteed the right to education in their own language. In the ethnically mixed area of Slovenian Istria, therefore, in addition to Slovenian, the official language is also Italian, which is the language of the autochthonous national community. Therefore, pupils and students in schools with Slovenian as the language of instruction are obliged to learn Italian as well, which is also stipulated by the Primary, Secondary School and Gymnasium Act. Therefore, learning Italian begins in the first grade of primary school and continues until the high school diploma, regardless of the strand \({ }^{22}\).

\footnotetext{
\({ }^{22}\) Po Ustavi Republike Slovenije država varuje in zagotavjja pravice avtohtone italijanske in madžarske narodne skupnosti in jima med drugim zagotavlja pravico do vzgoje in izobraževanja v svojem jeziku. Na narodno mešanem območju Slovenske Istre je zato poleg slovenščine uradni jezik tudi italijanščina, ki je jezik avtohtone narodne skupnosti. Zato se učenci in dijaki v šolah s slovenskim učnim jezikom obvezno učijo italijanski jezik, kar določa tudi Zakon o osnovni, srednji šoli in gimnaziji. Učenje italijanščine se zato prične že v 1. razredu osnovne šole in se nadaljuje do splošne oziroma poklicne mature. (Šečerov et al, 2010, p.5)
}

\subsection*{2.5.1 Gimnazija and Italian as a Second Language}

The text that Slovenian gimnazija refer to as regards the teaching of Italian as a second (or foreign, depending on the context) language is Učni načrt za italijanščino kot tuji in kot drugi jezik: gimnazija (Šečerov and Zorman, 2008). When defining the position of Italian in the educational system, it is explained how (in the case of Italian as a second language) students are expected to develop the ability to learn and act in a multilingual and multicultural space, based on openness towards different languages and cultures, on tolerance and coexistence, aimed at shaping the cultural identity of the individual as well as of the community. In the first general part, therefore, it can be read that, in both second and foreign language classes, students are encouraged to engage in active oral and written communication as well as to use the language in question autonomously and through the exploitation of different sources, including information and communication technologies.

It is argued that students will develop the ability to use ICTs, particularly for a safe and critical use in learning and communication; to search for data on web pages and use them appropriately; for the presentation of their products in different ways (graphic, pictorial, written, audio, multimedia); and to be involved in potential international network projects.

The general competences that pupils are expected to develop at the level of objectives and contents are then presented, including skills in the creation of oral and written texts, in oral and written communication, in the development of linguistic, intercultural and literary skills, in writing artistic texts and so on. While more will be said in Chapters 5 and 6, addressing the fact that the use of digital technologies in education has a long tradition in Slovenia feels relevant. In the early 80 s, computer science became a compulsory subject in lower secondary school, where students learned about computers and programming languages. In 1989 the use of computers in primary school was integrated for the first time with the teaching of art, technology and Slovenian (Wechtersbach, 1993). Important methodological and content changes in the digital technologies curriculum date back to 1995: the main objective became the development of a greater degree of information literacy, considered as the reference framework for finding, evaluating and processing data to construct information and for understanding and using said information (Krapez, 2001). In 2005, the Ministry of Education and Sport developed a scheme for
the development of digital skills. In this context, digital competences have been defined as abilities to make use of knowledge and to assume the necessary lifestyles for an effective and efficient creative and critical use of digital technologies, as well as to manage issues relating to security and stability, in order to protect both individuals and society, while being aware of the continuous need for training, initiative and personal development through the use of digital resources (Svetlik, 2006).

Another aspect worth mentioning concerns the fact explicit reference made to how important the role of the teacher is when it comes to introducing students to different ways of learning in order to create an environment for them to experiment with methods and tools and find the ones that suit them best: it is explained how it is important that the teacher acquaints learners with various learning strategies, through the use of ICTs and various methods or forms of work (individually, in pairs, groups, project work); they will then formulate their own learning strategies according to their learning styles, abilities, interests and experiences.

