Università
Ca'Foscari
Venezia

Master's Degree Programme

in Language Sciences

Final Thesis

Fostering Vocabulary Acquisition and Enhancing Metacognition through Digital Tools and Playful Teaching

A Case Study on Italian L2 Learners

Supervisor
Prof. Barbara Baschiera

Assistant supervisor
Prof. Graziano Serragiotto

Graduand
Simona Guarnieri
Matriculation Number 976920

Academic Year
2023 / 2024

To Tommaso, Marisa, Mauro and Irene,
my safe haven.

TABLE OF CONTENTS

ABSTRACT

The thesis degree under discussion involves metacognition, inclusive learning, digital tools and playful methodology in two Italian as second language classes. This investigation is composed of two sections, the first including epistemological principles, and the second reporting the research conducted with students.

Metacognition and its implication in the language classroom, in relationship with notions referred to memory functioning and to individuals' multiplicity of traits is first addressed; second, key concepts of language learning, of inclusive learning and an overall analysis of studies conducted on playful methodology and its benefits in the language learning field are outlined.

Furthermore, digital resources developed are considered in detail with regards to their impact on the learning process, which is also reported by guidelines provided by the European commission. Notions referred to cooperative learning as a means of improving cognitive skills and of actively building knowledge among peers are described as well.

The second section reports the experimentation conducted in two A-level Italian as second language classes. The project investigates students' viewpoint of Wooclap digital platform as an instrument to convey cinema-related vocabulary and to activate metacognitive strategies. To be more specific, a playful, interactive in-class presentation purposefully developed by the author, including both individual and group tasks, is first performed; a qualitative analysis is subsequently conducted via Google Forms to collect data about students' metacognitive competences and about their personal perception of digital tools in the Italian language course. Teachers' feedback is also considered in the research and compared to students' answers.

Results obtained reveal technological resources are perceived, by both students and teachers, as an entertaining and effective modality of performing language lessons. Wooclap offers a number of accurate, interactive task typologies though which it is possible to monitor students' progress, even though a complete transition from the traditional didactics is not unanimously desired by the participants involved in this case study.

ACKNOWLEDGEMENTS

The realisation of this degree thesis has been possible only thanks to the contribution of those people to whom I would like to dedicate heartfelt thanks.

First, I would like to immensely thank my supervisor Professor Barbara Baschiera for her precious work and for her useful suggestions that made this thesis project feasible. Your kindness and accuracy made this challenging work a pleasant journey.

Thanks to Professor Graziano Serragiotto who carefully revised this final thesis.

I would like to show my huge gratitude towards Professor Elena Ballarin for believing in my abilities and for all the lessons: those we conducted together as co-workers, and those I was taught and which made me grow from a professional perspective. Your dedication is inspiring and admirable, and your contribution has been essential in the developing of this thesis. Working together has been a wonderful and formative experience. Thanks to all School for International Education of Venice personnel for the opportunity I was given.

I deeply thank Professor Paolo Nitti and the Centro Interculturale of Turin teachers for their availability and cooperation. Their contribution added value to my work and allowed me to experience a new, stimulating teaching context.

I would like to thank Tommaso with all of my heart for being a constant reference point in my life and for caring for my dreams. Thanks for our unforgettable life experience in Venice and for going on this adventure together. Without you all of this would have remained a long-cherished dream.

I would like to express special gratitude to my parents and my sister for supporting me even from far (far!) away, for teaching me the importance of culture and for investing in my education.

Thanks to my colleagues Alice, Matteo, Erica, Giorgia, Sebastiano, Letizia and Silvia with whom I shared my university life. Thank you for the support given to each other and for all the beautiful moments spent inside and outside the classroom.

Thanks to all my hometown friends and family for supporting me all the way long and for always welcoming me open arms during my brief trips home. I’m grateful to have you all in my life.

INTRODUCTION

Language learning represents an important requirement in the multicultural society. Mastering multiple languages enhances the life and work of all individuals (European Union, 2020), therefore promoting social inclusion. In order to achieve the ambitious goal of multilingualism, the formative context is crucial: teaching practice and learning practice play a crucial role in developing language competences and social skills.

Academic research in the educational field thus contributes to the identification of effective methodologies to be implemented in language courses which are up to date and aligned with the current social context.

In detail, language learning principles are not exclusively involved in the research since all aspects concerning the environment and the context of learning are relevant, as reported in the International Classification of Functioning, Disability and Health (2001), fostering social inclusion for all individuals.

Moreover, brain functions and psychological aspects need to be taken into consideration as well to promote wellbeing in the learning context.

This master's degree thesis addresses Italian as second language learning with adults and young adults of two different institutions located in Italy. To be more specific, this exploratory study aims at employing digital platforms developed in recent years, which are revolutionising today's educational field, to promote vocabulary acquisition, to foster metacognitive knowledge and to detect whether and how they affect students' language acquisition.

The main topics carefully described in the following chapters are metacognition, memory functioning, cognitive psychology in relationship with multiple intelligences and learning styles, inclusion, language teaching and learning, digital resources, playful methodology and cooperative learning.

The literature considered in this work includes publications, resources and papers published in different time spans. Studies on metacognition and memory functioning mainly considered the research progress made in the last decades of the XXth century since it still represents a solid and even now valid foundation for subsequent studies conducted. Concepts related to cognitive psychology and to the educational field include literature published between the XXth and the XXIst century and their update

reported in more recent research. Lastly, the section dedicated to digital tools mainly considers resources published in the last ten years since the topic is quite recent and platforms quickly become outdated as subject to frequent updates.

The literature taken into consideration helped the author identify a gap in the existing research studies which led to the identification of the research questions of this thesis. The three different research questions identified are the following:

-How do students perceive digital and interactive platforms as a means of conveying new vocabulary? How do their perceptions change according to their age?

-How is it possible to obtain relevant results about students' language learning progress and metacognition through such tools?

-Do language teachers of the classes involved actively use or do not use digital tools and for what reason? Does a correlation between teachers' and students' familiarity with digital instruments exist and affect the learning process?

This exploratory study included an in-class Wooclap interactive presentation addressed to students, which had been prepared and conducted by the author herself, and a subsequent Google Forms questionnaire to be individually filled in. To be more specific, two questionnaires had been developed, one for the two classes participating in the study, and one for the two corresponding teachers.

The qualitative research method was employed to conduct an in-depth analysis of the data collected which were grouped together in graphs and tables and critically addressed to obtain relevant results to the research questions formulated.

This master's degree thesis is composed of five chapters, briefly summarised in the following lines. The first two chapters contain the epistemological principles on which the exploratory study developed is based, whereas the last three chapters are dedicated to the description of the exploratory study conducted.

The first chapter presents metacognition as defined by Flavell (1979), the American scholar who first introduced the concept, and deepens the functioning of the human mind thanks to which it is possible to explain the existence of multiple intelligences and learning styles, elements that need to be taken into consideration by teachers and professionals working in the educational field. Lastly, pedagogical implications and concrete applicableness of metacognitive principles in classrooms to achieve learner autonomy are outlined.

In the second chapter, notions about language learning are described, with the purpose of offering an overview of the key concepts of this discipline. Inclusive learning principles are furthermore described since representing a requirement for effective didactics, together with playful methodology. Digital tools available are also addressed and the European guidelines regulating their implementation in the language learning field are outlined.

The third chapter introduces the exploratory study conducted by presenting the research context and the sample, the research questions outlined, the aims of the study, data collection instruments developed and their corresponding data analysis procedure and methodology. Finally, ethical principles respected are reported.

In the fourth chapter, results obtained are analysed and carefully reported by implementing tables, pie charts and bar graphs to offer an overview of the data collected.

Finally, the fifth chapter critically addresses the research questions based on the results obtained to outline significant findings of the research and by listing the limitations to the study as well.

The topic addressed in this master's degree thesis has been chosen by the author since, in her personal teaching and learning experience, the importance of metacognitive reflection for a successful language learning and for a deeper knowledge of oneself has always been undeniable, along with the need for didactics not too distant from students' reality and social context.

Von Humbolt (1999) stated, "you cannot teach a language, you can only create the conditions under which it can be learnt": this quote accompanied many of the theorical courses attended by the author, and it also represented a starting point for this thesis that aimed at investigating the possible implementation of technological tools together with playful methodology as a means of promoting an inclusive and meaningful language learning and of fostering metacognitive competences by paying particular attention to the environment surrounding learners.

CHAPTER 1. METACOGNITION AND ITS IMPLICATION IN THE LEARNING PROCESS

1.1. DEFINING METACOGNITION

Metacognition represents a crucial concept for the learning process of every individual, not strictly ascribable to the language learning process only, but to the many activities of the human mind overall.

This term was first investigated in the American Psychologist Journal published at the end of the Seventies, thanks to the contribution of the psychologist John Flavell who developed a proper definition and description for it. Metacognition is closely related to cognition, since it is presented as the ability to acknowledge one's proper cognitive functioning (Flavell, 1979). Awareness, reflection, monitoring and evaluation consequently become key terms related to metacognition.

Flavell shaped his work on metacognition on Vygotsky's educational principle called zone of proximal development (1978). This concept ascertains the accessible goals learners can achieve without any assistance, and furthermore identifies those goals students may reach when guided or when cooperating with peers. Thus, the author states different performances and outcomes of individuals depend on the modalities employed to work, and guidance and cooperation foster success and allow to effectively perform more complex tasks.

Flavell (1979) identified four classes of metacognitive monitoring phenomena: metacognitive knowledge, metacognitive experiences, goals (or tasks) and actions (or strategies).

Metacognitive knowledge refers to the individuals' knowledge of the world surrounding them and the ability to recognise themselves and other people as cognitive processors. The author explains "metacognitive knowledge consists primarily of knowledge or beliefs about what factors or variables act and interact in what ways to affect the course and outcome of cognitive enterprises" (*ibid*). The quoted variables are those of person (what you believe about yourself and about other people), task (the information available to your mind) and strategy (good practice habits to improve learning), these three never working separately. Metacognitive experiences happen

through reflection and conscious thinking, and they are closely connected to the personal goals and strategies activated to pursue that specific goal.

Furthermore, Flavell also expressed the necessity for children to be taught metacognitive strategies and to start being conscious about their cognitive skills from a young age to be able to monitor their own cognition and become successful in the social environment.

Haque (2019) summarised the relationship between metacognition and cognition through an artistic metaphor: metacognition improves learning skills through reflection, planning, monitoring, and evaluation which are the instruments (the "brushes") that work on the learning canvas, namely cognition. Cognition therefore refers to both the mental process of knowing and the state (or product) of knowing.

To better understand how the brain processes and retains information and the progress made by researchers in the study of personal traits influencing in the learning process, it is necessary to dedicate part of the chapter to the description of memory and its functioning and to the theories concerning intelligences developed by psychologists between the XXth and the XXIst century.

1.2. MEMORY AND ITS FUNCTIONING

Describing human memory has always been controversial. Theories about it were developed from Ancient Greece, and the investigation of its functioning and the memory-oblivion dualism has interested writers, philosophers and psychologists through the centuries. Memory is defined as the cognitive faculty able to code, to store and to retrieve information employed to interact with the environment (Cardona & De Iaco, 2023). The result of the combination of these operations is learning.

In the Eighties memory was compared to a warehouse, meaning to something static, but thanks to further studies and experiments it has been possible to discover that memory is rather dynamic and not merely a container in which information is retained.

The first experiment conducted on memory was performed by Herman Ebbinghaus at the end of the XIXth century. His studies enhanced psychology as a scientific subject to which it is possible to apply the scientific method and his experiments outlined significant notions still considered a milestone of the studies on memory.

The scientist traced the forgetting curve (Ebbinghaus, 1885) identifying the decay of notions retained by the human memory over time. He observed that the information perceived and retained by human memory drastically decreases within the first nine hours, to finally reach stability. He also focused on repetition strategies by working with a series of trigrams, underlining how powerful this technique is to withhold information. Although the results of Ebbinghaus' experiments are quite limited, as the scientist is the only subject involved in them, he served as a pioneer in the research on memory and as a starting point for following models.

The studies conducted in the Fifties marked a turning point in the description of the memory system. It was in those years that psychologists understood memory depends on a series of interacting processes and it is not composed of a single device. Research conducted on amnestic subjects who were able to recall recent events but not the one pertaining to the past, or vice versa, proved the existence of different sections of the brain operating to retain past information and recent information.

The currently accepted model describing memory is the one developed by the psychologists Richard Atkinson and Richard Shiffrin in 1968. The Atkinson-Shiffrin model (1968), also known as the Human Information Processing, identifies three different stores composing human memory: a sensory register, a short-term store and a long-term store.

The sensory register is the section where the input (stimulus) from the environment enters memory, it represents what the human being perceives. This sensory store involves all the senses, meaning there is a sensory register for each of the five senses.

The short-term store retains information only temporarily, for about twenty seconds, and possesses the ability to work on the information itself.

The long-term store is composed of permanent notions stored in memory and of processing strategies previously acquired. The long-term store can retain unlimited information the individual is able to recall after a long time since its storage. Thus, a stimulus is first perceived by the sensory register, temporarily stored and manipulated in the short-term memory and finally transferred to the long-term store when maintenance and rehearsal of notions happen.

Another aspect to underline is that individuals play an active role in selecting the input to process and to be stored in the brain and the strategies to employ to do so as

well. Watkins (1990) described the three stages of memory according mediationist theories. The term Mediationism refers to "the doctrine that remembering an event requires that a representation of that event be embodied in a 'memory trace' that is retained over the time between the event's occurrence and its recollection" (*ibid.*). The encoding stage, the retention stage and the retrieval stage are the three stages of memory.

In the first stage, a stimulus is perceived and codified, meaning analysed and categorised. The way a stimulus is registered also affects its chances to be remembered. The retention stage is a dynamic phase in which information is subject to change and simultaneously stored in memory. The final stage is connected to the ability to recall notions when individuals hear part of the information they want to remember, when they find themselves in the same context in which the original event happened or when they employ specific strategies to actively retrieve that precise information.

Furthermore, it is not to forget the existence of other long-term memory system devices. Explicit (or declarative) memory is responsible for the ability to retrieve memories related to the meaning of words, to the place and time the events took place and to pieces of information of all kinds. On the other hand, implicit memory is a system allowing individuals to remember processes in an automatic way, it represents the information unintentionally stored people are usually not aware of. To rephrase the concept, explicit memory represents the "knowing that", while implicit memory is the "knowing how", as explained in Cardona and De Iaco (Cardona, & De Iaco, 2023).

Explicit memory further incorporates episodic memory and semantic memory, the former retaining concrete events and their context, and the latter referring to general knowledge not related to any specific moment in life. This subdivision was identified by the Canadian psychologist Tulving in 1972.

The memory system significantly involved in the learning process is the working memory, a model introduced by Alan Baddeley and Graham Hitch in 1974 (Baddeley, & Hitch, 1974). This model describes short-term memory as a multi-component system and identifies a system responsible for the temporarily manipulation of information during cognitive tasks, called working memory. The author explains "the term working memory refers to a brain system that provides temporary storage and

manipulation of the information necessary for such complex cognitive tasks as language comprehension, learning and reasoning" (Baddeley, 1992). Working memory affects comprehension, decision-making and learning, and it is where problem solving skills reside.

Baddeley dedicated many years to the development of an exhaustive model to represent in detail how working memory operates. The model he proposed (Figure 1) includes a central executive controlling attention and distributing the cognitive load to the phonological loop (working on verbal material), and to the visuospatial sketchpad (focusing on visual and spatial input). The researcher subsequently improved his model by including the episodic buffer operating as a mediator between short-term memory and long-term memory (Baddeley, 2000).

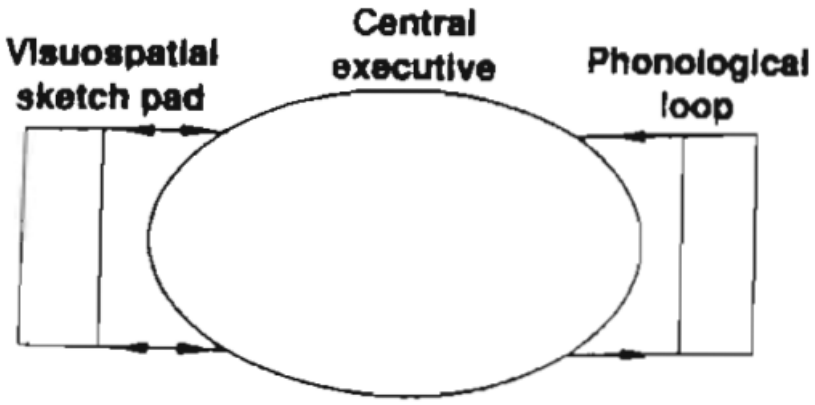

Figure 1: Working memory model (Baddeley & Hitch, 1974).

Lastly, researchers also identified prospective memory and autobiographical memory. Prospective memory refers to the ability to intentionally remember actions to be performed in the future; autobiographical memory represents the storage of the personal history of the individual.

All the memory devices explained above compose the complex system synergistically working on information that characterises the human mind. The research conducted in the past decades helped define memory and its functioning, creating a basic literature strictly connected to the topic of metacognition and its implication in the learning process.

To be more specific, studies on memory are related to the educational field since the identification of useful learning strategies requires a deep understanding of memory functioning. Only after having mastered how the brain codifies, processes, stores and retains information it is possible to outline learning and metacognitive strategies actively supporting students in their learning process.

The acquisition of new competences depends on the ability of individuals to know themselves, how their memory works and the suitable strategies to acquire new concepts (which differ in every person), a topic requiring an in-depth analysis that will consequently be addressed in the following section of the chapter.

1.3. THE MULTIPLICIY OF INDIVIDUALS: COGNITIVE STYLES AND MULTIPLE INTELLIGENCES

Another necessary premise to deepen the understanding of the learning process and of metacognitive knowledge involves learners' personality: students do not all acquire information in a similar way, but different processing modalities exist, and theories about cognitive styles and multiple intelligences involved in a cognitive task have been developed.

Psychometric tests are currently used to measure the intelligence quotient, but these tests evaluate the individual's abilities from an external point of view, by objectively considering the results. In other words, such practice does not effectively detect how the subjects' mind works and the essence of human intelligence.

Nevertheless, cognitive psychology reconsidered and deepened the studies on intelligence and described it as a dynamic and complex system involving distinct areas of the brain.

The psychologist Howard Gardner expanded the idea of the complex functioning of the mind and developed the Theory of Multiple Intelligences (Gardner, 1983). He claimed intelligence could be evaluated by adopting different criteria, and that multiple intelligences exist and affect the way people perceive and processes information, operating via distinct areas of the brain. The author suggests people do not adhere to a single, generic, concept of intelligence, but many intelligences promote the personality

of individuals who might develop different forms of intelligence when surrounded by a favourable environment.