\subsection*{2.5.2 Technical and professional schools and Italian as a Second Language}

As for the teaching of Italian as a second (or foreign, depending on the context) language in Slovenian technical and professional schools, it is regulated by a different text: Italijanščina kot drugi jezik: izpitni katalog za poklicno maturo (Šečerov et al, 2010). In a context of communicative approach, in which the teacher is defined as a facilitator, the same concept is affirmed, according to which various different methods, forms of work and technological tools must be presented in order to introduce students to different possible learning strategies. The importance of digital literacy is reiterated, and a list of skills that students will develop in this context is described.

There are, however, two other aspects worth highlighting. First of all, different types of text are listed with which students will inevitably find themselves working while learning a second language. Besides dictionaries, manuals, professional text, job applications and offers and so forth, we find, to quote a few: brief instructions for using the product or service, recipes and catalogues, posters and diaries, but also websites, educational films on the operation of specific devices, spreadsheets, graphs, PPT presentations and so forth \({ }^{23}\). This means that explicit
reference is made to a wide range of texts that, by differing from the traditional paper-based supply, allow students and teachers to explore the digital and multimodal environment as well.

Furthermore, the idea according to which being able to act and work includes the development of social skills, learning strategies, and communication in our everyday life as well as in our professional life is clearly emphasised. In other words, both learning strategies and those skills that transcend the development of intercultural skills are explicitly mentioned as pivotal for active participation in today's society.

\subsection*{2.6 ISL Specific Learning Objectives}

The aim of this paragraph is to summarise the key points of the specific learning objectives established for ISL in gimnazija and technical and professional schools in the bilingual area of Slovenia. For the sake of our first research question (see paragraph §3.2), particular attention will be paid to whether and to what extent the concept of Literacy is taken into account together with some of its many facets, including multimodality, new forms of literacy and digital technologies.

\section*{a. Gimnazija}

As regards the specific learning objectives, the document relating to the teaching of Italian in Slovenian Licei (Šečerov and Zorman, 2008) explains that, by learning a foreign language, students develop a communicative ability in that language, which also includes elements of intercultural communication, enabling intercultural dialogue and promoting a willingness to coexist and mutual respect. When teaching a second/foreign language, students are systematically trained for active spoken and written contacts with speakers of other foreign languages, for the autonomous use of the second/foreign language in obtaining data from both

\footnotetext{
\({ }^{23}\) [...] slovar, priročnik, razpredelnica gesel (npr. orodje, materiali, sestavine), kratka navodila za uporabo izdelka ali storitve, opis predmeta, naprave, stroja in delovnega postopka, recept za pripravo jedi, katalog, računalniški ukaz, spletna stran, plakat, zloženka, reklamni oglas, poročilo, dnevnik, strokovno besedilo, izobraževalni film o delovanju naprave, stroja, preglednica, graf, PP-predstavitev, ponudba in povpraševanje, naročilo, reklamacija, prošnja za zaposlitev, curriculum vitae, ponudba za delo (oglas), strokovno besedilo, (Šečerov et al, 2010, p.19).
}
written and other sources, for other spoken and written forms of communication and for the use of Information and Communication Technologies (ICT). \({ }^{24}\)

Given the coexistence of several languages in different areas of the country, much importance is given to multilingualism and interculturality: in fact, it is specified that only an individual who, in addition to language skills, also develops intercultural skills, will be able to create strong bonds of successful (co)operation in a multicultural reality \({ }^{25}\). Students will therefore be asked to develop the ability to learn and act in a multilingual and multicultural space, based on openness to different languages and cultures, on tolerance and coexistence, which also shape the cultural identity of the individual \({ }^{26}\).

In contrast with the Italian context, the digital aspect is emphasised, as the text contains the definition of 'Digitalna pismenost', or 'digital literacy'. Students, the text says, will develop the ability to use information and communication technologies, in particular for:
- safe and critical use in learning and communication;
- search for data on web pages and their appropriate use;
- presentation of their own products in different ways (graphic, pictorial, written, audio, multimedia); and
- involvement in international network projects \({ }^{27}\)

\footnotetext{
24 "Dijaki z učenjem tujega jezika razvijajo sporazumevalno zmožnost v tem jeziku, ki vključuje tudi prvine medkulturnega sporazumevanja, kar omogoča medkulturni dialog in spodbuja pripravljenost na sobivanje in medsebojno spoštovanje. Dijaki se pri pouku drugega/tujega jezika sistematično usposabljajo za dejavne govorne in pisne stike z govorci drugih/tujih jezikov, za samostojno uporabo drugega/tujega jezika pri pridobivanju podatkov iz pisnih in drugih virov, za druge govorne in pisne oblike sporočanja ter za uporabo informacijske komunikacijske tehnologije (IKT)", Šečerov and Zorman, 2008, p. 10. Translation by the author.

25 "Le tisti posameznik, ki bo poleg jezikovnih zmožnosti razvil tudi medkulturno zmožnost, bo sposoben ustvariti trdne vezi uspešnega (so)delovanja v večkulturni stvarnosti", Šečerov and Zorman, 2008, p. 18. Translation by the author.

26 "Dijaki razvijajo zmožnosti učenja in delovanja v večjezičnem in večkulturnem prostoru, ki temelji na odprtosti do različnih jezikov in kultur, tolerantnosti in sožitju, kar oblikuje tudi kulturno identiteto posameznika", Šečerov and Zorman, 2008, p. 7. Translation by the author.

27 "Dijaki razvijajo zmožnosti uporabe informacijsko-komunikacijske tehnologije, predvsem za:
- varno in kritino rabo pri uenju in sporazumevanju,
}

Distinguishing between foreign and second language and between different modules depending on the number of teaching hours available, we read the following: students of Italian as a foreign language will learn to make inferences about the meaning of unknown words on the basis of the context and/or use an (electronic) dictionary, and to use the teacher's instructions to search for desired data on the World Wide Web and use (electronic) materials. In the second language section, the description is slightly different and a little more specific: that is, the pupils will learn to use a variety of media and modern technologies for research projects in Italian, for communication and critical evaluation of information, as well as for the presentation of content on a particular topic (e.g., culture of one's own country, celebrities of Slovenian and Italian nationality in the cultural, scientific and technical fields) \({ }^{28}\).

\section*{b. Technical and professional schools}

As for Technical and Professional schools, a few more technical points are added to the ones covered by Šečerov and Zorman (2008): it is said that the student develops the ability to use information and communication technologies mainly for:
- safe and critical use in learning and communication;
- accessing them and searching for the desired data;
- presentations of their products within their professional field (graphic, pictorial, written, audio, multimedia...);
- creation of a simple spreadsheet;
- use of simple functions to create a graph;
- use of a text editor;
- involvement in international network projects, etc \({ }^{29}\).
- iskanje podatkov na spletnih straneh in njihovo ustrezno uporabo,
- predstavitev lastnih izdelkov na razline naine (grafino, slikovno, pisno, zvono, vepredstavno),
- vkljuevanje v mednarodne mrežne projekte", Šečerov and Zorman, 2008, p. 12. Translation by the author.

28 "uporabljajo raznovrstne medije in sodobno tehnologijo za projektno raziskovanje v italijanščini, za komunikacijo in kritično vrednotenje informacij, kakor tudi za predstavitev vsebin na določeno temo (npr.: kulturne znamenitosti lastne države, znane osebnosti slovenske in italijanske narodnosti na kulturnem, znanstvenem in tehniškem področju)", Šečerov and Zorman, 2008, p. 27. Translation by the author.

\footnotetext{
29 "Dijak razvija zmožnosti uporabe informacijsko-komunikacijske tehnologije predvsem za:
- varno in kritično rabo pri učenju in sporazumevanju,
}

In addition, the use of information and communication technologies to promote motivation is recommended, as well as having students use the teacher's instructions to search for professional information on the World Wide Web (catalogues of products and services) and use materials and manuals to obtain information and new vocabulary in another language.