The essential role of the environment is as well underlined by the International Classification of Functioning, Disability and Health (ICF) developed by the World Health Organisation, endorsed in 2001. This classification enhances the vital relevance of the environment surrounding the individuals in promoting their full potential in the social world, indeed including a specific section dedicated to "environmental factors". A more detailed description of the ICF and its pedagogical implications will follow in the next chapter (see chapter 2.2).

The American psychologist Howard Gardner identified eight different intelligences, or "frames of mind" (Gardner, 1983), shaping the complex and dynamic human cognitive system. His research in the neurological field demonstrated how children with brain damage were able to perform tasks even though they lacked some abilities, meaning they could rely on competences of other kind they possessed. He also conducted experiments on gifted children and observed the disparate ways of processing information employed to complete tasks. The following lines report a brief description of each of the eight intelligences identified by Gardner.

The linguistic intelligence outlines a particular sensibility towards words and language. People with a developed linguistic intelligence have a particular disposition for writing and reading, possess good vocabulary skills and mostly communicate through words. They have a keen predisposition for oral skills and use debates as a means of vehiculating new concepts and information.

Logical-mathematical intelligence characterises people who prefer working with numbers, reflecting on the logical connection among different elements, and have the capacity to analyse and solve problems logically. Numbers and symbols and their practical application are the core of this intelligence. People with logical-mathematical intelligence prefer conducting experiments to analyse data and understand the real world. They have strong skills in using abstract symbols and abstract thinking.

Visuo-spatial intelligence is associated with images and the ability to think, manipulate, and elaborate images in the spatial context. It belongs to people who love to doodle, to draw, to create schemes and who have a keen sense of direction. They

capture details easily, and visually identify solutions to problems. This intelligence also takes advantage of colours and shapes.

Musical intelligence refers to subjects who support their thinking with music, melodies, and rhythm. Listening to and creating music represents their preferable way to process information and learn new concepts. This intelligence belongs to those individuals who effectively express themselves when music is involved, and who easily retain information through songs and melodies.

Bodily-kinaesthetic intelligence is employed when people think through movements and gestures. It is the intelligence expressing its potential through one's whole body (or part of it), for instance, through facial expressions and hand gesture. Physical activity is preferred by individuals with strong bodily-kinaesthetic intelligence, who even possess a pronounced body coordination.

Naturalistic intelligence is strictly connected to natural phenomena. People with this type of intelligence like collecting samples of plants, rocks or other natural elements and have a particular sensibility towards ecological and environmental issues. Their learning is facilitated when they have the opportunity to select and classify information or work outdoors to directly interact with nature. They are good observers and easily discriminate and understand natural events.

Interpersonal intelligence belongs to those subjects who favour groupwork and easily interact with other people to share information. Individuals with a strong sense of empathy and respect, and who understand other people's point of view possess this type of intelligence. They enjoy interacting and cooperating to work on projects, to communicate and to socialise with peers.

Intrapersonal intelligence concerns subjects who are self-smart, meaning who work on themselves through meditation, reflection and individual thought and better learn when working individually. They reflect on their feelings, on their learning process and effectively plan their work when asked to complete a task. Intrapersonal intelligence thus identifies introspective individuals with a natural predisposition for metacognitive reflection.

Individuals do not possess one form of intelligence exclusively, but many intelligences can co-exist to varying degrees to perform cognitive tasks. Forms of intelligence could also be strengthened and mastered by adopting specific strategies.

Furthermore, the Italian psychologist Cesare Cornoldi dedicated his studies to memory in relationship with the personality of the individual as well, and developed his theory of cognitive styles, described as an influencing factor of the individual's learning process. It is important to underline recent studies conducted by neuroscientists stated that speaking of learning styles is preferable compared to speaking of cognitive styles, meaning recent research highlighted individual diversities are ascribable to differences in acquiring new concepts and not to cognitive processes.

Learning styles mark differences among the subjects in perception of the input and in rational procedures. The modalities employed to organise learning material and to memorise new concepts are similarly affected by cognitive styles.

Cornoldi (Cornoldi & De Beni, 2001) identified multiple learning styles and classified them according to the way input is perceived, memorised and to the modalities through which attention and reasoning are conveyed. The individual perceives new notions in two different modalities: details could be perceived first as opposed to the whole, or vice versa. The analytical style favours details first, while according to the global style the focus is initially on the general appearance.

The second subdivision concerns memorisation. Those who prefer information vehiculated through the spatial code represent the visual style, while those who prefer working with words have a predisposition for the verbal style.

Eventually, reasoning proceeds via systematic or intuitive modality, or either via impulsive or reflexive modality. The individual's style is systematic when details are carefully considered and analysed step by step, whereas it is intuitive when general hypothesis are formulated and subsequently confirmed or rejected. The learning style is impulsive when short time is dedicated to decision-making and the task is not carefully analysed, whereas it is reflexive when the subject invests some time to understand the request and to identify the resources at disposal.

Despite not having received huge consensus among scientists, Cornoldi's theory underlined the amplitude of modalities developed by the human mind to build knowledge and to actively process new information.

From the educational viewpoint, Gardner's and Cornoldi's theories require the employment of different input modalities: new concepts should be proposed to learners

in varying modalities in order to respect all the different intelligences and learning styles existing. By conveying the content of the lesson through different channels and resources (to list some examples, in written or oral way, through images, videos, music, gestures), teachers give to all students the possibility to process information according to their personality and learning styles, considering their singularity.

Sternberg (1990), who focused on learning styles regarding the educational field, also observed that from the teachers' point of view "students whose styles correspond to our own appear to us to be brighter" (*ibid.*), reminding to all teachers to consider and actively engage to discover students' preferred styles and the different personalities co-existing in the class.

Flexibility thus becomes an essential condition for teachers to allow students to discover their full potential and talents. Moreover, he stated that learners may implement different styles (also on the basis of the task to perform) instead of relying on one of them exclusively; what differs is the ability to switch among them (*ibid.*). Moreover, predisposition for styles might change through different stages of life, as styles "are not fixed, but fluid" (*ibid.*).

1.4. IMPLEMENTING METACOGNITION IN THE EDUCATIONAL FIELD: PEDAGOGICAL IMPLICATIONS

The previous sections of the chapter briefly summarised the research conducted in the past decades aimed at investigating the human memory and the relevance of personal traits in the information acquisition process. The studies considered create a solid foundation to better understand metacognition, metacognitive strategies and to discuss about their relevance in depth.

As previously explained, metacognition was defined by Flavell (1979) as the ability to acknowledge one's proper cognitive functioning. This section of the chapter provides more details about metacognitive knowledge, its purpose in the educational and pedagogical field, and the methodologies developed to implement it in class.

Since Flavell's definition, metacognition evolved in an umbrella term including the following expressions: self-regulation, Bloom's high-order skills (analysing,

evaluating and creating), metamemory, comprehension monitoring, feeling of knowing, judgment on learning and learning strategies (Haque, 2019).

In the educational field, the aim of the metacognitive approach is to "learn to learn". To do so, metacognitive teaching effectively supports students and help them develop disparate competences.

The Italian pedagogist Cottini further explained the role of metacognitive teaching in the educational field, asserting it offers the opportunity to all students to learn to interpret, organise and structure the information perceived from the surrounding environment, and to reflect upon these processes to become autonomous and able to deal with new circumstances. The metacognitive approach thus shapes individuals who are aware of their cognitive processes and improves both soft skills such as attention, memory and study method, but also content learning as reading comprehension, writing abilities and mathematics as well (Cottini, 2006).

Cottini (*ibid*.) reported that numerous researchers agree upon the identification of four levels characterising the metacognitive teaching approach. In the first one, teachers provide information concerning the functioning of the human mind to students, to make them aware of all the processes happening inside their brain.

The second level requires learners to identify and valorise their abilities and limits. In this case, teachers necessarily need to provide feedback on students' performance about the cognitive processes they employed. It is important to remind the feedback must exclusively focus on the performance without implying statements about students themselves, in order not to disrespect any individual.

The third level aims at guiding students in controlling their cognitive processes to complete a task. Such level includes different steps: establishing a goal and the strategies to implement to achieve it, setting a series of concrete instructions to follow, monitoring the learning process and the competences acquired to observe whether initial instructions are respected, and finally decide whether to change the procedures because of their ineffectiveness.

The fourth and last level is dedicated to psychological aspects, according to which psychological factors such as the locus of control, motivation, self-esteem and self-efficacy perception of learners influence their ability of activating metacognitive

processes. Teacher thus should focus on helping students build a positive self-perception and vehiculate the idea that all could perform successfully.

Perry, Lundie and Golder (2018), considering the research conducted with students and classes of different grades through the years, stated "wherever metacognitive skills are taught in lessons, there appears to be improvements in pupil outcomes, irrespective of which subjects are being taught". In addition, the authors also declared "there is no agreed typology of metacognitive strategies used in classrooms" since metacognition is rather a blurry concept to be objectively detected.

Nevertheless, researchers have developed and identified effective strategies helping to work on metacognition, with the aim of outlining metacognitive teaching and its practical implementation in class. In the following paragraphs, metacognitive teaching is addressed by considering the work of different authors operating in the educational field.

1.4.1. Metacognitive strategies in the classroom context

Dettori and Letteri (2021) identified those factors students usually take into consideration when asked to perform a cognitive task, namely, the difficulty of the task, the time required to conclude the task, resources involved, the monitoring of the executive process, the prediction of the hypothetical results and their evaluation. All these factors have a common aspect, namely, the active role of students who become responsible, conscious, and autonomous in their own learning process.

Metacognitive teaching employs specific strategies with the aim of promoting student reflection and their active participation in the activities proposed. It is important to remember there are no strategies more successful than others, since students' personalities and learning styles differ, meaning learners must engage themselves to discover the most effective way to acquire knowledge that suits them.

Dettori and Letteri. (*ibid*.) presented some main strategies identified by research studies conducted in different countries. When employed in class, the following strategies foster metacognition.

The first one involves the selection of relevant information by highlighting main concepts, using students' guide sections, taking notes and identifying concepts suiting the curriculum. The second strategy concerns the logical organisation of concepts,

which also means identifying connections between information. Concept maps are the result of such practice, as they include the main topics (reported as keywords or short sentences) and their logical connections. In addition, maps also involve different colours, different fonts, insert images, take advantage of visual memory, and develop oral skills. They represent an extremely useful strategy for all students, especially for those with special needs, who manage to understand and master new topics in a more accessible way. The third strategy consists in elaborating, therefore connecting new information with prior knowledge, and it is feasible by taking notes, asking questions, summing up, creating maps and schemes and writing texts. The last strategy concerns the repetition of information to obtain a complete memorisation. These strategies activate the working memory and allow the storing of new information by reading, copying and underlining concepts. Nevertheless, repetition strategies do not transform nor classify information, as they simply help learners retain information in a rather superficial way.

According to Zappaterra (2004), metacognition and the metacognitive teaching need to focus on the process rather than on the results. Observation and change of perspective are key elements to become aware of one's own learning process. To be more specific, the author (*ibid*.) suggests proposing tasks requiring observation, creativity, transformation and production of words, images, objects, and to implement practical activities helping students adopt different points of view. She underlines the importance of narration, as she recommends learners from a young age should frequently be asked to recount how they managed to acquire new concepts, in order to develop both reflection and oral skills. The author also remarks that teaching a metacognitive study method means activating tools of awareness and building collective and individual knowledge (*ibid*.).

Professor Paolo Torresan proposed metacognitive activities to be implemented in schools to vehiculate metacognition and raise awareness among students as well. The author identified four metacognitive methodologies to promote students' in-class reflection, namely reflecting on assumptions and attitude, planning, monitoring, and revision (Torresan, 2022).

Reflecting on assumptions and attitude is a strategy particularly effective in language learning, a field significantly influenced by biased ideas of culture, of

languages and of the most effective ways to learn them. The metacognitive letter (requiring students to describe their feelings concerning their language learning process, in written form) thus becomes an interesting instrument to collect students' opinions and share them with the class, promoting group reflection to identify those stereotypes that need to be deconstructed and to help students discover new learning strategies they had never thought of.

Planning consists of a strategy learners should implement whenever they need to complete a task. It aims at reasoning about all the steps that need to be performed to achieve a specific goal. Planning may include designing concept maps and schemes, instruments promoting both learning skills and metacognitive skills. Dedicating some time to planning how to proceed also improves students' results, since the final work becomes more accurate, more complex, and better structured.

Monitoring strategies may be employed after having completed a task or during the performance of a task: in the first case opportunities for reflection are conveyed through questions (left to students or guided by the teacher) with the aim of helping learners reason about the difficulties they encountered, time management and strategies applied; in the second case a list (or check-list) of indications and suggestions students should pay attention to is provided, as Torresan (2022) explains, to report those factors helping them be successful and reminding them what processes teachers expect from them. In this case, learners are guided in every step of the task in reflecting upon the best strategies to implement to develop a brilliant performance.

Revision fosters reflecting upon one's performance as well, but it differentiates from monitoring: the focus of revision is on the final product, whereas monitoring involves reflecting upon the processes employed to elaborate the final product. Revision requires students to actively participate to evaluate their own work, meaning learners do not passively listen to the teacher's correction and suggestions. Nevertheless, the teacher necessarily needs to guide learners during revision, by reporting the elements requiring correction, both orally or by highlighting them on the paper through symbols or abbreviations. Revision could be performed individually but also in groups or in couples to foster peer-reviewing and autonomy.

Furthermore, Maria Luisa Boninelli (2015) highlights the potential of the Feuerstein Method, a method which aims at supporting students discover their suiting learning

method. The Feuerstein Method is not taught by teachers but undertaken by learners: students are required to actively search for metacognitive competences, autonomously shaping their learning process and acquiring metacognitive abilities. The method underlines the importance of learning experiences for all students since direct experiences promote the development of the nervous system. This methodology works on three main fields, namely the emotional field, the cognitive field and the metacognitive field, all interconnecting with each other. The Feuerstein Method is currently used also with students with special needs and in the rehabilitation field, as it focuses on the abilities and not on the incapacities of the individual, promoting reflection and self-awareness.

Reflecting thus becomes indispensable when discussing about metacognition. To be more detailed, thinking about one's own thinking seems a proper expression to refer to metacognitive activity. In addition, comprehension represents a core activity of the brain, since being able to understand also signifies being able to establish connections with a plurality of concepts and with prior knowledge. Planning, monitoring, revision and reflection are thus the main strategies to work on metacognition and to pursue the metacognitive goal, namely enhancing students' active role and participation in their learning process and help them become responsible for it. Autonomous learners are those learners who managed to reflect upon their learning, identified their favourable strategies and applied them to improve the assimilation of new contents. They represent the ideal student, motivated and interested in building knowledge.

It is necessary to specify that investigating metacognition entails methodological difficulties, both for researchers and for students who are prone to reflecting about their learning, as it is not possible to consider the topic objectively and to separate personal traits, emotions and other variables affecting the subject from the data collected. In addition, it is possible to investigate metacognition only verbally, meaning through qualitative analysis concerning interviews most of all (Cornoldi, 1995).

Through the years, questionnaires including Likert scales and closed-format items fostering students' reflection have been developed. However, Perry, Lundie and Golder (2018) consider self-reporting questionnaires an imprecise and unreliable strategy to investigate metacognition, raising limitations concerning their effectiveness

to promote metacognitive reflection. The authors additionally assert "at least two types of research tools should be developed: one which can measure metacognition in action; and one which can measure the longer-term impact of metacognition" (Perry, Lundie & Golder, 2018). Further research is thus necessary to deepen the investigation concerning metacognition and metacognitive strategies for students and teachers, with the aim of finding instruments which could objectively investigate the topic.

Cornoldi (1995) identified some possible sources of error involved in the study of metacognitive knowledge: the age of the individual (also affecting the interactions with other individuals), language competences, abstract thinking abilities, absence of involvement, lack of association between knowledge and action, absence of cognitive knowledge, length of tests and time at disposal to complete them.

Moreover, the author (*ibid*.) explained the central role of attitude in working on metacognition, for instance when individuals are aware of their poor memory but do not actively engage to find an effective strategy to compensate this failure: this is a simple but clear example of lack of interest in improving one's own cognitive (and metacognitive) skills.

1.4.2. Metamemory and mnemonic strategies

Metacognition is related to metamemory as well. Metamemory corresponds to the type of metacognition according to which individuals reflect upon their own memory abilities and upon the most effective strategies to employ to improve one's learning and memorisation of concepts. It represents the ability to carefully observe one's own behaviour and to identify favourable contexts and methods in which memorisation happens in order to recreate a successful learning environment. Metacognitive knowledge referred to metamemory evolves through the years, as children's and elderly people's attitude and awareness towards their memory differ.

Metamemory necessarily requires reflecting to detect those elements which promoted acquisition. This reflection needs to consider the context of learning as well: the emotional state of the individual influences the ability to retain information and the quantity of concepts assimilated. To be more specific, the effectiveness of learning depends on the feelings of individuals towards the information they need to memorise, meaning when the topic is perceived as interesting and pleasing learners are

consequently motivated, pay more attention and foster memorisation. The context in which learning originally happened is relevant as well, since it is simpler to retrieve information when the subject is in the same location or in the same emotional state as when information was acquired.

The relevance of metacognition for the learning process has furthermore been recognised by the Italian psychologist Mario Polito, who deepened the studies on metamemory by identifying mnemonic strategies. The author stated that, to effectively remember, individuals should consider three factors: they need to be aware of the reasons for their forgetfulness, they need to recognise how they acquire and memorise information, and they need to develop mnemonics to improve their learning process (Polito, 2017).

He explained that an individual discovers his memory functioning best when employing metacognitive strategies as reflection and self-monitoring. He defined self-monitoring as the awareness of the method of study employed and its aim is the search for the most effective result; metacognition refers to the awareness of the individual towards the "laws of mind" (*ibid*.), towards the successful strategies to acquire, process and retrieve information and towards the discovery and invention of new mnemonic strategies.

Thanks to the metacognitive practice, it is possible to detect mnemonics, defined as those personal strategies facilitating memorisation for every individual that need to be discovered and applied to the learning process. Polito underlines the aim of mnemonics is not learning by heart but integrating newly acquired concepts to facilitate their permanence in people's mind (*ibid*.). Mnemonics thus serve as support for learners to foster the assimilation of new concepts and to organise those concepts to be able to successively retrieve them.

As previously mentioned, students should reflect upon the reasons for their forgetfulness to identify disturbing elements and actively engage to create successful learning conditions. Polito (*ibid*.) reports demotivation, distraction, interference and lack of use as the four main factors affecting the ability to retain information.

Interference requires a more detailed analysis: this phenomenon happens when the subject is working with an extreme quantity of concepts (consequently creating a sort of saturation), when there is insufficient time at disposal to elaborate concepts.

Interference also relates to the inability of self-monitoring and to poor study strategies, and it is eventually due to lack of planning and revision abilities and to the presence of negative emotional states, such as anxiety (*ibid*.).

Polito (*ibid.*) identified different categories of mnemonics: mnemonics of logic, of places, of images, of associations, of numbers, and verbal and physical mnemonics.