Once again, great importance is given to the development of intercultural skills as the foundation for the effective functioning of all forms of integration in a multicultural society, and is therefore one of the fundamental objectives of teaching. Being able to act and work includes social skills, learning and communication strategies in daily and professional life: given the new reality affected by the processes of globalization, therefore, teaching a second or foreign language faces new challenges, as it must prepare students not only to develop communication skills in the second language but also to get in touch with other cultures. Intercultural learning, which serves to develop intercultural competence, is an integral part of second language teaching. The need to develop intercultural competence arises from the fundamental premise that language and culture are inextricably linked \({ }^{30}\). A detailed list of possible texts to be addressed in learning a second or foreign language is also provided \({ }^{31}\).

\footnotetext{
- vnašanje in iskanje želenih podatkov,
- predstavitve svojih izdelkov v okviru svojega strokovnega področja (grafično, slikovno, pisno, zvočno, večpredstavno ...),
- oblikovanje preproste računalniške preglednice,
- uporabo enostavnih funkcij, za izdelavo grafa,
- uporabo urejevalnika besedil,
- vključevanje v mednarodne mrežne projekte itd", Šečerov et al, 2010, p. 14. Translation by the author.

30 "Znati ravnati/delati: vključuje socialne veščine, strategije učenja in sporazumevanja v vsakdanjem in poklicnem življenju", Šečerov et al, 2010, page 11; and

Pouk drugega/tujega jezika je glede na novo stvarnost, na katero vplivajo globalizacijski procesi, pred novimi izzivi, saj mora dijake poleg razvijanja sporazumevalne zmožnosti v drugem jeziku pripraviti tudi na stike z drugimi kulturami. Medkulturno učenje, ki služi razvijanju medkulturne zmožnosti, je sestavni del pouka drugega jezika. Potreba po razvijanju medkulturne zmožnosti izhaja iz temeljne predpostavke, da sta jezik in kultura neločljivo povezana", Šečerov et al, 2010, p.13. Translations by the author.
\({ }^{31}\) "Vrste besedil v drugem jeziku: slovar, priročnik, razpredelnica gesel (npr. orodje, materiali, sestavine), kratka navodila za uporabo izdelka ali storitve, opis predmeta, naprave, stroja in delovnega postopka, recept za pripravo jedi, katalog, računalniški ukaz, spletna stran, plakat, zloženka, reklamni oglas, poročilo, dnevnik, strokovno besedilo, izobraževalni film o delovanju naprave, stroja, preglednica, graf, PP-predstavitev, ponudba in povpraševanje, naročilo, reklamacija, prošnja za zaposlitev, curriculum vitae, ponudba za delo (oglas), strokovno besedilo", Šečerov et al, 2010, p.19. Translation by the author.
}

An important aspect present in both texts is the attention paid to the role of the teacher, who is defined as a facilitator in a context of communicative approach. It is important that the teacher, using ICTs and various methods or forms of work (individual, pair or group projects), introduces students to different learning strategies, thus designing teaching strategies based on their style, skills, interest and experience, and providing multimedia support for the lessons \({ }^{32}\). In such an integrated approach, the teacher must evaluate the communication skills achieved by the learners in another language, as well as their strategies and learning competences (i.e. intercultural, social, digital, etc.) \({ }^{33}\).

32 "(Pomembno je, da uitelj) z uporabo informacijsko-komunikacijske tehnologije (IKT) in razlinih metod oz. oblik dela (individualno, v parih, skupinah, projektno delo) dijake seznanja z razlinimi unimi strategijami; ti nato oblikujejo lastne une strategije glede na uni stil, sposobnost(i), interes in izkušnje" (Šečerov and Zorman, 2008, page 33; Šečerov et al, 2010, page 28). Translation by the author.

33 "Celostni pristop: Učitelj vrednoti doseženo sporazumevalno zmožnost v drugem jeziku, učne strategije in kompetence (npr. medkulturna, socialna, digitalna itd.)", ; Šečerov et al, 2010, page 30. Translation by the author.

\section*{Estratto per riassunto della tesi di dottorato}


Multiple and multimodal literacies in Foreign and Second Language Learning Titolo della tesi \({ }^{1}\) : in the digital age

\begin{abstract}
:

Gli ultimi decenni hanno visto il concetto di Literacy cambiare rapidamente in base alla continua evoluzione delle tecnologie dell'informazione e della comunicazione e alle competenze necessarie per un efficace problem-solving e per un approccio critico all'informazione presentata attraverso una varietà di canali multimediali. Questo studio delinea il quadro teorico di riferimento che ripercorre l'evoluzione dei diversi aspetti facenti parte del concetto di Literacy attraverso la lente dell'educazione linguistica, analizzando i punti di forza e le criticità evidenziate dalla ricerca. L'accento viene posto sul rapporto tra casi studio e classi di lingua, ed i risultati della ricerca, che raccoglie ed analizza dati sia quantitativi che qualitativi, confermano l'esistenza di un divario, relativo al concetto di Literacy, tra il mondo della ricerca ed il sistema scolastico, dovuto anche alla mancanza di obiettivi specifici di apprendimento appositi per l'educazione linguistica. Ciò riflette la generale mancanza di familiarità riscontrata da parte degli insegnanti verso questi concetti e terminologia, nonché le difficoltà incontrate nel promuovere forme di literacy plurali, multimodali e digitali.
\end{abstract}

The last few decades have seen the concept of Literacy change rapidly reflecting the continuous evolution of information and communication technologies and the necessary skills for problemsolving and for a critical approach to information presented through a variety of multimedia channels. This study traces the evolution of the different aspects that are part of the concept of Literacy through the lens of language education, analysing both the strengths and the criticalities highlighted by research. The emphasis is placed on the relationship between case studies and language classrooms, and results of the research, which collects and analyses both quantitative and qualitative data, confirm the existence of a gap between the world of research and the school system, Literacy-wise, also due to the lack of specific learning objectives vis-à-vis Literacy for language education. This reflects the general lack of familiarity found in teachers towards these concepts and terminology, as well as the difficulties encountered in promoting plural, multimodal and digital literacies.

Firma dello studente


\footnotetext{
\({ }^{1}\) Il titolo deve essere quello definitivo, uguale a quello che risulta stampato sulla copertina dell'elaborato consegnato.
}```


[^0]:    ${ }^{1}$ This research is part of an international project (see $\S 1$ ), which sees the collaboration of Italian and Slovenian Universities (Ca' Foscari of Venice and Primorska of Koper, respectively).

[^1]:    ${ }^{2}$ A cross-sectional study refers to "a snapshot-like analysis of the target phenomenon at one particular point in time; focusing on a single time interval. It allows us to establish relationships between variables" (Dörnyei, 2007, p.78).

[^2]:    ${ }^{3} \mathrm{https}: / / \mathrm{www} . e t y m o n l i n e . c o m / w o r d /$ literate? $\mathrm{ref}=$ etymonline_crossreference
    ${ }^{4}$ https://www.etymonline.com/word/literacy

[^3]:    ${ }^{5}$ Author's note, [BCSD], 2017.
    ${ }^{6}$ The Battelle for Kids, 2019, p. 5.

[^4]:    ${ }^{7}$ Author's note: ISTE stands for International Society for Technology in Education.

[^5]:    New Literacies can be considered as the overarching umbrella term. Everything in the field under the umbrella, including the aspects addressed in the previous paragraphs, includes new literacies.

[^6]:    ${ }^{8}$ NMC and the European Commission "Horizon Report Europe: 2014 Schools Edition", 2014.
    9 "An online study makes it possible - new ECDL - reframing the climate of public opinion", Austria, 2014.
    ${ }^{10}$ Tech and Law Center, "Security of the Digital Natives", Italy, 2014.

[^7]:    ${ }^{11}$ Please find a synthesis of the two educational systems as regulated by national norms in APPENDIX 16.

[^8]:    ${ }^{12}$ Author's translation: "Curriculum for Italian as a foreign and second language: high school" (Šečerov and Zorman, 2008).
    ${ }^{13}$ Author's translation: "Italian as a Second Language: Vocational Baccalaureate Exam Catalogue" (Šečerov et al., 2010).