Among all mnemonics, logic is described as the most powerful one since it is based on order. The author declared logic mnemonics should be learnt first, as logic concerns the ability to select key concepts and to reorder them hierarchically. Logic mnemonics employ concept maps and schemes to spatially organise information and visualise the connection between concepts. Isolated notions have few or no connections with other concepts, meaning they are more likely to be forgotten by learners.

Polito (*ibid*.) asserted it is possible to distinguish between a mnemonic expert and an inexpert individual because the former properly knows how to use schemes and prior knowledge to understand reality, whereas the latter does not. Logic mnemonics are beneficial since they effectively categorise information, they entail a summary of the main concepts, and develop reasoning and deduction (which concerns inferring notions starting from prior knowledge in order to reduce the quantity of information to be memorised).

1.4.3. Teachers' role and responsibility in the metacognitive context

Having metacognitive teaching methodologies been described, it is necessary to investigate another crucial figure operating in the learning environment: the teacher. Dettori and Letteri (2021) explained the objective of teachers according to metacognitive methodologies does not consist in the elaboration of resources nor methodologies, but in supporting learners in shaping their cognitive strategies and creating a prosperous learning environment, working as facilitators. This assertion is also shared by Boninelli (2015), who added teachers should focus on helping students develop high-order cognitive skills and awareness.

Zappaterra (2004) deepened the role of teachers and stated they need to work as substitutes for students in the first stages of their learning, by planning a feasible task suitable for students' level, predicting difficulties and gradually increasing the complexity of the request, until learners become aware and responsible for their

learning process and thus independent form the teacher. Among the numerous didactic activities, the author (*ibid.*) identified some which are appropriate for the metacognitive study method, as memory activities, comprehension activities, communication activities, reading activities, problem solving activities and those activities working on concentration, attention and lack of attention.

Boninelli (2015) furthermore underlined that the main factor influencing the teaching and learning process is the methodological competence of teachers. The successful learning of all students depends on high-quality teaching, meaning on a methodology that puts students in the first place and considers interculturality, special needs and technological progress. A favourable learning environment integrates context, task structure and class environment.

Despite recognising the importance of metacognitive abilities, Dettori and Letteri (2021) reported teachers usually lack competences intended to create tasks promoting cognition, metacognition and to develop cognitive abilities in students since they mostly focus on conveying and explaining new concepts. A continuous education is thus necessary both for teachers and students to shape a stimulating metacognitive environment which fosters personal growth.

This chapter provided a detailed description of metacognition, of memory functioning, of factors involved in the learning process and additionally reported metacognitive teaching and strategies helping students become aware and responsible for their learning.

Metacognitive teaching represents an extremely useful approach for teachers, who could easily implement it in the class to help all students develop social skills and improve their learning style. Metacognitive teaching furthermore provides special needs students, who usually lack reflection abilities, the possibility to develop metacognitive competences when properly guided and supported.

To conclude, it is possible to consider metacognitive teaching an inclusive approach which fosters self-realisation and raises awareness among all learners. Nonetheless, the inclusive aspect requires an in-depth analysis and will be investigated in detail in the following chapter.

CHAPTER 2. TEACHING LANGUAGES INCLUSIVELY, DIGITALLY AND PLAYFULLY

2.1. KEY CONCEPTS OF LANGUAGE LEARNING

This chapter introduces notions of glottodidactics and its pedagogical implications. After having identified basic notions and key terms, language learning is addressed from different perspectives: inclusion is considered first, then playful and digital methodologies are investigated to analyse the current available resources to empathise with students living in a digital real world.

Language learning involves different didactic methods and principles, developed by scholars and researchers over centuries. It is necessary to define some key terms representing their core: approach and method.

The term approach refers to the ideas the individual develops about language, culture, communication, students, teachers and teaching, it represents the underlying philosophy of the language learning and teaching (Balboni, 2019).

The method corresponds to the process that transforms the approach in operating procedures realising on the practical way the concepts presented by the approach itself (*ibid.*). It corresponds to the resources employed to plan and organise the language learning process.

Nowadays, approaches and methods are included in the Instructional Design process, a concept referring to "the art and science of creating an instructional environment and materials that will bring the learner from the state of not being able to accomplish certain tasks to the state of being able to accomplish these tasks. Instructional Design is based on theoretical and practical research in the areas of cognition, educational psychology, and problem solving" (Siemens, 2002). It represents a valid framework for learning as it ensures learners achieve established outcomes (*ibid.*).

Reigeluth (1999) further described instructional design as "a theory that offers explicit guidance on how to better help people learn and develop", highlighting its flexibility since the methods of instruction are selected on the basis of the situation and are always implemented to pursue students' learning goals.

Instructional Design was first developed at the end of the XXth century for online programs and e-learning (Siemens, 2002), hence strictly connected with technology and interaction; however, it is still representative of the contemporary teaching and learning practice in which digital resources play a crucial role and are widely implemented to convey new content.

Instructional Design is the result of years of studies on language acquisition, and it was preceded by numerous language approaches developed in the previous centuries, starting from the Grammar-translation approach.

The Grammar-translation approach was the first language approach developed, according to which grammar and translation were emphasised as the name itself declares. Its origins date back to the XVIIth century, and it has been employed until the Seventies of the last century, even though it is not possible to deny it is still used in some measure by teachers (Balboni, 2019).

In the Grammar-translation method the language was a mere system of rules to be memorised and employed in written or reading tasks. Little space was dedicated to oral skills, developed via reading activities or dictation. This core of this approach was represented by teachers, who used to transfer their language knowledge to passive students whose assignment was memorising lists of words and verbs. This approach, undoubtedly criticised in view of a change in considering language teaching and learning, was shaped on the Latin teaching practice and gradually adapted to modern language teaching (*ibid.*).

Other approaches have been developed through the years, even though in current times speaking of method is outdated, as "methods are based on and meant to be used in idealized contexts. They are far from real life in the classroom, in which teachers choose and follow procedures not associated to any particular theory, feeling that no single method can help them cope with the challenges of everyday teaching" (Caruso, 2015).

In the current post-method era, a predetermined set of generic principles and procedures are rejected since a contextual and local-specific pedagogy based on the understanding of linguistic, sociocultural and political particularities is promoted (Kumaravadivelu, 2001). The author's statement served as a starting point for scholars such as Brown, Ellis and Long to progress form the discontent with previous methods

to developed post-method proposals considering socio-contextual and socio-relational factors (Scholl, 2017).

New language approaches have been developed according to present tendences. Current European language policies emphasise the importance of developing competences in different languages and insist on promoting foreign language acquisition in schools, through approaches such as Content and Language Integrated Learning (CLIL) and Intercomprehension. The former employs the foreign language to teach content subjects, promoting a concrete and practical use of language. The latter fosters the use of multiple languages simultaneously, and it is defined by Doyé in the Council of Europe (2005) as "a form of communication in which each person uses his or her own language and understands that of the other". Intercomprehension improves communication skills and exploits the full linguistic repertoire of the individual without considering a linguistic system better than others, consequently promoting language diversity.

Particularly important is Krashen's naturalistic approach developed at the end of the XXth century. The American neuro-linguist developed the Second Language Acquisition Theory (SLAT), stating foreign language acquisition follows a process which corresponds to the L1 acquisition process (1982). Another aspect to remark is that Krashen was undoubtedly influenced by the concept of Language Acquisition Device (LAD) developed by Chomsky (1965) which stated that all individuals are born with the LAD, an innate system helping children in their language acquisition.

Krashen identified five language learning hypotheses still considered a milestone of the language learning process: in their paper, Lichtman and Vanpatten (2021) took into consideration the research conducted since 1970 on three of the five hypotheses developed by Krashen, namely, the acquisition/learning distinction, the natural order hypothesis, and the input hypothesis, stating that "research since the 1970s has not demonstrated that the fundamental ideas involved in these three components are wrong". The authors suggested slight modifications of the hypotheses in light of subsequent studies, but Krashen's theory still remains valid. Similarly, Jegerski (2020) agreed about the centrality of Krashen's hypotheses, claiming that they persisted for four decades because of their correctness.

Krashen's first hypothesis concerns the difference between language acquisition and language learning. Krashen explains language acquisition is the natural and involuntary process employing both cerebral hemispheres of the brain. In language acquisition, language competences of the individual are stored in the long-term memory. On the other hand, language learning is a rational process involving explicit explanations of the structures of the language, representing an instable competence which also requires significant effort to be employed in communication. Krashen declared language acquisition is preferable since it builds language competences by replicating children's natural language acquisition process.

Language learning is strictly related to the monitor hypothesis: the monitor device is responsible for the conscious language production, and it indicates grammar structures have been voluntarily studied. It operates whenever individuals edit their language production, meaning they are able to autonomously detect mistakes in their production and correct themselves.

The third hypothesis consists of the formula of the natural order "i+1". This formula refers to the idea that learners possess the ability to acquire new input (i) when this is a step beyond their language competence. The new information, the "+1", represents the proximal development zone (Vygotskij, 1978), namely, the distance between the task students are able to perform and the potential level learners could achieve with the abilities they possess. The natural order implies a gradual language acquisition which respects students' learning pace.

The active filter is the hypothesis connected with emotional and psychological states: anxiety, stress, poor self-esteem, uncomfortable learning environments all affect language acquisition. In the listed situations, the filter activates and operates as a barrier, preventing language acquisition. Thus, it is important to create a comfortable and welcoming learning environment capable of motivating students.

The last hypothesis is that of the comprehensible input. Acquisition happens when learners properly understand the input, meaning when it respects the formula "i+1" and when the filter is not activated.

Krashen's theory contributed to shaping modern language acquisition fundamentals and represents a reference point for linguists and language teachers, who still follow

and respect the five language acquisition hypotheses when planning and teaching a language course.

Furthermore, it is worth dedicating a few lines to deepen basic notions of language learning and teaching. Language learning could involve the FL, foreign language, or the L2, second language. FL represents the acquisition of a foreign language which is not spoken in the country where the learner lives. It is the case of the English language taught in Italian schools: students have the chance to improve their language skills (almost) exclusively in class since English is not the official state language spoken by Italians. On the other hand, L2 suggests learners are studying the language spoken by the citizens of the country where they reside. Foreign students attending Italian universities and courses of Italian language are thus studying Italian as a second language.

2.1.1. Acquisition unit

In-class language learning requires the employment of the acquisition unit, which is the evolution of Freddi's (1993) and Porcelli's (1994) concept of didactic unit implemented since the Nineties. The acquisition unit and the didactic unit have a similar structure divided into five stages. However, they also present remarkable differences: the didactic unit focuses on teachers and implements deductive reasoning, whereas the acquisition unit focuses on learners and fosters inductive reasoning, thus embracing more recent language learning and teaching tendences.

The five stages of the acquisition unit are Engagement, Globality, Analysis, Synthesis and Discussion**.**

Engagement consists of choosing an authentic material to attract students' attention and motivate them in participating in the lesson. It also functions as icebreaker. Globality starts with a text which is listened or read, followed by comprehension exercises. The aim of this stage is to move learners from a general understanding to a deeper understanding of the language involved. The Analysis section contains the language structures students are expected to learn in the lesson. The class works on the didactic material to find patterns and inductively deduce the functioning of the language structures proposed by the didactic unit. Synthesis necessarily requires learners to actively use the new language structures to practice them and use them in

context. The lesson ends with the Discussion stage, in which the class compares, discusses and reflects upon the topic of the lesson with the aim of becoming aware and responsible of their language learning process. A sixth stage might be added to the didactic unit of acquisition, namely Assessment, to check students' understanding and language learning progress.

A relevant aspect of the acquisition unit is that it is based on the inductive reasoning, according to which students are required to observe patterns, connect different elements and reason about the structures to deduce the language functioning. Inductive reasoning starts with examples, and learners are expected to find the general rules starting from the examples given. This methodology makes students involved in their learning process and it contrasts the deductive reasoning, in which teachers explain language structures to students who simply listen to the teacher and work on examples, starting from the rules.

2.1.2. Language skills and certifications

Four basic language skills have been recognised and included in the existing language certifications, namely, reading, listening, speaking and writing. These four skills are divided into receptive skills (listening and understanding), and productive skills (speaking and writing). Those skills also combine to create integrated skills aimed at developing more complex abilities, such as conversating and summarising, which are present in the everyday life of all learners.

These four basic skills are an integral part of the Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR, 2020), a crucial document first published in 2001 and periodically updated by the Council of Europe, containing language learning and teaching guidelines and defining a common international system to track the acquisition of language skills. The CEFR is divided into numerous chapters dealing with different topics, namely, the political and educational context, the existing approaches, the Common Reference Levels, language learning and teaching, linguistic diversification and assessment.

The Common Reference Levels identifies three categories of language users and six levels of language competence, as shown in Figure 2.

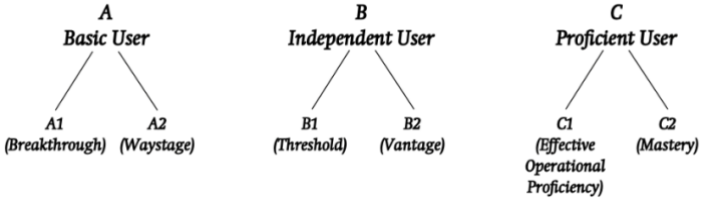

Figure 2: Language learning levels (CEFR, 2020).

The Council of Europe (2020) explains:

"There does appear in practice to be a wide, though by no means universal, consensus on the number and nature of levels appropriate to the organisation of language learning Common European Framework of Reference for Languages: learning, teaching, assessment and the public recognition of achievement. It seems that an outline framework of six broad levels gives an adequate coverage of the learning space relevant to European language learners for these purposes."

The six levels are summarised in the following table (Table 1). Each level contains descriptors to better understand the expected competences. These descriptors serve as a reference point for many didactic resources such as textbooks and workbooks, and for international language certifications whose levels follow the CEFR subdivision.

Proficient User	C2	Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
	C1	Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
Independent User	B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
	B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.
Basic User	A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
	A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

Table 1: Common Reference Levels, global scale (CEFR, 2020).

Nevertheless, communication does not depend on language proficiency only: the global communicative competence is composed of different elements first outlined by Freddi (1993) in the Nineties and subsequently investigated and deepened by following scholars who validated Freddi's concept of communicative competence. The global communicative competence is defined as a mixture of different elements simultaneously operating to convey a message from a speaker to a receiver, involving language, all the five senses, and the environment.

The global communicative competence contains language competence in its core. Phonology, grammar and lexicon shape the linguistic competence of the individual. The second layer corresponds to sociolinguistics, which indicates the ability to convey a message through words and attitude befitting the communicative exchange. The following layer of communication involves paralinguistics. All non-verbal elements of speech such as tone, volume, facial expressions, speed and pauses all contribute to convey meaning to the message as well. The last and most external layer concerns the extralinguistic competence referred to the general world. Kinesics, proxemics, the elements of the environment (both elements perceived by senses and objects) all belong to this last layer.

2.2. INCLUSIVE TEACHING AND LEARNING

The human communication system is, as previously explained, a complex system of different elements all contributing to vehiculating a message from an individual to another. The complexity of language production reflects the complexity of personal traits of learners which must be taken into consideration within the learning environment.

The topic of inclusive teaching and learning belongs to the field of educational studies focusing on inclusion. In this field, the term inclusion indicates the possibility given to all students to participate and work in the context of the class group and of the school community according to their personal possibilities (Dettori & Letteri, 2021). Inclusive teaching and learning promote a learning experience that considers, welcomes and respects all students without making differences, and it requires the

cooperation of teachers, headmasters, families, the community and the surrounding environment (Boninelli, 2015).

Inclusion entails a change of perspective in considering other individuals: diversity acquires a new meaning, and it indicates the potentiality and originality of people belonging to the social community; each person is unique, and this uniqueness adds value to the community itself. This perspective leaves no space left to exclusion and discrimination but fosters self-realisation for every individual.

This inclusive perspective is further enclosed in the International Classification of Functioning, Disability and Health (ICF) published in 2001 by the World Health Organisation and the ICF-CY, the International Classification of Functioning, Disability and Health – Children & Youth version endorsed in 2007 specifically addressed to developmental age.

ICF represents a biopsychosocial model which does not focus on the limits of individuals anymore, but rather on the social environment which directly affects their realisation in the social context. This classification considers health-related states first, with a focus on activities and participation of subjects and the environmental factors determining their disadvantaged condition. In ICF, the social environment thus entails both barriers or facilitators, disability consequently becomes a variable concept depending on the relationship between the subject and the context in which he or she operates.

This international classification determined a cultural change towards the positive idea of participation, by considering the relevance of the environment, and by equating educational and social intervention connected to the growth and development of children.

In the educational field, ICF and inclusion have been addressed by the discipline of special pedagogy, which promotes favourable learning conditions for every student considering and enhancing their differences and potentialities.

ICF fosters the transition from integration pedagogy to inclusive pedagogy, which concerns all cultural, social, linguistic, racial, gender, mental and physical differences (Pradal, 2014). Hence, inclusion does not refer to students with disabilities but to all those students who feel disadvantaged in their learning environment for any reason (*ibid.*). Moreover, educational field behaviours directly involve the environment

surrounding learners, consequently impacting on barriers and facilitators: schools, universities and educational centres thus could significantly make the difference towards inclusion following ICF principles.

Particular attention is paid towards teachers' role since they have the responsibility of establishing a comfortable and welcoming learning environment to actively engage the participation of all students in their learning process, putting student wellness at the centre.

Professor Fiorino Tessaro (2006) stated students must be responsible for their learning, comprehend its purpose, its meaning and be actively involved in it to live comfortably in their condition of long-life learners. The author also suggests three wellness axioms all teachers should consider: wellness consists of a balance between the present state of a subject and his ideal condition; wellness involves self-perception in relationship with the world and other individuals; wellness in the school setting promotes psycho-social paradigms by applying them to the educational context (*ibid*.).

Furthermore, the concept of wellness may be considered from different perspectives, namely the psychological perspective when the focus is on the wellbeing of the person, the sociological perspective when relationships with the social environment are considered, and the pedagogical perspective when wellness refers to the formative path of the individual.

Inclusive principles in the educational environment are feasible through the Universal Design for Learning pedagogical approach, developed in 1984 by the Center for Applied Special Technology (CAST) of the United States. At first, the CAST aimed at finding proper learning solutions intended to students with disability through technological resources available at the time, subsequently expanding its intervention by proposing learning methodologies suiting every learner without making distinctions. The UDL fosters inclusive education in relationship with technology and aims at eliminating labels such as SLD (specific learning disorders), to create an inclusive environment in which diversity is considered a resource and not an impairment.

The UDL relies on the possibility for every individual regardless of age, personal traits, abilities and lifestyle to think, design and employ services available according

to seven principles, namely, equitable use, flexibility in use, simplicity and intuition, perceptible information, low physical effort, tolerance for error, and size and space.

The curricula considering the UDL include objectives, methodologies and resources which are valid for all students, who thus have equal opportunities of success in the learning environment.