[^9]:    ${ }^{14}$ For information: https://www.google.it/intl/it/forms/about/ (2017-07-26).
    ${ }^{15}$ Author's note: a Likert scale consists of a list of items that the respondents are asked to evaluate by giving them a quantitative value that indicates their positive-to-negative strength of agreement. Likert scales can also measure other variations such as frequency, quality, importance, and likelihood.

[^10]:    ${ }^{16}$ Author's note: Didattica a Distanza (DaD), or distance learning, and Didattica Digitale Integrata (DDI), or Integrated Digital Education.

[^11]:    ${ }^{17}$ Author's note: the following quotes are reported here for context, since paragraph $\S 6.4$ focusses on different aspects of the topic. The transcripts in full can be consulted in APPENDICES 13 to 15.
    "Due to the fact that there was a pandemic and we worked a lot with the platforms, you know, Google now even on-site I dedicate a lot of time to this aspect" (Speaker 5)
    " We worked on Google's Classrooms, for the pandemic, it is logical that I too must have my students ready, because if they close us overnight, they must understand well how to navigate it, it has become some sort of support, even with the criticalities that I feel I need to express regarding both DaD and DID , it is logical that we have all become much faster." (Speaker 3)
    " We have been using Google Meet since last year, for obvious reasons, but I must say that [...] we still use the Google Meet Classrooms to send documentation, materials, articles". (Speaker 2)
    " Schools, in short, are beginning to use these means that were necessary for us last year" (Speaker 4)
    " Now the pandemic has meant that we are using computers, here, [...] so in my opinion many have been forced to become more digital" (Speaker A).

[^12]:    ${ }^{18}$ Link at the time of writing https://transcribe.wreally.com/

[^13]:    ${ }^{19}$ Author's note: data that can be measured on an infinite scale.

[^14]:    ${ }^{20}$ Author's note: we draw the attention of the reader to the fact that the data coming from the qualitative variables of a questionnaire are different from the data collected from a qualitative research method, which are 'soft data', i.e. data that cannot be measured or statistically analysed.

[^15]:    ${ }^{21}$ Author's note: a count variable is a variable based on the sum of the values of multiple items.
    ${ }^{22}$ See note 20 .
    ${ }^{23}$ See note 20 .

[^16]:    ${ }^{24}$ One of which describes it as "the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve his or her goals, develop his or her knowledge and potential, and participate fully in community and wider society" (UNESCO, 2004, 2011). See §1.1.1.

    25 "We define digital literacies as the individual and social skills needed to effectively interpret, manage, share and create meaning in the growing range of digital communication channels". (Dudeney et al., 2014).
    ${ }^{26}$ See paragraph §1.1.5.

[^17]:    ${ }^{27}$ E.g., Informatica; Sistemi e automazione; Tecnologie della Comunicazione; Elettronica, elettrotecnoca e automazione.

[^18]:    ${ }^{28}$ Author's note: in comparing two by two all the categories in which the respondents have been subdivided (e.g., nine in the case of variable 1, namely the different types of upper secondary school, six in the case of variable 2, namely different levels of teaching experience), the analysis checks whether the null hypothesis is valid or not.

[^19]:    ${ }^{29}$ Author's note: all the tables referring to the appendices can be interpreted as follows: A stands for APPENDIX; the following number is the appendix number; any following letters refer to a specific section of the appendix; finally, the last number is the actual number of the table or figure. For example, in this case, table A7a. 1 refers to Appendix 7, section a, table 1.
    ${ }^{30}$ Author's note: since p-value in inferential statistics indicates the degree of significance of the sample, in this and in all the following tables it is indicated with "Sig."
    ${ }^{31}$ Author's note: what the analysis does is compare all the samples in which the respondents have been subdivided (e.g., nine in the case of variable 1, the different types of upper secondary school) two by two, to check the validity or not of the null hypothesis. Sample 1 and sample 2, therefore, vary for each row of

[^20]:    the analysis: in the first case, they will indicate "Liceo Classico" and "Liceo Scientifico"; in the second "Liceo Scientifico" and "Liceo Linguistico" and so on.
    ${ }^{32}$ See note 31 .

[^21]:    ${ }^{33}$ According to Cohen (1988), correlation coefficients in the order of .10 are "small," those of .30 are "medium," and those of .50 are "large" in terms of magnitude of effect sizes (Cohen, 1988, pp.77-81). These guidelines are "offered as a convention [...] for use when no others suggest themselves" (Cohen, 1988, p.79).

[^22]:    ${ }^{34}$ Western Sydney University website,
    https://www.westernsydney.edu.au/studysmart/home/study_skills_guides/digital_literacy/what_is_digital _literacy).
    ${ }^{35}$ Variables that divide respondents into more than two samples (i.e., the type of upper secondary school they teach in; their different lengths of teaching experience; their different age ranges; their levels of knowledge and awareness of national guidelines and specific learning objectives) require performing the non-parametric Kruskal-Wallis test. As for the relationship between the depend variables and

[^23]:    dichotomous variables, the adoption of the non-parametric Mann-Whitney $U$ test is required. The correlation between dependent quantitative variables is always checked through the non-parametric Spearman's rank correlation coefficient.

[^24]:    ${ }^{36}$ Author's note: what the analysis does is compare all the samples in which the respondents have been subdivided (e.g., nine in the case of variable 1 , the different types of upper secondary school) two by two, to check the validity or not of the null hypothesis. Sample 1 and sample 2, therefore, vary for each row of the analysis: in the first case, they will indicate "Liceo Classico" and "Liceo Scientifico"; in the second "Liceo Scientifico" and "Liceo Linguistico" and so on.

[^25]:    ${ }^{37}$ See note 36 .

[^26]:    ${ }^{38}$ Variables that divide respondents into more than two samples (i.e., the type of upper secondary school they teach in; their different lengths of teaching experience; their different age ranges; their levels of knowledge and awareness of national guidelines and specific learning objectives) require performing the non-parametric Kruskal-Wallis test. As for the relationship between the depend variables and dichotomous variables, the adoption of the non-parametric Mann-Whitney $U$ test is required. The correlation between dependent quantitative variables is always checked through the non-parametric Spearman's rank correlation coefficient.

[^27]:    ${ }^{39}$ See note 36 .

[^28]:    ${ }^{40}$ Variables that divide respondents into more than two samples (i.e., the type of upper secondary school they teach in; their different lengths of teaching experience; their different age ranges; their levels of knowledge and awareness of national guidelines and specific learning objectives) require performing the non-parametric Kruskal-Wallis test. As for the relationship between the depend variables and dichotomous variables, the adoption of the non-parametric Mann-Whitney $U$ test is required. The correlation between dependent quantitative variables is always checked through the non-parametric Spearman's rank correlation coefficient.
    ${ }^{41}$ See note 36 .

[^29]:    ${ }^{42}$ See note 36.

[^30]:    ${ }^{43}$ From Paul Gilster's definition of Digital Literacy (Gilster, 1997, p.1).

[^31]:    ${ }^{44}$ One of which describes it as "the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve his or her goals, develop his or her knowledge and potential, and participate fully in community and wider society" (UNESCO, 2004, 2011). See §1.1.1.

    45 "We define digital literacies as the individual and social skills needed to effectively interpret, manage, share and create meaning in the growing range of digital communication channels". (Dudeney et al., 2014).
    ${ }^{46}$ See paragraph §1.1.5.

[^32]:    47 "Dijaki razvijajo zmožnosti uporabe informacijsko-komunikacijske tehnologije, predvsem za: - varno in kritino rabo pri uenju in sporazumevanju,

    - iskanje podatkov na spletnih straneh in njihovo ustrezno uporabo,
    - predstavitev lastnih izdelkov na razline naine (grafino, slikovno, pisno, zvono, vepredstavno),
    - vkljuevanje v mednarodne mrežne projekte", Šečerov and Zorman, 2008, p. 12. Translation by the author.

[^33]:    ${ }^{48}$ Author's note: all the tables referring to the appendices can be interpreted as follows: A stands for APPENDIX; the following number is the appendix number; any following letters refer to a specific section of the appendix; finally, the last number is the actual number of the table or figure. For example, in this case, table A10a. 1 refers to Appendix 10, section a, table 1.