The UDL considers three brain networks involved in the learning process, meaning the affective network, the recognition network and the strategic network, which represent the starting point for three inclusive didactic principles subsequently divided into nine guidelines and operative instruments all teachers should take into consideration when planning their courses.

The affective network represents the "why" of the learning process and it involves engagement and participation. This principle encourages motivation and interaction among students by providing different means of engagement, with the aim of helping learners become purposeful and motivated. The recognition network is the "what" of the learning process and it relies on multiple means of representation to promote perception and comprehension, to prepare resourceful and knowledgeable students. The strategic network involves the "how" of the learning process and it suggests providing different means of action and expression to develop elaboration skills and executive functions, to shape strategic and goal-directed learners.

UDL principles promote accessible and inclusive learning, and its guidelines are constantly in evolution to welcome new suggestions to improve the educational offer. The following table (Table 2), taken from the CAST website, summarises the guidelines developed to promote an inclusive learning environment.

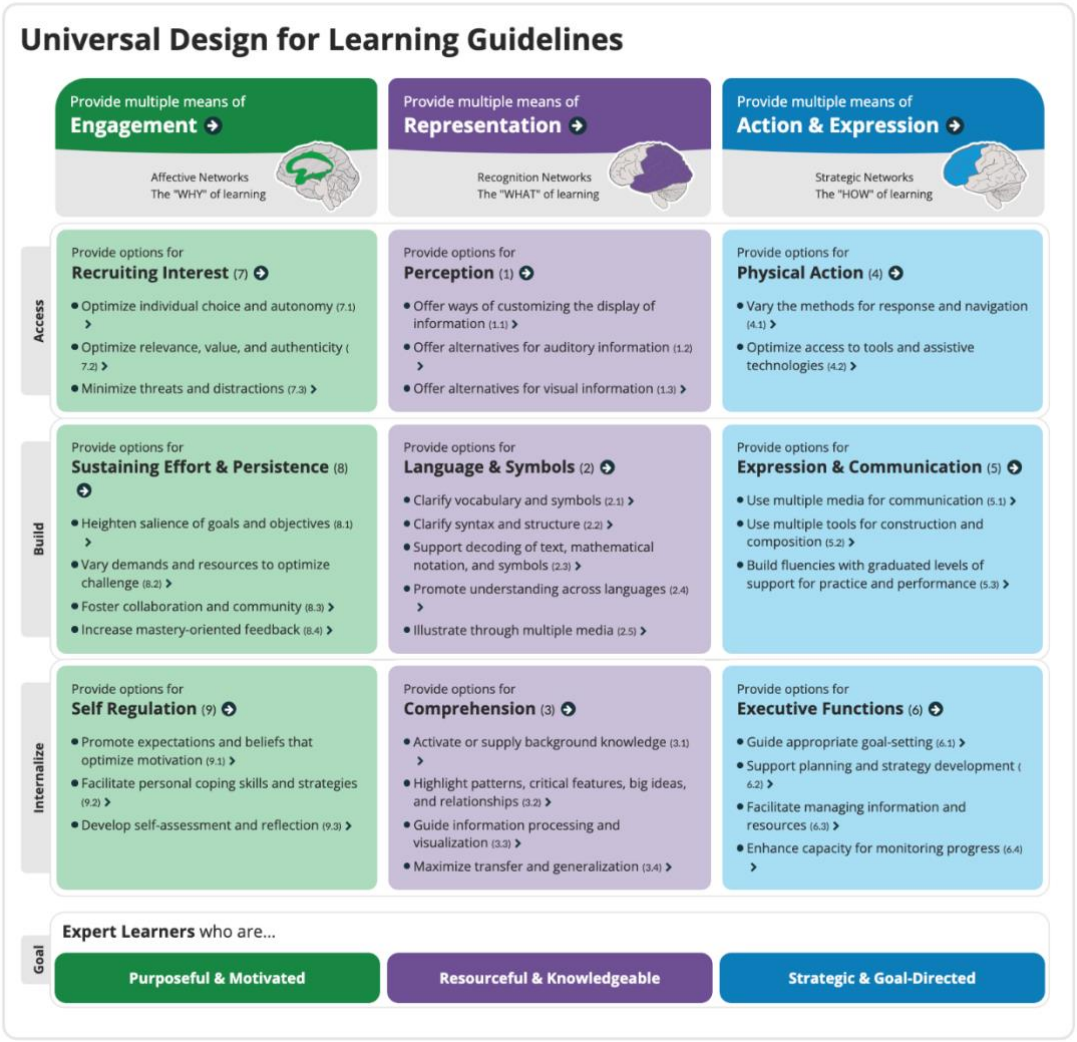

Table 2: Universal Design for Learning Guidelines (CAST, 2018).

The UDL guidelines contribute to shaping a new learning environment that widely involves interaction with peers and the acquisition of competences. Recent trends renewed the traditional idea of didactics in which the contents were transferred from the teacher to the student, to adopt a new vision according to which knowledge is directly acquired by the student and teachers plays a supportive role. This innovative pedagogic concept promotes the evaluation of competences acquired by learners, considering their knowledge, their abilities, their motivation and the possible concrete application of all the above (Tessaro, 2012).

In particular, the cooperative learning approach fits this new didactic concept since it promotes interaction among peers to develop and build knowledge. Cooperative learning belongs to the collaborative learning approach and it represents a crucial

teaching approach fostering social competences and inclusion where students work in small groups and learn by interacting with peers, whereas teachers guide the learning process and support mutual interaction.

Thanks to cooperative learning it is possible to develop social competences to establish a positive attitude towards classmates, to control emotions and to learn to respect rules. Cooperative learning is strictly related to the theory of Constructivism which states knowledge is the product of meaning negotiation operated via interaction with others, and it depends on prior knowledge and on the cultural and social context in which learning happens. Thus, knowledge acquisition does not depend on teachers' explanations anymore but deals with discussion among peers.

Research demonstrated that, when properly implemented, cooperative learning is more effective compared to traditional frontal lessons, as it develops high-order cognitive skills and promotes permanent learning, consequently preparing students to deal with future social and working environments.

Advantages and difficulties in implementation of the collaborative approach were listed by Baschiera and Borg (2023). Collaborative learning improves both learning abilities, cognitive processes, and skill development and motivation.

The authors (*ibid.*) stated collaborative learning moves students to a more active role in their learning, consequently promoting their productive cognitive processes. In addition, groupwork fosters problem solving and promotes issue examination from different perspectives to find a suitable solution, consequently promoting empathy. Lastly, collaborative learning "develops personal autonomy through a team-based approach that moves students away from the traditional, unidirectional teaching system and encourages student responsibility for individual and group learning" (*ibid.*), putting peer interaction at the centre of the knowledge building process.

Despite the attested positive impact of collaborative learning, there are still relevant difficulties in its application that emerge from time and investment needed, and from students' resistance (*ibid.*). The former aspect relates to teachers' preference for traditional teaching methods which ensure a disciplined class and fit the curriculum, focusing on content to prepare students for final tests; the latter identifies inequalities in tasks and work-sharing, difficulties in reaching agreement, loss of concentration and

long time required for group discussions as repulsive aspects of collaborative learning for students.

Nevertheless, research about groupwork effectiveness has been made, and four different theoretical perspectives on cooperative learning and achievement have been defined (Slavin, 2014). Motivational perspectives hold that task motivation is the key to teamwork, and students focus on rewards and care about obtaining a successful result as "the only way group members can attain their own personal goals is if the group is successful" (*ibid.*). The social cohesion perspective considers cohesiveness of the group and the quality of group's interaction as decisive, stating students effectively work in group since they care about the group itself. Cognitive perspective declares "interactions among students will in themselves increase student achievement for reasons which have to do with mental processing of information rather than with motivations" (*ibid.*). Lastly, developmental perspectives are strictly related to Vygotsky's concept of zone of proximal development, as interacting among peers around appropriate tasks increases the individual mastery of critical concepts.

As previously described, the five main factors characterising cooperative learning are interaction among peers, individual and group responsibilities, social competences, positive interdependence and self-assessment. In particular, the last factor mentioned, self-assessment, entails metacognition: Zappaterra (2004) considers metacognition an important cross-sectional tool fostering the achievement of other relevant objectives in the pedagogical context, such as student autonomy and cooperation skills. The author underlines the need for an approach focusing on the process of thinking and not on the results obtained in evaluation tests (*ibid.*). The didactic approach that involves metacognition operates on self-awareness and on self-esteem as well, metacognitive aspects special needs students usually lack (Dettori & Letteri, 2021). To sum up, metacognitive teaching activates a reflective and inclusive thinking process useful for all students which allows learners to analyse individual and group dynamics for a meaningful acquisition of knowledge.

Although students represent the core of cooperative learning, teachers do not play a marginal role in it. Serragiotto (2020) declares teachers have the responsibility of keeping updated with new research projects involving education, neurosciences and cognitive theories to update their teaching practice, to offer different modalities to

convey language content, and to stimulate information processing and communicative competence.

Furthermore, the greatest challenge teachers face concern content diversification to meet students' demands and needs (*ibid*.). This practice respects inclusive principles as it requires teachers to reshape learning paths to make resources accessible to all students and to create a collaborative and supportive environment.

As previously explained, teachers' main function is to support students in building knowledge instead of only lecturing via frontal lessons. Nevertheless, teachers are responsible for the class setting: they choose the objective of the lesson, plan the physical setting of the class, the stages of learning, they define groups and their members, they prepare materials and monitor students learning process. Teachers are also expected to directly involve the class in the planning of the lesson by sharing the objectives, assigning tasks and group roles, indicating the evaluation system adopted and discussing the progress of and with every group.

Another crucial aspect to take into consideration is group formation. Cooperative learning is particularly effective when students work in group of three or four people in which members possess different competences and abilities. Teachers have the responsibility of creating groups according to sociometric principles, meaning after having evaluated social relationships among classmates, to create mix-skilled groups to avoid isolation or excessive leadership, but also to promote cooperation between students with different levels of performance in the subject involved.

Moreover, Polito (2001) explains teachers must engage to build functioning groups: groupwork requires training to avoid incorrect behaviour of students. It is the case of groups in which a member is excluded by other members, where students refuse participating in the activity or where a few members only take charge of the entire group, imposing themselves. Hence, teachers need to consider groups from different perspectives: the personal perspective referred to single students, the interpersonal perspective involving relationships between classmates, and the systemic perspective that analyses both interpersonal relationships and the corresponding behaviour within the group (*ibid.*).

Furthermore, assessment represents a fundamental aspect of teaching which needs to be implemented according to inclusive principles as well. Serragiotto (2017) asserts

evaluation is strictly related to interpretation, since teachers should analyse both data collected through tests but also consider the whole personal learning process of every student.

The ideal assessment procedure to follow concerns triangulation (*ibid.*), a principle stating different points of view (at least those of three people) are necessary to develop a proper subject evaluation, which becomes significant for learners if directly shared and discussed with them. Subjectivity is preferred to objectivity in inclusive teaching, as an inclusive student assessment considers social and environmental factors as well instead of student performance only.

Inclusive assessment aims at making students aware of their progress without criticising the person; instead of underlining mistakes and inabilities, teachers should provide positive feedback which highlights students' strengths and potential first, considering the fact that negative evaluation does not help students improve and it could also demotivate them (*ibid.*).

All things considered, the cornerstone of inclusive teaching and learning is represented by dialogue and interpersonal relation, crucial elements to establish a welcoming learning environment that fosters self-realisation for all students and that teachers must engage to realise in their classes.

2.3. PLAYFUL METHODOLOGY AND DIGITAL RESOURCES FOR AN INTERACTIVE AND INCLUSIVE LANGUAGE LEARNING

The inclusive educational setting fosters students' participation in the activities proposed. Nevertheless, students' abilities differ, and so does their academic performance, especially in language courses.

Language courses usually deal with heterogeneous classes where "teachers should be aware of the fact that learners are different from one another in a number of ways, which affect their learning styles and consequently the way teachers should teach them." (Veneâncio Faleiros, 2009). Hence, teachers should take into consideration students' needs to propose varied and suitably challenging activities by implementing different teaching approaches.

To be more specific, learning styles, multiple intelligences and individual differences should be valorised by vehiculating the content through different channels and modalities. This thesis implements playful methodology and digital resources to work with heterogeneous language classes. Thus, in this section of the chapter, the former and the latter are described in detail to highlight their potential and their possible implementation with language learners with different backgrounds.

Playful methodology implements playful tasks and games as in-class activities. In spite of the fact that games are usually associated with leisure, Sudati (2013) reminded the etymology of the adjective "ludic": it derives from the Latin word "*ludus*" which referred to the place where pupils used to meet to learn the alphabet, meaning the equivalent of modern schools.

Playful methodology entails psychological well-being, focus on students and motivation, involving the communicative approach as the objective in the language learning field is to help learners develop communication and language skills.

Neurosciences further agreed about the positive impact of playful methodology since it proposes multisensorial stimuli which favour a greater storage of information in long-term memory compared to traditional methodologies (Fiorentino, 2022).

Moreover, psychologists such as Piaget, Freud and Bruner as well insisted on the importance of games and ludic activities for the developmental age, claiming games represent the means through which children learn and discover the world surrounding them, also specifying that games are present and influence the entire life of human beings. As a matter of fact, games in the educational context are functional both for children attending schools, and for adults who enjoy the challenges characterising the game as a means to develop language skills.

Playful methodology promotes the natural acquisition of language by implementing language itself to play the game according to Krashen's first language hypothesis and to the forgetting principle, a concept developed by Krashen according to which learning is effective when students forget they are attending language classes and unconsciously employ language in their performance.

Begotti (2007) furthermore explained playful methodology totally engages learners who are prone to pay attention for longer time spans and who participate actively and cognitively to the task.

In other words, motivation is higher when students are asked to complete tasks developed according to playful methodology. Caon (2020) explained motivation is "a fundamental motor for meaningful learning, or that which is stable and lasting in our memory". Motivation can be intrinsic or extrinsic, the former referring to "the condition in which a student autonomously finds interest, need, desire, curiosity, and pleasure in learning", and the latter indicating the case in which "reasons for learning are not rooted in personal factors, but they have ties with external factors such as, for example, gratification or reward from the teacher" (*ibid*.).

Meaningful learning questions traditional approaches and overcomes two main problems concerning language learning students usually deal with, namely the lack of connection with spontaneous need for communication, and the language structures that are discordant with the linguistic structure of the mother-tongue (*ibid*.). Hence, teachers' task is to create favourable learning conditions to promote an interested and active participation of students, by building meaningful relationships within the class.

Games are a total and holistic experience integrating affective, social (cooperative), motor and psychomotor, cognitive, emotive, cultural and trans-cultural components, involving students on two planes: on the synchronic plane when the game is played and students feel motivated, and on the diachronic plane when the game is repeated, and competences evolve since students engage to surpass the previously achieved aim (*ibid*.).

Furthermore, games are both trans-cultural, since they are independent from the geographical and cultural origin, and simultaneously culturally determined as they are influenced by the cultural system in which they are created and played (*ibid*.).

Caon (*ibid*.) summarised the main principles realised by playful methodology which derive from the humanistic, affective, communicative approaches and from constructivism: attention to students' needs from the psycho-affective and educational points of view, the importance of language as an instrument of social interaction, students' participation in the learning process to personally commit to knowledge building, valorisation of differences among students, and the role of teachers as facilitators who have the responsibility of creating a serene and motivational learning context which entails playful activities.

Technology and digital tools allow the realisation of the playful methodology principles listed above. Borello, Luise, Pederzoli and Tardi (2016) declared “the new millennium has marked the beginning of a new technological era characterised by the new Web 2.0 environments which have changed the role of the actors involved in the education process”, and further explained “all past technologies, from electric light to the airplane, took a whole generation to gain ground among people, and Internet has not required such a long time” (*ibid*.).

Digital resources have been rapidly reshaping didactics and the relationships among students, teachers and resources employed in the lesson.

Nitti (2018) defined digitals tools employed in glottodidactics as all those hardware and software devices which are able to improve and optimise the language course. New media, the interactive whiteboard, smart devices such as smartphones, online programmes teachers implement to plan the course and create materials all belong to this definition (*ibid*.).

Hence, the expression digital tool refers to all the content conveyed through technological devices and screens, such as videos, images, audio-visual aids, and interactive platforms. Software such as Wooclap, Moodle, Canva, Genially and the Google Suite are nowadays used in various professional fields, and the educational field is just one of many.

It is not possible to ignore technological progress since it is remarkably affecting the way people interact and build knowledge, this is the reason why in the last two decades pedagogy has conducted research to investigate the use of technology in the educational context and has been promoting the development of digital resources to be implemented in class.

To be more detailed, Favaro and Menegale (2014) highlighted the need for a methodology bridging the gap between how content is learnt inside the school and how it is learnt outside of it, by adopting a teaching approach which is able to eliminate such difference to stimulate students from the cognitive point of view.

Nevertheless, technology in the learning context remains a widely discussed topic. Three main discussion points have been identified (*ibid*.): from the affective point of view, digital resources keep students’ focus, but they could quickly become ineffective when learners become used to employing the same specific platform; from the

cognitive point of view researchers claim technology reshaped children's cognitive structures which now operate via hyperlink and not sequentially, but data collected are insufficient to prove it; from the pedagogic point of view there is evidence showing teachers sometimes refuse implementing digital tools since they do not accept the change in relationship with students. In particular, in digital teaching teachers do not represent the exclusive source of knowledge anymore, as groupwork among peers and interaction with devices reverse the course of the lesson and teachers' role.

New digital instruments main feature is interactivity: users have the power of shaping and adapting the content as they please and do not passively make use of digital resources anymore (Quaggia, 2013). Learner autonomy is thus encouraged as individuals have the possibility to use learning materials according to one's learning styles, becoming responsible for their learning.

Technological resources have also been crucial for language learning as it is now possible to work with authentical input and authentic language. Nowadays it takes seconds to share an image, a text, an audio-message, or a video: this greatly simplified the access to authentic material, an essential requisite especially when working with oral language.

In Ballarin (2007) suggestions addressed to teachers about the implementation of the first digital resources employed in the language learning field defined a currently valid guideline to follow when selecting authentic linguistic material: teachers should opt for recent material that corresponds to cultural practices into effect, that suits students' competences and level and, finally, that is authentic and representative of the true language spoken by a community.

Interactive linguistic material entails both advantages and disadvantages. Extralinguistic elements such as images, gestures and tone simplify comprehension and help learners develop hypotheses about linguistic structures, foster intercultural comparison and establish connection between new information and prior knowledge; on the other hand, authentic materials do not pertain to a specific, circumscribed CEFR level, consequently causing difficulty in comprehension for low-proficiency students; moreover, background noise could also represent an obstacle to comprehension. (*ibid*.).

Digital competences are also required by international and European documents which have been published or updated over the years.