[^34]:    ${ }^{49}$ Author's note: all the tables referring to the appendices can be interpreted as follows: A stands for APPENDIX; the following number is the appendix number; any following letters refer to a specific section of the appendix; finally, the last number is the actual number of the table or figure. For example, in this case, table A5.4 refers to Appendix 5, table 4.

[^35]:    ${ }^{50}$ The possible answer options for the reported questions (unless otherwise indicated) are:
    Strongly Agree (SA) Partially Disagree (SD)
    Agree (A) Disagree (D)
    Partially Agree (PA) Strongly Disagree (SD).

[^36]:    ${ }^{51}$ See note 49 .

[^37]:    ${ }^{52}$ The full list of terms is available by consulting table 11 in APPENDIX 5 for the EFL teachers and table 11 in APPENDIX 8 for ISL teachers.

[^38]:    ${ }^{53}$ All three scales had scores from 6 to 1 as answer options. In this case we mean the sum of the percentages relating to the two highest scores, 6 and 5 .

[^39]:    ${ }^{54}$ Variables that divide respondents into more than two samples (i.e., the type of upper secondary school they teach in; their different lengths of teaching experience; their different age ranges; their levels of knowledge and awareness of national guidelines and specific learning objectives) require performing the non-parametric Kruskal-Wallis test. As for the relationship between the depend variables and dichotomous variables, the adoption of the non-parametric Mann-Whitney $U$ test is required. The correlation between dependent quantitative variables is always checked through the non-parametric Spearman's rank correlation coefficient. See $\S 4.2$ for a more detailed description.

[^40]:    ${ }^{55}$ Author's note: literally, "Modello del Litorale" (Čok, 2009).

[^41]:    ${ }^{56}$ For the EFL context (§3.3):

    - the MIUR-MEF Interministerial Decree number 211 of 7 October 2010;
    - the Ministerial Directive 4 of 12 January 2012
    - Legislative Decree number 61 of 13 April 2017; and
    - Decree number 92 of 24 May 2018.

[^42]:    57 "Key competences are those which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment. The Reference Framework sets out eight key competences: 1) Communication in the mother tongue; 2) Communication in foreign languages; 3) Mathematical competence and basic competences in science and technology; 4) Digital competence; 5) Learning to learn; 6) Social and civic competences; 7) Sense of initiative and entrepreneurship; and 8) Cultural awareness and expression". RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 on key competences for lifelong learning (2006/962/EC).

[^43]:    ${ }^{58}$ Author's note: the eight key competences were reorganised as "Literacy competence, Multilingual competence, Mathematical competence and competence in science, technology and engineering, Digital competence, Personal, social and learning to learn competence, Citizenship competence, Entrepreneurship competence, Cultural awareness and expression competence". RECOMMENDATIONS COUNCIL - COUNCIL RECOMMENDATION of 22 May 2018 on key competences for lifelong learning (Text with EEA relevance) (2018/C 189/01).

[^44]:    ${ }^{59}$ Does the school system establish specific learning objectives vis-à-vis literacy for foreign and second language learning? If so, what are they? Is there a gap (and, if so, how wide) between them and the conclusions drawn from the most recent language education studies in the field, especially when it comes to the development of multilayered, digital and multimodal literacies? (§3.2).

[^45]:    ${ }^{60}$ The term Multiliteracies appears in the Slovenian scientific literature as mnogopismenost (Medved Udovič in Cotič, Starc, 2011) or večrazsežna ali sestavljena pismenost (Grosman, 2011).

[^46]:    ${ }^{61}$ Author's note: Unequal sample sizes may affect statistical power and Type I error rates (Rusticus and Lovato, 2014). The statistical power of a hypothesis test that compares groups is highest when groups have equal sample sizes.

[^47]:    ${ }^{62}$ This research is part of an international project (see $\S 1$ ), which sees the collaboration of Italian and Slovenian Universities (Ca' Foscari of Venice and Primorska of Koper, respectively).

[^48]:    21. Technology *

    Express your level of agreement with the following items by marking one choice in each row