The CEFR is built on the concept of communication skills individuals are expected to develop, but because of the advent of the internet those competences have been affected by technological progress as well, and the concept of communication skills itself changed (Quaggia, 2013).

The European Union composed documents and invested in projects addressed to teachers with the aim of defining digital competences they should master and of listing guidelines to promote digital competences in the educational field.

Recent research conducted on teachers' digital competences by Ranieri (2022) highlighted digital tools entered daily life of European citizens since around 2006, however the active consideration of such tools in the educational field is rather recent and consequent to the publication of shared frameworks of reference, following reported.

The Digital Competence Framework for Education (2017) was published in 2017 by the European Commission and identified six areas of interconnected competences focusing on educators' professional activities, namely, professional engagement, digital resources, teaching and learning, assessment, empowering learners, and facilitating learners' digital competence (Figure 3).

The DigCompEdu further recognises six digital professional phases strictly connected with the CEFR levels. In the first stage (A1 and A2 levels) teachers simply know and explore the potential of digital tools, in the second stage (B1 and B2 levels) teachers implement digital resources and experiment with them, whereas experts (C1 and C2 levels) possess adequate competences to renovate and create new resources.

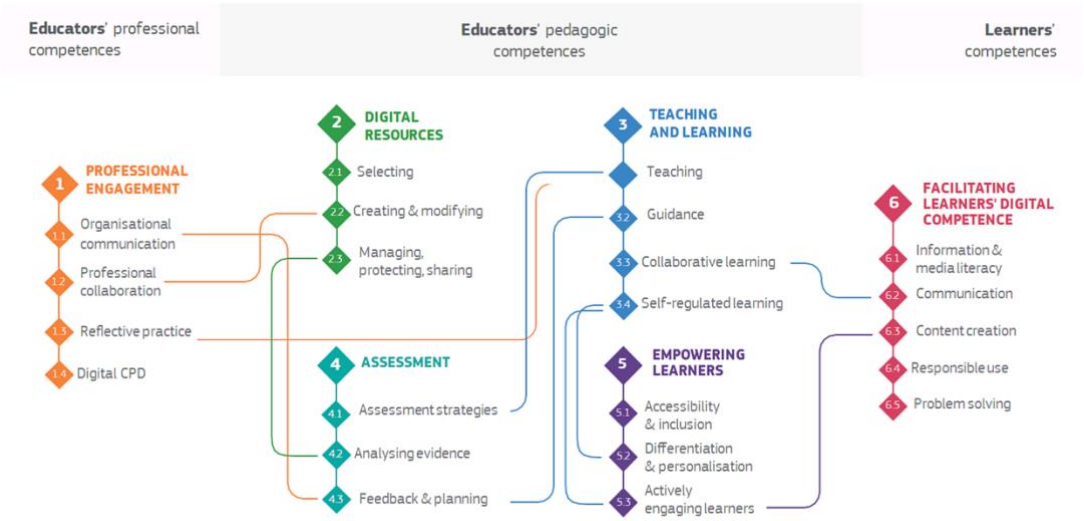

Figure 3: DigCompEdu competences and their connection (DigCompEdu, 2017).

The European Union thus promotes the implementation of digital tools in the learning environment and of digital education for all professionals working in the educational field.

Diadori (2022) summarised the current tendences of international education included in the European documents and projects, which correspond to being aware of limits and potentials of digital resources, integrating those resources in the language learning, following the professional stages explained in the DigCompEdu, developing the ability to choose proper material and adapt it, projecting new resources, implementing digital tools according to the CEFR levels, and promoting digital professional growth.

All things considered, researchers and professional agree about the need for an inclusive learning environment which valorises the potential of every student without making differences, by implementing teaching approaches that are able to motivate and engage learners and that foster the implementation of digital resources.

CHAPTER 3. EXPLORATORY STUDY: CONTEXT AND METHODOLOGY

The analysis of the available literature concerning metacognition, inclusive learning, playful methodology and digital resources in the language learning field allowed to identify the research gap this exploratory study would like to help fill.

Bassani and Perrello (2020) investigated students' perception of playful activities implemented in Italian language lessons and highlighted the need for research involving subjects of different age and nationality to observe how their feedback differs. Casani (2021) employed a metacognitive questionnaire with a sample of university students to detect their language learning strategy preferences. Results collected suggest further research should investigate the relationship between learning strategies and language competences in learners with different educational background.

In view of the literature considered and analysed in the previous chapters, this section delineates the research context of the exploratory study first, then the research questions and aims are outlined, lastly, participants and data collection instruments and methodology are described in depth.

3.1. THE RESEARCH CONTEXT

The research project involved Italian as second language learners in Italy. The exploratory study was conducted in two different locations, namely, Ca' Foscari School for International Education of Venice (SIE) and Centro Interculturale di Torino (CIT), located in Turin.

Ca' Foscari School for International Education promotes learning in a cross-cultural environment at Ca' Foscari University, providing university-level instruction for foreign students. The school offers courses in English for exchange students, graduate seminar programmes, courses of Italian language and of the Venetian natural and cultural environment, joint Summer Schools with international universities and the Foundation Year programme for prospective students at any Italian higher education

institutions. Italian language and culture play a crucial role in the school's programmes as the institution is also an accredited centre for the official certification of the Italian language, the CILS.

Centro Interculturale di Torino fosters intercultural education for Italian citizens and immigrants. The centre offers training for teachers, educators and social workers, organises seminars and conferences, conducts research projects in the educational field, prepares materials and resources for educational purposes, hosts a film festival and meetings to valorise the activity of city organisations and offers Italian as second language courses. The centre is as well accredited for CILS, DITALS and CEDILS certifications for both Italian language students and teachers. Particular attention is paid towards immigrants and second-generation individuals, with the aim of building bridges between their cultural background and the Italian context in which they live, hence promoting social inclusion.

3.2. RESEARCH QUESTIONS AND AIMS

The research questions of the present study emerged from reading the literature introduced in the first two chapters and from the personal teaching and learning experience of the author.

This contribution investigated the following research questions:

-How do students perceive digital and interactive platforms as a means of conveying new vocabulary? How do their perceptions change according to their age?

-How is it possible to obtain relevant results about students' language learning progress and metacognition through such tools?

-Do language teachers of the classes involved actively use or do not use digital tools and for what reason? Does a correlation between teachers' and students' familiarity with digital instruments exist and affect the learning process?

This exploratory study combines digital platforms, playful methodology and language learning.

The research pursues multiple objectives. First, it aims at observing whether it is possible to foster metacognitive reflection through interactive tasks supported by digital tools, and to investigate their effectiveness in keeping track of learners'

language progress. Second, it observes students' involvement and participation in such activities requiring individual and group performance to detect whether digital resources in language lessons are perceived as effective by students, deepening the question by asking them what, in their opinion, the advantages and the drawbacks of such format are. Particular attention is paid to the participants' age impact on the feedback collected. The third purpose is that of reflecting with students about the potentiality of cooperative learning to foster social skills and to build knowledge, and to suggest valid language learning strategies to be implemented while learning vocabulary. Lastly, the research investigates the relationship between digital tools and the language teachers of the sample considered to understand their familiarity with such resources and the reasons for their implementation in language lessons.

All things considered, the exploratory study does not include research purposes only, as the activities proposed contain useful and practical suggestions students could implement to improve their language learning process.

3.3. PARTICIPANTS AND METHODOLOGY

The research involved twenty-six foreign students in total and two Italian as second language teachers. Of the twenty-six students composing the sample, thirteen were attending the A2 level Italian language course at SIE, and thirteen were attending the A level Italian language course at CIT.

The SIE class started their Italian course in October 2023, gradually moving from the A1 to the A2 level of proficiency according to the CEFR, supported by the same teacher all along. None of the students possessed any Italian language skills before starting the course. The course consisted of three lessons of one hour and half per week for the first three months, whereas from January the weekly lessons were reduced to just two. It is important to underline that until January the lessons were employing a hybrid system since those students waiting for their VISA to leave their country were attending lessons via Zoom, whereas those students already possessing their VISA were regularly following in-class lessons in Venice. Online students did not have recorded lessons available but were connecting to the digital platform when in-class

students were simultaneously attending lessons in Venice. Both groups were thus actively participating in the lessons.

From the end of October 2023, the author of this exploratory study started working together with the SIE class as language tutor, at first supporting online students on Zoom platform during the lessons and offering a weekly in-person tutoring for those students who had just arrived in Venice or needed extra lessons; then, once the entire class was attending in-person lessons in Venice, additionally supported students during their weekly in-class lessons as well.

The SIE students involved in the research were attending the Foundation Year programme, a specific year-long programme for those students who have completed high school and would like to enrol in Italian universities. Students thus study European history, academic English, Italian language and also take more specific courses according to the disciplines they would like to study at university.

The ages of the thirteen students participating to the exploratory study ranged from eighteen to twenty-one. Eight of them were from the Republic of Kazakhstan, one from Azerbaijan, one from Bolivia, one from Egypt, one from Russia, and one from Ukraine.

The CIT class started the Italian course in April 2024 and all the students were attending in-person lessons, no online lessons were contemplated. The course considered aimed at developing A-level proficiency according to the CEFR and students were attending Italian lessons of two and half hours, twice a week. The course involved twelve meetings which occurred within two months. As highlighted by one of the teachers working with the class, the number of students attending lessons was changing and the participation rate of the course was thus rather variable.

The class was composed of students with different educational backgrounds and with different Italian language competences since many of them had been living in Italy for some time. Therefore, the class considered was a multilevel class. The course aimed at developing basic language skills useful for everyday situations and at facilitating autonomous study to support learners who daily dealt with the Italian language. The class worked with different teachers, sometimes more than one teacher was simultaneously in class to teach students and support them in case they needed clarifications or help. At the end of the course, it was possible for the students to attend

two more meetings which consisted of a simulation of the CILS certification of Italian language.

CIT students' ages ranged from eighteen to sixty-seven and participants came from different countries: two students were from Brazil, one from Argentina, one from Canada, one from Israel, one from Mexico, one from Morocco, one from Pakistan, one from Slovakia, one from Spain and one from Venezuela. The nationality of two students participating in the research is not known by the author.

Data concerning the individuals' nationalities were obtained in the preparatory phase of the exploratory study, when the author of the thesis and the two teachers of the classes composing the sample were planning and discussing about the concrete realisation of the project with students, occasion in which overall information about learners was shared. In most cases, information concerning sample's nationalities were subsequently collected via final questionnaires filled by the participants as well. In two cases, nationality data were not given to the author and since the number of questionnaires collected is inferior compared to the total number of participants, it is not possible to indicate the correct nationality of two of the participants.

The two teachers took part in the exploratory study as well by filling in a questionnaire specifically prepared for them, thus representing part of the sample considered and contributing to deepening the research project of this thesis.

All things considered, the sample involved in this case study is a convenience sample, a non-probability sample chosen by the author due to availability and willingness of students and teachers to participate with their classes in the exploratory study.

This research represents a case study that employs a qualitative method of research, which means "not concerned with how representative the respondent sample is or how the experience is distributed in the population. Instead, the main goal of sampling is to find individuals who can provide rich and varied insights into the phenomenon under investigation so as to maximize what we can learn" (Dörney, 2007).

This qualitative exploratory study thus focuses on a small-size sample typically employed in case studies to detect students' and teachers' reactions and feedback towards digital resources, playful methodology, cooperative learning and metacognition in language lessons.

3.4. DATA COLLECTION INSTRUMENTS

The exploratory study consisted of two different parts, an interactive presentation carried out by the author, and a feedback questionnaire for both students and teachers. Both instruments have been created by the author of the thesis for this specific purpose.

3.4.1. Interactive presentation

The interactive presentation consisted of a series of activities performed with the classes via the digital tool Wooclap, a platform for student engagement facilitating student-teacher and peer interaction, and helping teachers collect immediate feedback and results. The platform is accessible to all Ca' Foscari students and teachers since it is one of the digital teaching tools directly provided by university.

Wooclap allows the implementation of interactive activities students can perform via smartphone or computer such as multiple choices, polls, word clouds, open questions, finding spots on images or labelling spots on images, matching words or expressions, filling in the blanks, sorting activities, brainstorming activities, spinning the wheel activities and it further allows to include links to external websites, it offers the possibility to write on the whiteboard, and, lastly, it also offers the possibility to import Google Presentation slides which can be modified to make them more interactive.

The platform does not have a limit on the number of participants simultaneously working on the presentation, and it only requires the choice of a nickname to access the slides; the access to the presentation happens via alphanumeric code or QR Code directly created by the platform itself.

In addition, since Wooclap is frequently used with large audience, it is possible to set a timer for each interactive task to better manage the transition between the presenter's speech and the activities performed on the platform; the results of such activities are also visible to all participants facilitating group discussion and reflection.

The platform further allows the possibility to assign points to participants for every activity, meaning enabling the competition mode, which can foster student engagement and participation.

Participants do not have free access to the entire presentation: the transition between slides is controlled by the presenter only, participants' devices thus exclusively show the slide the presenter is sharing. Whenever the presenter proceeds with a new slide, participants are automatically shared the same slide without the possibility of keeping on working with the previous content.

All things considered, Wooclap presentations do not only allow the creation of interactive tasks, but also the implementation of entertaining activities that include playful methodology features.

The presentation developed for this study concerned the vocabulary related to the semantic sphere of the cinema and aimed at observing whether digital tools such as Wooclap facilitated vocabulary acquisition and represented an effective modality of conveying and retaining new words for Italian as second language learners.

The topic of the cinema was chosen as it was suitable for A-level learners. The textbook "*Dieci. Lezioni di italiano. A2*"[1] is the Italian as second language book implemented by the SIE course that the author used as reference to develop this exploratory study. The sixth unit of the textbook, called "*Ci andiamo?*" introduces the topic of the cinema, dedicating the vocabulary and communication sections to cinema-related words and expressions to discuss about films, to invite friends and make plans to go to the cinema. The sixteen words implemented in the exploratory study were in part taken by the lexicon contained in this unit.

The activities elaborated gradually increased their difficulty following Krashen's intake + 1 hypothesis (1982), allowing students to master new vocabulary step by step.

A detailed description of the slides and activities proposed to students is reported below. Labelling spots on the image, word cloud, matching, sorting and brainstorming are the interactive questions included in the presentation.

The initial slide, not given any number since automatically created by the platform, contained the alphabetic code to use on the website and the QR code students could scan to access the presentation via their personal devices (Figure 4).

[1] Naddeo, C. M., & Orlandino, E. (2019). *Dieci. Lezioni di italiano. A2*. Firenze: Alma Edizioni.

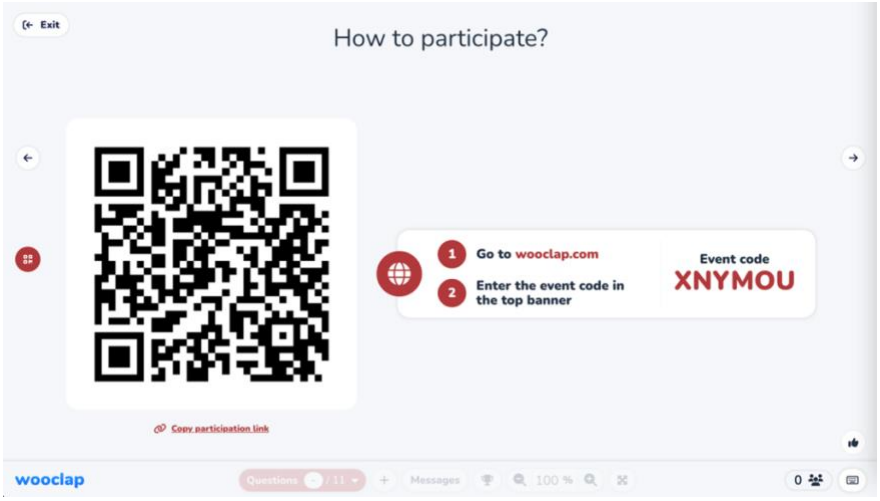

Figure 4: Initial slide, "How to participate?".

The first slide served as background (Figure 5) for the author to introduce herself and the research project, in order to give the class basic information concerning the field of study, the thesis topic chosen and its aims. An overview of the activities composing the case study was given to students, to make them aware of the development of the research itself and of the tasks they were expected to complete.

Figure 5: Slide 1, introduction to the study.

The following slide simply contained a picture with the aim of arousing students' curiosity and interest (Figure 6). This slide realised the engagement stage of the acquisition unit as established by Freddi (1993) and Porcelli (1994). Students' participation was promoted by asking them to guess the topic of the exploratory study

and by sharing their ideas *in-plenum*; it did not require them to interact with the platform but simply to establish a positive learning environment and to help them focus on the presentation.

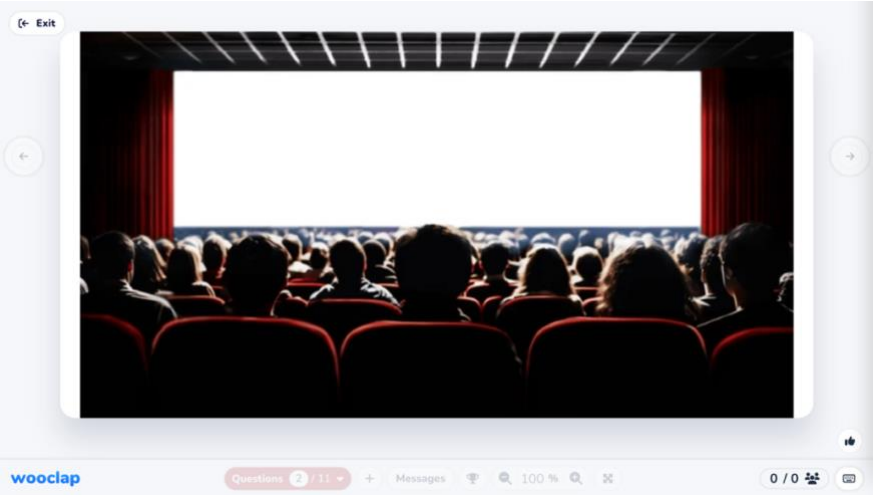

Figure 6: Slide 2, engagement stage.

The third slide consisted of the first activity of the study which required students' individual participation. Having discovered the topic of the activity, students were asked to reflect upon the Italian words related to the semantic sphere of the cinema they knew and to write them on the slide to form a word cloud with all the entries collected (Figure 7). The words dimension changed according to the number of times that were written by participants: bigger words thus represented the vocabulary known by a higher number of learners.

This activity helped students reflect upon prior knowledge and the competences already possessed before introducing new vocabulary. Furthermore, data collected also helped the author understand the lexicon mastered by learners and the overall knowledge of cinema-related words of the class.

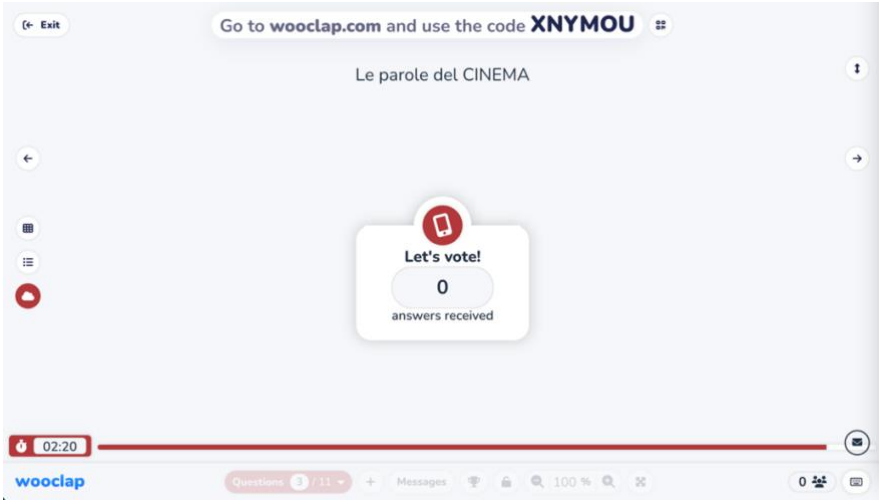

Figure 7: Slide 3, "Le parole del cinema", word cloud.

Slide number four reported the new vocabulary on which the presentation was based, on the whiteboard (Figure 8). The sixteen words were written in black ink, in random order and disposition. The purpose of this slide was to introduce the words representing the core of the presentation to be implemented in the following activities.

Participants were asked to discuss in small groups, created by the teachers, about the meaning of the sixteen words without consulting the dictionary, in order to put together all the pieces of information every group member possessed in order to share and build knowledge. Moreover, the content of this slide had also been printed and sheets were distributed to groups to facilitate groupwork and discussion, but also to allow students to save a copy of the vocabulary involved in the interactive presentation performed.

Participants were invited to work in groups according to cooperative principles which represent a pillar of the learning process, not only in the language learning field. Balboni (2010) asserted cooperative learning is strictly related to constructivism, a concept grounded on the idea that knowledge is built when people share their competences and experiences, thus representing a collective process which cannot be excluded from Italian language teaching and learning.

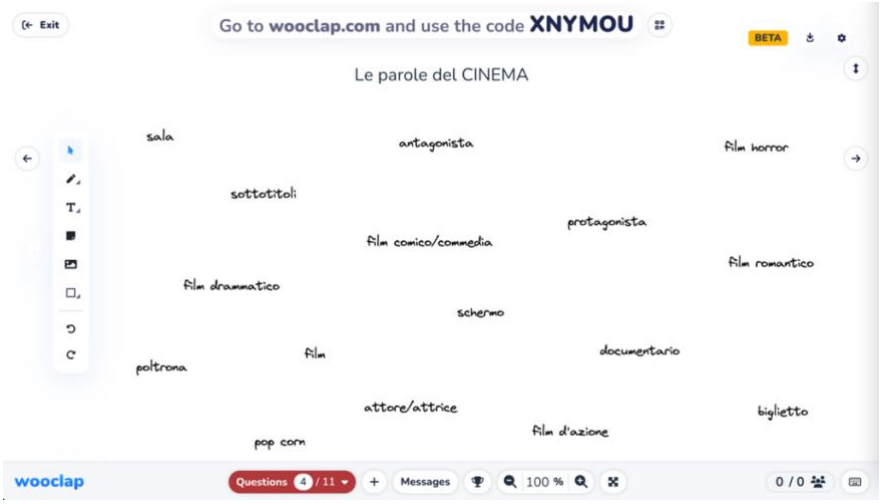

Figure 8: Slide 4, "Le parole del cinema", whiteboard.

The sixth slide requested the class to actively work with the new cinema-related lexicon to assign the words to proper categories (Figure 9) by employing the brainstorming function offered by Wooclap.

The sixteen words were divided by the author into three categories, namely, *genere cinematografico* (film genre), *luogo/edificio* (place/building), and *film*. Learners were divided in groups and requested to put each word in their category according to the meaning previously hypothesised with the group members. Hints to help students were given (an example for each category was reported on the slide), as well as the number of words pertaining to each specific category (in brackets).

This activity was performed in groups, and it represented the starting point of the process of identification and understanding of the focus words of the presentation.

Furthermore, the subdivision of the vocabulary into categories is a crucial strategy when learning new words, since logical organisation fosters memorisation, as Polito explained (2017).

In addition, colour coding is also included in this slide since each category is represented with a different colour. Colours favour memorisation as well, especially in those students who possess strong visual memory.

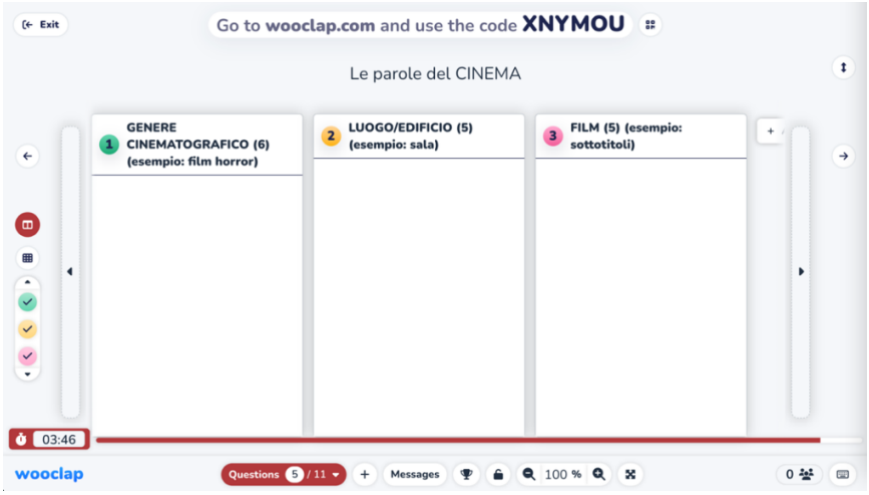

Figure 9: Slide 5, "Le parole del cinema", brainstorming.

The next step of vocabulary acquisition consisted of a matching activity to perform in groups where participants were asked, after having identified the category to which each word belonged to, to match the words with the corresponding picture (Figure 10).

In all the cases, pictures were referring to a single word; two words were excluded from the activity, namely, *protagonista* and *antagonista*, as specified in the question section of the slide visible to participants.

Matching words to images is an effective exercise to support learners in their discovery of the meaning of words: at this point of the activity, they knew words were related to the cinema semantic sphere and that words belonged to three different categories; therefore, this activity allowed to visualise words and to consequently confirm or contest what had been previously hypothesised while discussing with group members.

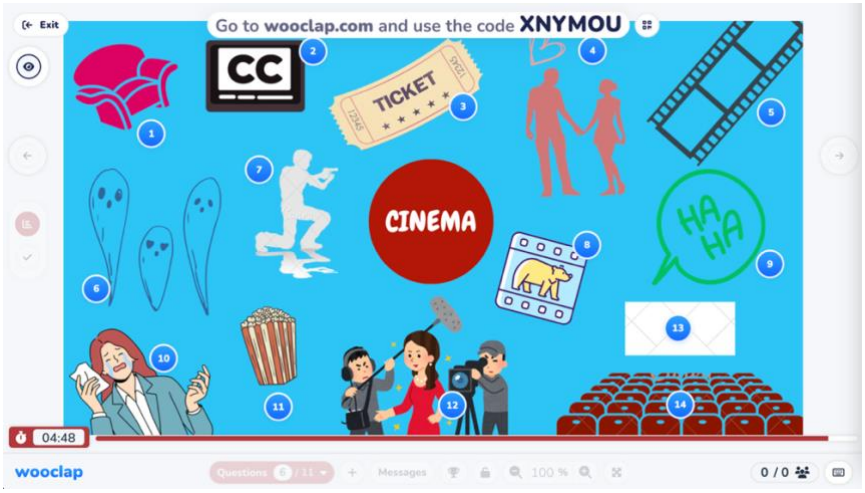

Figure 10: Slide 6, "Le parole del cinema", matching words and images.

The last activity involved slides number seven, eight and nine (Figures 11, 12, 13). Students (still divided in groups) were requested to match the sixteen words object of the presentation to their corresponding definition. Definitions were written in Italian; no extra definitions were included in the slides: the number of words were thus equivalent to the number of definitions given.

Hence, Wooclap matching task respects the guidelines suggested by Mollica (2010), who declared that, to be effective, matching exercises need to place all the items on the same page, to give detailed information about the structure of the options, to employ elements referred to a single semantic field, to avoid to put irrelevant information which serves as distractors, and finally to clearly highlight the two columns to match.

The sixteen words have been divided into three slides for a specific reason: placing all the items on the same slide would have been little usable for those participants performing the task on their smartphones. Therefore, words have been divided with the intent of mixing all the three categories identified among three different slides, the first containing six words and the remaining two including five words each.

This last activity aimed at finding a suitable description for words once the context and the meaning were discovered. Students were thus invited to match words to the corresponding definition even when the understanding of the Italian description was not complete, to actively work with vocabulary and on comprehension skills.

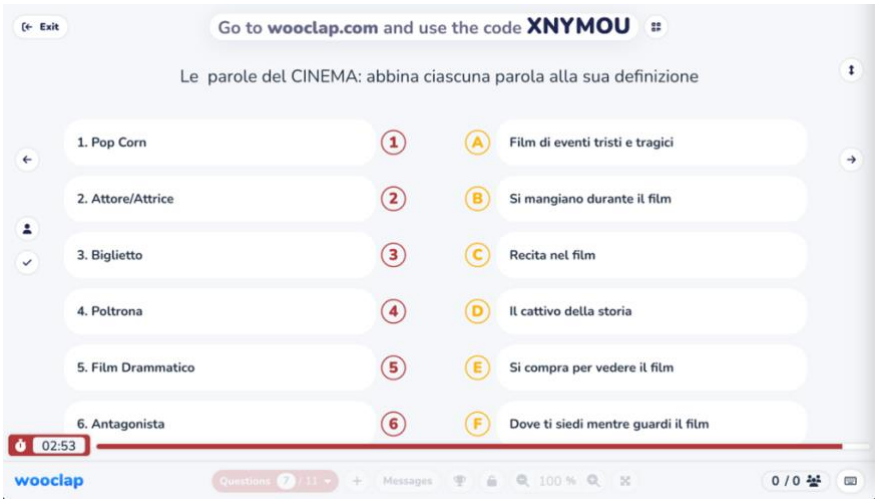

Figure 11: Slide 7, "Le parole del cinema", matching part one.

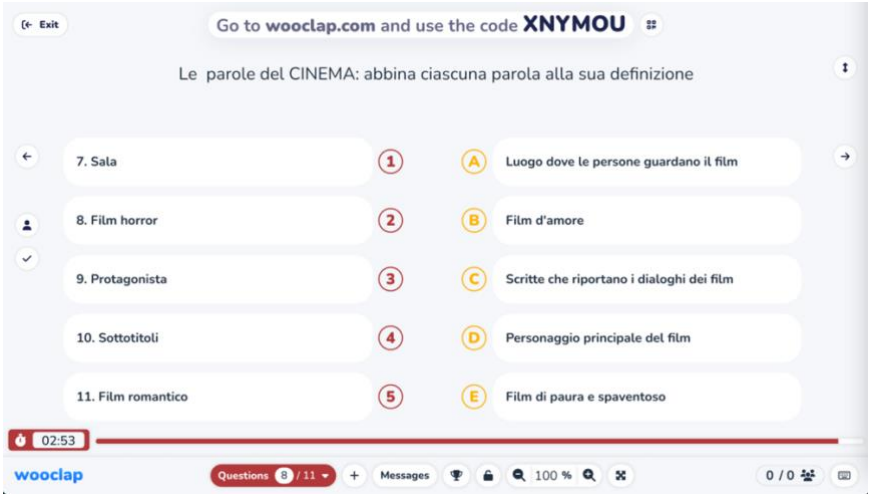

Figure 12: Slide 8, "Le parole del cinema", matching part two.

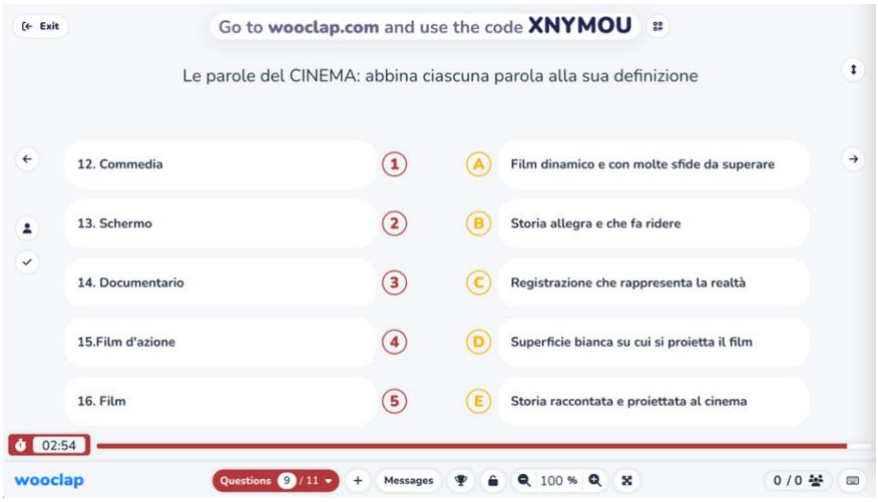

Figure 13: Slide 9, "Le parole del cinema", matching part three.

The tenth slide consisted of a sorting task in which students were expected to order chronologically the activities conducted via digital mode, individually (Figure 14). This last request aimed at inviting learners to reflect upon the steps performed and the purpose of each of them, to raise awareness of their learning process and directly involve them in the evaluation of the effectiveness of the activity mode proposed. Therefore, the main objective of this final slide was that of fostering reflection to develop metacognitive competences.

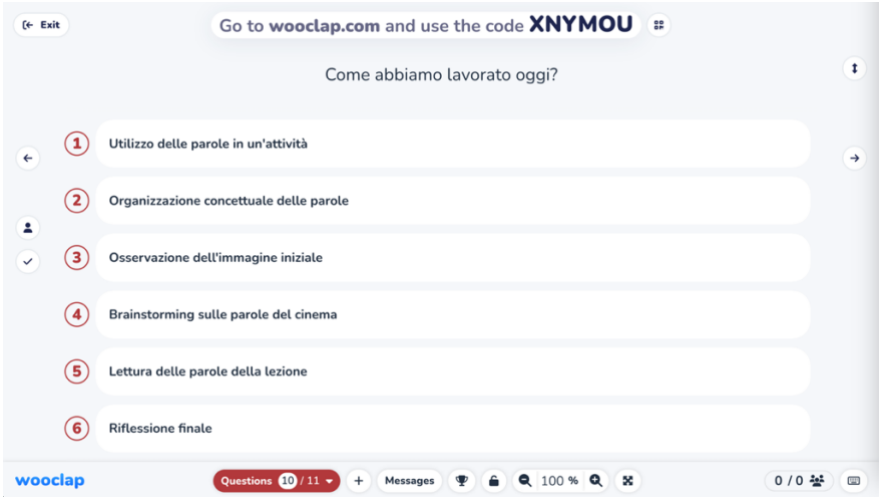

Figure 14: Slide 10, "Come abbiamo lavorato oggi?".

A closing slide (Figure 15) defined the end of the presentation and marked the passage to the second part of the exploratory study, namely, the student and teacher questionnaires.

Figure 15: Slide 11, closing slide.

All the activities included in the Wooclap presentation took into consideration Gardner's theory of multiple intelligences (1983) and were designed according to his principles. Verbal intelligence is the main intelligence fostered by all the activities proposed, as students were repeatedly invited to reflect upon words, upon their meaning and to actively use them to complete tasks designed. Logical intelligence was promoted when learners were asked to divide cinema-related vocabulary into three

different categories. Word-image matching (slide number six) required visuo-spatial intelligence. Intrapersonal intelligence was activated thanks to the initial brainstorming and to the final metacognitive exercise. Finally, interpersonal intelligence was necessary for groupwork in order to cooperate at best.

In addition, Wooclap allowed to propose new concepts according to the UDL concept of different means of representation since students were offered the possibility to work with new vocabulary through logical organisation of words, through images and through definitions. Words were presented from different perspectives and different modalities were implemented to create an inclusive interactive presentation which required and promoted everybody's participation.

3.4.2. Student questionnaire

A Google Form online questionnaire was elaborated to collect data and students' feedback, and thereafter distributed once having completed the presentation.

The student questionnaire was composed of twenty-five items divided into three sections: the first concerning personal information, the second about language background and the third involving the activities proposed to the class. Both close-ended and open-ended questions were included in the questionnaire.

Some of the items composing the third section took inspiration from the Strategy Inventory for Language Learning (Oxford, 1989), a Likert-scale structured questionnaire employed in English as foreign language learning to test students' metacognition. In particular, SILL questions structure served as an example to elaborate metacognitive questions pertinent to the current exploratory study, which however remain original and created by the author of the thesis herself.

Personal information section was composed of the following items:

1. What is your age?
2. What is your country of birth?
3. Please specify the educational centre you are attending.
4. What is your educational level?
5. Are you a student? Are you a worker?
6. If you study and/or work, please specify your study field and/or your current profession.

7. How long have you been living in Italy?

Language background section consisted of the following questions:

8. What is/are your native language/s?
9. Other languages fluently spoken (B2/C1 level)
10. What other languages have you studied besides your native language(s)?
11. How long have you been studying Italian?
12. Why did you start learning the Italian language?

The final section, aimed at collecting students' feedback on the activities proposed, included thirteen questions:

13. What digital tools and platforms used for educational purposes do you know?
14. Did you use any digital platforms while you were attending school? If yes, please specify whether you worked with digital platforms in language courses.
15. How often do you use digital platforms in the courses you are attending?
16. Would you rather use digital platforms in the Italian language course more often? Please specify the reasons why you would or wouldn't like to employ digital tools more often.
17. In your opinion, what are the drawbacks of using digital platforms?
18. In your opinion, what are the advantages?
19. What difficulties did you encounter during the activities proposed?
20. Did you discover any new strategy to learn new concepts?
21. At the end of the lesson, do you usually reflect upon the activities performed in the lesson?
22. Do you feel dedicating some time to reflection helped you identify effective learning strategies to employ while acquiring new words or information? Why? Why not?
23. Do you feel reflecting upon the activities helps you monitor your language learning progress? Does it help you identify your strengths and weaknesses?
24. Are you likely to employ the strategies discovered today in the future? Why? Why not?
25. Please rate today's experimentation format from 1 (I didn't like it at all) to 5 (I liked it a lot).

The questionnaire was written in English to facilitate communication and to adopt a single language system to collect and analyse data. However, CIT teacher raised the issue concerning a number of students who were not proficient at all in English, underling they hence would not have been able to fill in the questionnaire. Therefore, questions were translated in Italian and French as well. It is important to remark the exploratory research aimed at developing and working with inclusive instruments to interact with students, therefore the CIT teacher request was accommodated to give the opportunity to all participants to take part into the research.

3.4.3. Teacher questionnaire

A questionnaire addressed to the two teachers of the SIE and the CIT classes involved in the project was prepared as well. The teacher questionnaire aimed at collecting information concerning teachers' familiarity with digital tools, their implementation in their teaching practice, and the relationship between their teaching habits and metacognition. Data collected also allowed the author to investigate whether a correlation between students' relationship and teachers' relationship with digital tools in language courses existed.

The questionnaire was composed of ten items, and it included both close-ended and open-ended questions. Since the teacher sample was composed of two individuals only, most of the items consisted of open questions through which it has been possible to conduct a qualitative analysis of the results, as they are not generalisable to all Italian L2 teachers through such a small sample.

The ten items composing the questionnaire are reported below:

1. How long have you been teaching Italian as a second language?
2. What digital tools and platforms used for educational purposes do you know?
3. How often do you employ digital platforms in your lessons?
4. In your opinion, what are the drawbacks of using digital platforms in the educational field?
5. In your opinion, what are the advantages of using digital platforms in the educational field?
6. What are the reasons why you use or do not use digital tools?

7. In your opinion, could digital tools substitute textbooks to teach new content? Why? Why not?
8. Would you like to use digital tools more often during your lessons? Why? Why not?
9. Reflect about your teaching habits and select the appropriate answer to show agreement or disagreement with the following statements (I ask students to perform couple or group activities during every lesson, I dedicate the final minutes of the lesson to reflect about the activities performed, I try to suggest new learning strategies to my students, I ask students what kind of activities they would like to perform, I use digital platforms to fill the generational gap with students, I use digital platforms as a storage for didactic materials, I use digital platforms to send notifications to students).
10. This questionnaire helped me reflect upon my teaching habits and inspired me to improve my digital skills (1: strongly disagree, 5: strongly agree).

The teacher questionnaire was written and administered in English, and it was specifically created for this exploratory study.

3.5. ACTIVITY DESCRIPTION

Before conducting the exploratory study, the author asked the two institutions involved the permission to perform such research. Agreement with teachers was therefore made in order to organise the realisation of the study. This phase was essential for the author to collect more information about the Italian courses structure, the participants and the time at disposal, especially regarding the CIT institution. Thanks to this exchange of information, the author had the possibility to know better the CIT class (which was not working with the author), to adapt the questionnaire and to better prepare to conduct the presentation with CIT students once having discovered the presence of learners with no English language competences who came from French-speaking countries.

Discussing with teachers has been crucial to select a suitable day to conduct the experiment, especially for the CIT class. Since the CIT lessons had started at the beginning of April, it would have been premature to work on vocabulary related to the

semantic sphere of cinema at the beginning of the course, this is the reason why the two in-class experimentations took place in two different and rather distant days.

The exploratory study was conducted in person with the SIE class, whereas it was performed online with the CIT students. The activities were introduced and explained in Italian, even though key words were also repeated in English to SIE students, and in English and French to CIT students. The same system was implemented for the final reflection as well.

The estimated duration to complete the presentation and the following questionnaire was of more or less thirty-five minutes in total. In particular, twenty-five minutes were estimated to perform the interactive presentation task, and ten minutes to fill in the questionnaires.

The first step of the experimentation concerned the distribution of the consent forms, the presentation of the thesis project (given by the author), and the description of the exploratory study. Participants were then asked to use their devices to connect to Wooclap. The author gave instruction regarding each of the slides and discussed with the class about the answers given to each activity right after their completion. Participants were asked to work in groups most of the time, and they were hence invited to choose a spokesperson who was given the task of typing the entries on behalf of the whole group. Therefore, the results slides were expected to report a total number of entries which corresponded to the quantity of groups created. Results were then read aloud to involve every participant in the discussion and, if present, mistakes were additionally corrected. This *in-plenum* discussion was necessary to make students aware of their language learning progress and to help them notice those linguistic aspects that had not been correctly acquired.

Particular attention was given to the final reflection which was carried out starting with the tenth slide of the presentation and that required students to order chronologically the activities performed. The author discussed with the class about the correct order of the items and then summarised the tasks performed by highlighting the reason why they were proposed to students and the learning strategies each of them aimed at suggesting. Comments about group working modalities employed and results obtained were made to concretely help students realise the feasible implementation of

such strategies in the language learning process and to detect the strategies best suiting them, hence working on metacognitive competences.

Students were asked to work in groups most of the time, according to cooperative learning principles. Meanwhile, both the author and the teacher served as support in case instructions were not clear, to solve linguistic doubts or whenever students needed to solve problems related to devices and technology. CIT teacher's support was particularly useful since the experimentation happened via remote connection.

In addition, teachers also contributed to dividing students into groups as they better knew the participants and could create balanced groups that could successfully complete tasks and build knowledge, according to sociometric principles.

SIE students were divided into four groups, three groups composed by three individuals and one group of four participants.

CIT students were divided into four groups as well, three groups including four individuals and the last group consisting of three learners. However, two CIT students abandoned the activity and left the room in the middle of the lesson due to personal reasons. Groups were thus re-organised in order to be balanced from the numerical perspective.

After having completed the first part of the study concerning the Wooclap presentation, the author distributed the student and teacher questionnaires. To be more detailed, the Google Forms link was shared on Moodle platform for SIE students, whereas CIT students received it via email sent by the teacher. SIE students and teacher completed the questionnaire in class, immediately after the presentation, whereas CIT students completed it on their own because of insufficient time.

3.6. DATA COLLECTION PROCEDURE

The two in-class presentations took place on two different days. SIE students performed the cinema-related activities on April 10th, 2024, whereas the experimentation with CIT students took place on April 30th, 2024. Results concerning Wooclap interactive tasks were collected simultaneously with the in-class performance, whereas questionnaire data were collected from April 10th, 2024, until May 20th, 2024.

To be more detailed, the interactive presentation was completed first, both student and teacher questionnaires were subsequently distributed.

3.7. ETHICS

As Dörney (2007) explained, research in the educational field concerns people and their relationship with the social world, thus inevitably involving ethical issues. In particular, qualitative research, which usually investigates the intimate sphere, necessarily requires to consider ethics.

A consent form allowing the author of this thesis to use data collected was elaborated. Statements employed the English language only. Furthermore, the first item of both student and teacher questionnaires stated, “I have read the consent form and I accept the terms of the experimentation”, to make sure all participants filled in the form and allowed the author to use the information given.

In addition, learners were informed that participation in the exploratory study was voluntary. Anonymity was another significant aspect of data collection, as no sensitive data were collected nor used: the author only possesses information concerning the educational and linguistic background of the participants, information voluntarily given by them or shared by their teachers. Participants were thus apprised of anonymity. Lastly, the author audio-recorded the presentation activities after having obtained the permission from the two teachers.

3.8. DATA ANALYSIS PROCEDURE

After having collected data concerning both the Wooclap presentation and the questionnaires distributed, data were grouped together to proceed with results analysis. The answers obtained via interactive tasks were integrated with the information collected via online forms to grasp the outcome of the research study.

The responses of the slides were carefully analysed to detect whether the activities proposed successfully vehiculated new words and fostered their acquisition, through a qualitative analysis of the answers directly stored on Wooclap platform.

The data collected via Google Forms then served as an in-depth analysis of students' feedback, the linguistic and digital competences they possessed and the relationship between such data and their performance in the vocabulary-related activities. Teacher questionnaires were useful to conduct a detailed analysis of teachers' digital competences as well.

Data were grouped together on Google Sheets; pie charts and bar charts were created and percentages were calculated in order to organise data and elaborate meaningful answers to the research questions of this exploratory study.

SIE and CIT presentation results were analysed separately, whereas questionnaires result simply considered the entries without differentiating SIE answers and CIT answers.

CHAPTER 4. DATA ANALYSIS

This chapter provides a detailed description and analysis of the data collected. The results of the activities performed on the Wooclap interactive presentation are reported first, subsequently data collected through the online questionnaires are presented and grouped together to obtain meaningful information to answer the research questions of this exploratory study. Finally, author's relevant data and observations collected and noted during the in-class presentation are reported.

4.1. WOOCLAP PRESENTATION RESULTS

In this section, answers to the Wooclap activities performed are reported in detail. Slides are analysed one at a time and the overall correctness of students' performance is furthermore provided with the aim of understanding whether digital tools represent an effective instrument to convey new vocabulary for foreign language learners.

Figure 16: SIE word cloud results.

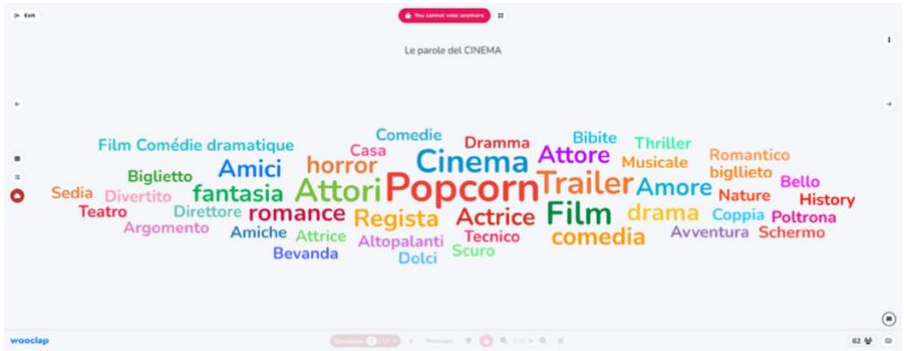

Figure 17: CIT word cloud results.

Slide number three consisted of the individual brainstorming proposed at the beginning of the presentation to reflect upon learners' prior knowledge. The total number of entries collected is ninety-two, thirty words were written by SIE students and sixty-two words were inserted by CIT students (Figures 16 and 17). It is possible to declare that a significant number of Italian words related to the field of the cinema were already known by the participants, as a total of more than ninety entries have been collected.

Furthermore, the word cloud also reports the entries according to their frequency: bigger words represent those words typed more than once. In this case, both groups' results show that some words are more common than others and consequently known by a higher number of students. SIE participants' most frequently known words are *attore* (actor), *film*, *biglietto* (ticket) and *guardare* (to watch). CIT participants' corresponding words are *popcorn*, *attori* (actors), *cinema*, and *trailer*. Grouping together the two slides, the frequency of words is the following: seven times for *film*, four times for *attore* and *popcorn*, three times for *biglietto*, *cinema*, *regista* (director) and *amore* (love). A significant number of words have been written twice, such as *guardare*, *romance*, *romantico* (romantic), *fantasia* (fantasy), *horror*, *drama*, *amici* (friends), *attori* and *trailer*. All the remaining words have been typed only once.

Some entries represent terms not specifically pertaining to the field of the cinema but to collateral elements related to it, such as *gelato*, *Coca Cola*, *dolci* (sweets), *bevanda* (drink), *bibite* (drinks), *bello* (beautiful), *amici* (friends), *amiche* (girlfriends), *direttore* (director), *tecnico* (technical or technician).

Moreover, some words composing the word clouds derive from foreign languages: it's the case of *film comédie dramatique*, *comedie*, *history*, *romance*, *nature*.

Lastly, spelling mistakes are present, as in *comedia*, *altopalanti*, *bigllieto*.

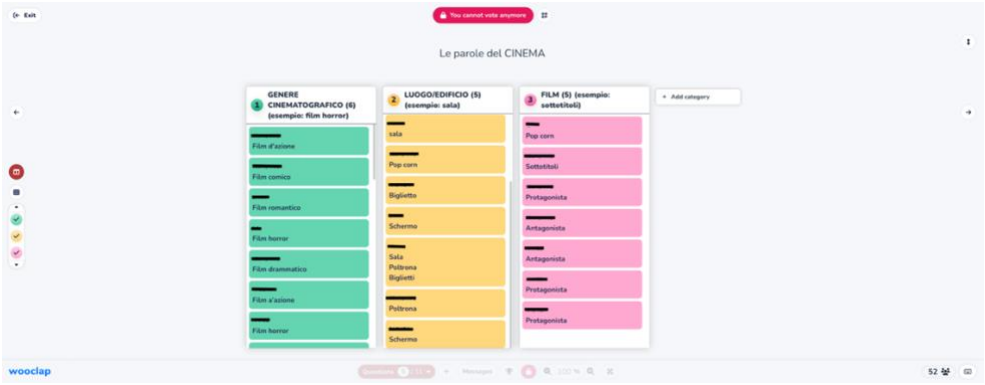

Figure 18: SIE brainstorming results.

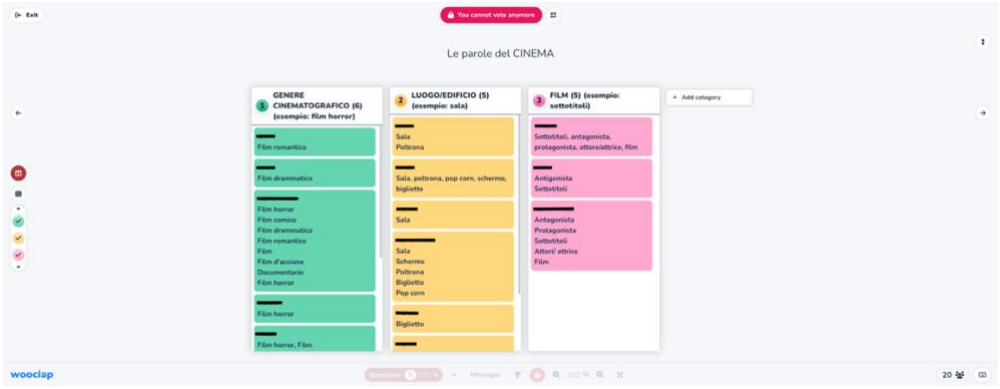

Figure 19: CIT brainstorming results.

The second activity aimed at dividing the vocabulary given into three different categories already established by the author, namely, *genere cinematografico*, *luogo/edificio*, *film* (Figures 18 and 19). The six words to be positioned in the film genre column are *film comico*/*commedia* (comedy), *film drammatico* (drama), *film d'azione* (action film), *film romantico* (romantic film), *documentario* (documentary), *film horror* (horror).

The column referring to terms indicating the place or the building are *sala* (room), *schermo* (screen), *poltrona* (chair), *popcorn* and *biglietto* (ticket).

The last column about film-related words is composed by the terms *attore/attrice* (actor/actress), *protagonista* (protagonist), *antagonista* (antagonist), *sottotitoli* (subtitles) and *film*.

The analysis of the entries collected reveals students opted for different procedures when writing words in the columns, as some of them wrote one word per entry, whereas other participants typed more than one word per entry, enclosing all the words of the category together in a single entry. Moreover, group division is not well-defined

as the number of those who wrote the words exceeds the number of the total groups created, especially in SIE students' results.

Eight different SIE individuals or groups wrote a total of twenty-eight entries including all the terms of the film genre category. Spelling mistakes as *film a'azione*, *film dramatico*, and *comedia* are present. Of the eight individuals or groups, only two of them inserted all of the six words pertaining to this category. *Popcorn*, *poltrona* and *biglietto* were erroneously put in this column and consequently corrected in the feedback phase. Four CIT students or groups wrote a total of nine entries. Among the words, a mistake only, the term *film*, was present (non-pertinent to the category) while half of the participants or groups identified all the six words referring to the film genre. The only spelling mistake was *film d'accione*.

The results concerning the place or building column collected from four SIE people or groups reveal none of them was able to identify all the five terms of the category, even though the overall evaluation of the ten entries shows all the five words of the category are in some way present on the slide. CIT answers were collected in eight entries written by four groups: two of them recognised all the five terms. A mistake is however present, the term *protagonista*, which does not belong to this category.

The last category, that of films, included a total of seven entries written by four SIE students or groups. Only three of the five words have been recognised. The words *attore/attrice* and *film* are not present in the result slide. In addition, the word *popcorn* was placed in this column even though it belonged to the previous one. On the other hand, two of the three CIT participants or groups correctly identified all the five words of the category, without making any mistakes.

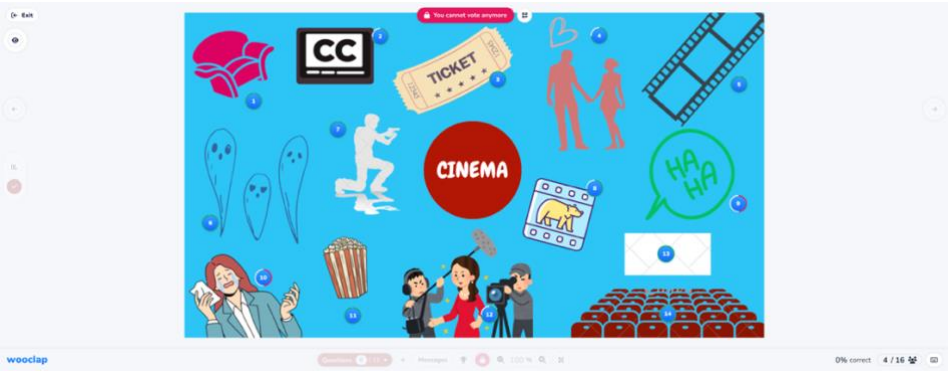

Figure 20: SIE matching words and images results.

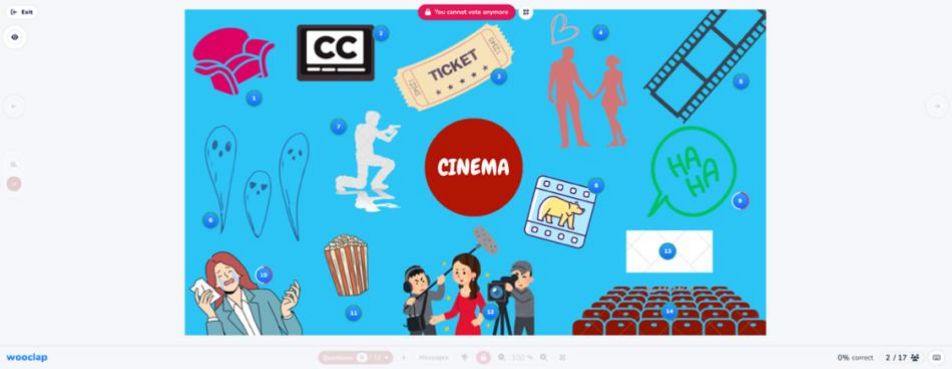

Figure 21: CIT matching words and images results.

The following activity included images that were supposed to be matched with the corresponding words (Figures 20 and 21). The exercise concerned fourteen of the sixteen total words, as *protagonista* and *antagonista* were excluded from it.

Both SIE and CIT students correctly matched words and images, no mistakes were made except for spelling mistakes, which affected the correctness percentages shown in the results slides. Four SIE participants and two CIT participants typed the words and completed the task.

In particular, SIE students misspelled *sottotittoli* and *documentary*; other types of mistakes impacting the results concern equivalent forms referring to the same element. For instance, image number 4 shows 75% of correctness due to the presence of three entries reporting *film romantico* and one reporting only *romantico*. The meaning is the same, even though the last entry is incomplete. The same happened with image number 9 (*film comico*, *film comico/commedia*, *comico*), image number 10 (*film drammatico*, *drammatico*, *drama*), and image number 12 (*attrice*, *attore/attrice*).

CIT students made a spelling mistake only, namely, *film dramatico*. Equivalent forms impacting the correctness concern image number 9 only, in which both *film comico/commedia* and *film comico* are reported.

	WORD	n° SIE entries	SIE	n° CIT entries	CIT	TOT
1	Popcorn	10	100%	6	100%	100%
2	Attore/attrice	10	90%	6	67%	81%
3	Biglietto	10	90%	6	100%	93%
4	Poltrona	10	100%	6	83%	94%
5	Film drammatico	10	100%	6	100%	100%
6	Antagonista	10	100%	6	67%	88%
7	Sala	10	100%	6	100%	100%
8	Film horror	10	100%	6	100%	100%
9	Protagonista	10	100%	6	100%	100%
10	Sottotitoli	10	100%	6	100%	100%
11	Film romantico	10	100%	6	100%	100%
12	Commedia	11	100%	8	88%	95%
13	Schermo	11	91%	8	88%	90%
14	Documentario	11	73%	8	88%	80%
15	Film d'azione	11	100%	8	88%	95%
16	Film	11	73%	8	100%	84%

Table 3: Word-definition matching results.

The last activity related to cinema vocabulary consisted of matching words to the corresponding Italian definitions. Words have been divided among three different slides, the first containing six words and the remaining two including five words each.

The table above (Table 3) summarises data collected. The percentages obtained by SIE and CIT students (whose number is reported in the entry numbers columns) indicating the correct answers given have been reported first, then the weighted average has been calculated to find the overall percentage of answers correctness.

Data analysis employed different colours to work with percentages. Green has been used to highlight the highest percentages, whereas orange indicates the lowest percentages obtained.

The number of participants completing the activities is varied along the three slides. Ten SIE students completed the first two slides, whereas eleven of them participated in the last one. Similarly, CIT students answering to the matching activity increased since six individuals completed the first two slides, and eight individuals completed the third one.

Data show seven words out of sixteen have been matched with the correct definition by all participants. In particular, the second slide of the activity was successfully completed with no mistakes by both SIE and CIT students. In the first slide, the terms

attore/attrice and *antagonista* obtained a score ranging from 80% and 90%, as the former total percentage is 81% and the latter total percentage is 88%. *Popcorn* and *film drammatico* obtained a percentage of 100%. In the third slide, none of the words have been correctly matched by all participants as the highest percentage is 95% for *commedia* and *film d'azione*. On the other hand, lowest results were recorded for *documentario*, 80%, and *film*, 84%.

The total score of the percentages collected ranges from 80% and 100%. The most difficult words to match were *documentario*, *attore/attrice* and *film*, whose percentages range from 80% and 85%.

Figure 22: SIE sorting activity results.

The final slide aimed at fostering metacognitive reflection. Students were asked to chronologically order the sentences referring to the activities composing the Wooclap presentation performed. The six sentences of the slide, here reported in the correct order, are *osservazione dell'immagine iniziale* (observation of the initial image), *brainstorming sulle parole del cinema* (brainstorming about cinema-related words), *lettura delle parole della lezione* (reading of the lesson vocabulary), *organizzazione concettuale delle parole* (conceptual organisation of the words given), *utilizzo delle parole in un'attività* (word implementation in activities), and *riflessione finale* (final reflection).

This individual activity was performed on the interactive presentation by SIE students only (Figure 22), whereas it was completed via *in-plenum* discussion with CIT participants. The reason of this choice was due to the multiple language levels of CIT students (as underlined by their teacher as well), which entailed a cause of risk

invalidating the potential answers since the six sentences proposed contained difficult terms not properly suitable for A-level students, thus making the six options incomprehensible, especially for those who were first approaching with the Italian language.

In total, ten SIE answers were collected. Nevertheless, they are not all visible since Wooclap summarises the answers obtained and exclusively shows the most frequent combinations obtained. None of three most frequent combinations reported on the slide is correct. However, two of them placed *brainstorming sulle parole del cinema*, one of the two activities conducted at the beginning of the presentation before giving the vocabulary of the lesson, in the first place, whereas all of them correctly placed *riflessione finale* as the last activity performed.

CIT discussion was conducted via open questions to the class (in Italian, key words and short sentences were expressed in English and French as well), to engage all participants and foster reflection. However, only a few students participated in it by giving one-word answers or simply nodding their head to express agreement or demonstrating they were paying attention.

In addition, the explanation of pedagogical implications of each of the six sentences and the reasons why they had been chosen was given to the participants to actively include them in their learning process. Reference to the relevance of reflecting upon prior knowledge, of logical organisation of words, of student autonomy achieved through cooperative learning, and of working with images and vocabulary to shape words meaning was highlighted.

4.2. STUDENT QUESTIONNAIRE RESULTS

Google Forms student questionnaires were distributed to all the twenty-six participants via Moodle or email. The answers collected are nineteen. To be more specific, six CIT students and thirteen SIE student questionnaires have been collected. However, data analysis only considers eighteen answers since one of the participants did not accept the terms of the experimentation. Therefore, his or her answers are excluded from the analysis conducted.

4.2.1. Personal Information and Language Background answers

The first part of the questionnaire aimed to obtain personal information useful to answer the research questions of this exploratory study. Data collected have been analysed and grouped together to outline meaningful information. Participants' answers are reported in the following lines as written in the questionnaire: spelling mistakes have thus not been modified in any way by the author but quoted in full.

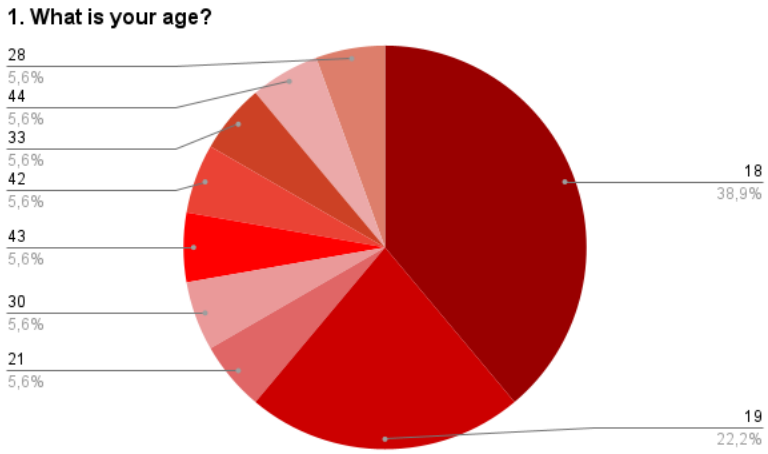

Figure 23: "What is your age?" pie chart results.

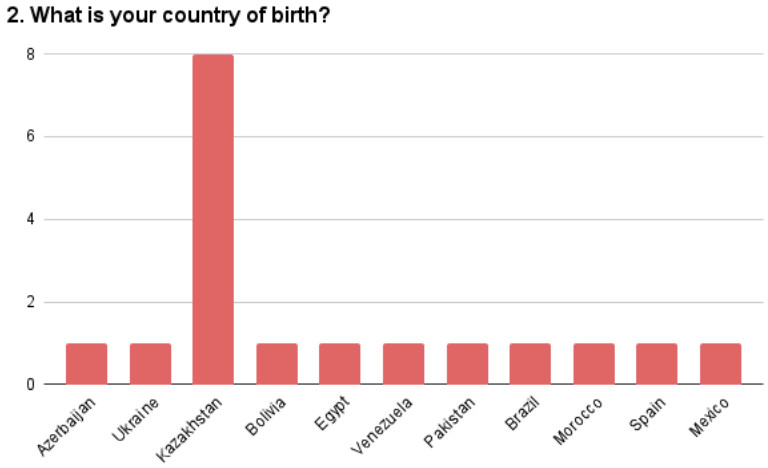

Figure 24: "What is your country of birth?" bar chart results.

The age of participants who answered the online student questionnaire ranged from 18 to 44 (Figure 23). About 60% of the subjects were eighteen or nineteen years old: 39% of the participant were eighteen years old and 22% were nineteen years old.

Eldest participants, aged between forty-two and forty-four, represent the 17% of the total.

As regards the country of birth (Figure 24), most of the participants (45%) came from the Republic of Kazakhstan. Entries collected show four participants came from the American continent (one coming from Bolivia, one from Venezuela, one from Brazil and one from Mexico), two participants came from Africa (one from Egypt and one from Morocco), one participant came from a European country, namely Spain, and finally eleven participants came from Eastern-Europe or Middle East countries (eight from Republic of Kazakhstan, one from Ukraine, one from Azerbaijan and one from Pakistan).

Thirteen learners, the 72% of the total, completed high school, whereas the remaining part possessed a master's degree. Fourteen participants declared they were currently studying, two of them worked and two of them did not work nor study. The area of expertise of 44% of the participants was business, economics and management. None of the participants had been living in Italy for more than a year and a half or less than two months.

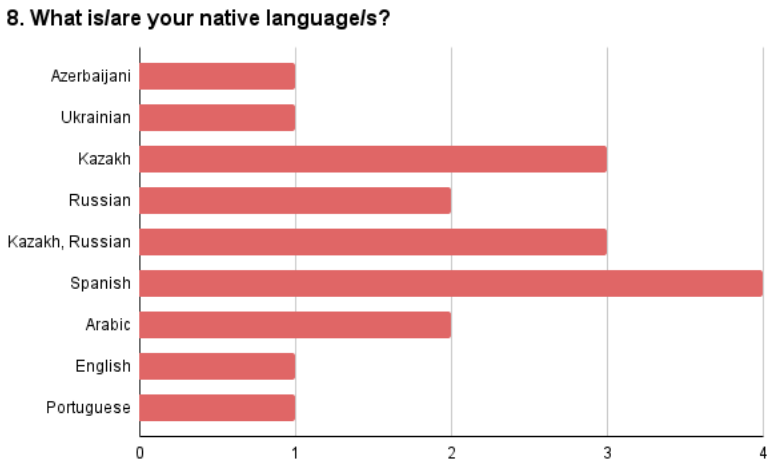

Figure 25: "What is/are your native languages?" bar chart results.

The bar chart of Figure 25 represents the native languages of the sample. Four participants' mother tongue was Spanish, three participants' mother tongue was Kazakh or Kazakh and Russian; Arabic and Russian were spoken by two subjects each, whereas Azerbaijani, Ukrainian, English and Portuguese by one individual each.

Most of the participants were fluent in at least another language: English places first as it was spoken by thirteen individuals, Russian comes next with five speakers. Turkish, Chinese, French and Urdu were spoken by a minority of students as well. Three people declared they were not fluent in any other languages except for their native language.

Nevertheless, all the students involved in the study have studied foreign or second languages in their life. Eleven of the eighteen participants have studied English, five of them have studied German, four have studied French, two have studied Russian; additionally, Chinese, Sign language, Kazakh and Turkish have been studied as well.

Moreover, data collected reveal information concerning participants' relationship with the Italian language: the majority of them, thirteen out of eighteen individuals, had been studying Italian for six or seven months, three people had just started studying Italian since they declared they had been studying it for a month only, and one of the participants had been studying Italian for a year and four months.

Students' motivation was examined as well, as item number twelve of the questionnaire asked, "why did you start learning the Italian language?". The results of this open question have been analysed and six main reasons have been identified (Figure 26).

12. Why did you start learning the Italian language?
October 2023
October 2023
My wife is Italian and I am living in italy
Per potere vivere in Italia
Because I'm living in Italy
Because it's a beautiful language, and I live in Italy so its necessary.
Perché abbiamo a Torino
Because I live in Italy
to know the language spoken in the country where I currently live
It was the part of the Foundation year program
Because it is mandatory course
Because I'll do my bachelor degree here in Italy
So I can study in Italy.
Per lavorare
Car je dois l'apprendre afin de faire des formations professionnelles et s'adapter au société
I study Italian language because it's so beautiful and important for me
Personal knowledge
I want to study, work and live in Italy

Figure 26: "Why did you start learning the Italian language?" table results.

Most of the participants declared they decided studying Italian because they were living in Italy or aimed at settling down in Italy (seven out of eighteen, yellow lines), as one of the subjects stated, "to know the language spoken in the country where I currently live". Other individuals started learning Italian because it was mandatory or part of their study programme (two out of eighteen, purple lines), in order to acquire Italian language to study in Italy "because I'll do my bachelor degree here in Italy" (two out of eighteen, orange lines), due to work-related reasons "*car je dois l'apprendre afin de faire des formations professionnelles et s'adapter au société*, since I need to study it to personal formation and to adapt to society" (two out of eighteen, green lines), for personal knowledge, "I study Italian language because it's so beautiful and important for me" (two out of eighteen, light-blue lines). One participant was currently studying Italian because of the desire to study, work and live in Italy (red line). Two answers were considered since not pertinent: the answers collected, "october 2023" do not explain the reason why participants started studying Italian (grey lines).

4.2.2. Wooclap interactive presentation answers

The third part of the questionnaire focused on students' feedback concerning the interactive activities performed via Wooclap, digital tools and metacognition. Below, results obtained are reported in detail.

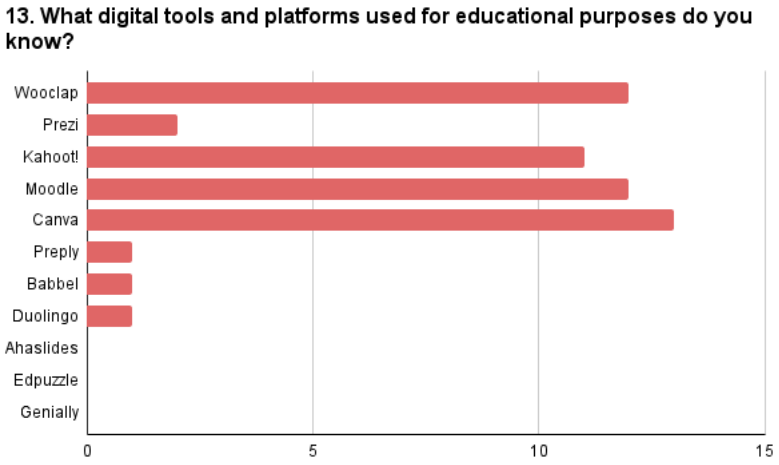

Figure 27: "13. What digital tools and platforms used for educational purposes do you know?" bar chart results.

First, students' familiarity with digital tools was investigated. Data show a considerable part of the listed digital tools were known by the sample, especially Canva, known by thirteen subjects, Wooclap and Moodle, known by twelve individuals, and Kahoot!, known by eleven participants (Figure 27). Thirteen people knew at least two digital tools, and nine of them knew at least four of them.

Following questions aimed at detecting whether participants actively implemented digital tools during their school life and to what degree. 83% of them used such tools in school, and 67% of this percentage implemented digital resources in language courses.

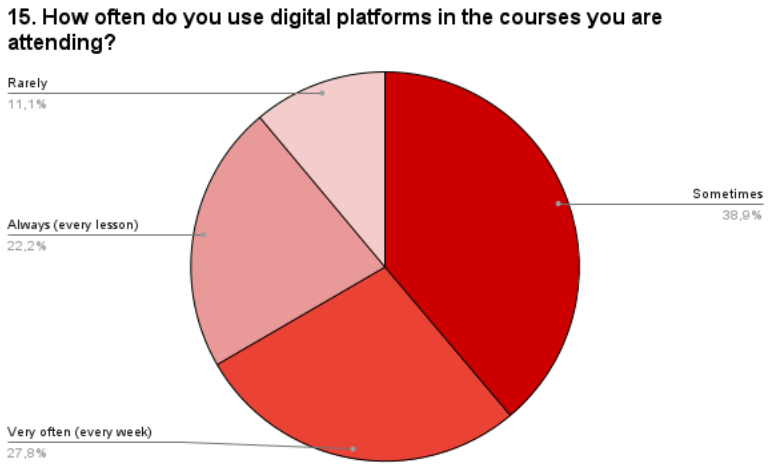

Figure 28: "15. How often do you use digital platforms in the courses you are attending?" pie chart results.

Students were subsequently asked to reflect upon the relationship between digital resources and the Italian course they were attending. In particular, they were asked about the usage frequency of such instruments in Italian language lessons (Figure 28). 40% of the participants claimed to use them only sometimes, meaning between once and three times a month, 28% declared to use them very often, 22% of them implemented them during every lesson, and only 11% stated digital resources were rarely employed in their Italian language course.

Furthermore, sixteen participants answered affirmatively to the question asking whether they would like to use digital platforms in the Italian language course more

often, which means an equivalent of the 89% of the sample. The motivation of their answers was requested as well.

Students who enjoy learning through digital tools expressed four main reasons of appreciation. First, their effectiveness is underlined, “it is a pretty effective tool for learning the language”, “I believe it was quite helpful. Digital tools are efficient and time effective, some of the strategies employed would take way longer if it wasn’t for digital platforms”. Second, they arouse interest in students, as “it helps to perceive the study material in a new, entertaining way”, “because doing everyday exercise is a little boring, I would like to make it a little bit more interesting with using digital tools”. Third, the playful structure is appreciated, as participants declared “it’s interesting to play some games during lesson, I think I can learn vocabulary better in this form of studying”, “I think digital tools makes de lesson more dynamic, interesting, funny and easy to learn, because there are many ways (games, forms) that you can learn from them”. Lastly, digital resources received consensus because of their variability and flexibility, “digital tools enable many possibilities, which are not possible other way”, “this method helps to learn faster by playing competitive games like Kahoot or WooClap. Creates competitiveness and motivation to study”, “the variety of exercises make it more useful than a text book”, “*perché è molto interattiva*, because it is very interactive”.

All things considered, effectiveness and interest arousal seem the two main advantages of employing technology in the educational field: “it is entertaining, it helps to develop group working skills”, it provides “easy access, convenience, games that can interest people”, it “creates additional methods of studying, and also gives the motivation to study”.

In addition, five participants highlighted that the possibility of studying and completing exercises from home represents a remarkable advantage, as one of them exhaustively explained, “digital platforms can connect people around the world. You can learn anywhere without the need of being inside a classroom as long as you have access to the internet.”

Lastly, they are positively considered since they help “develop group working skills” and represent “freedom, diversity and simplicity”.

Significant motivations are furthermore given by those who would not include digital tools in their lessons: "*Io preferisco il contato personale*, I prefer face-to-face contact", "constant interaction with real people is more challenging beacuse answers are not straightforward nor predictable. So, that helps you learn more by trying to adapt and understand different situations in terms of conversation", "students read fewer articles and books and have fewer practical exercises".

Other drawbacks underlined concerned technical issues most of all, "as the network does not work, it is problematic to use it". Health issues have been raised as well by two participants who asserted spending a considerable amount of time on smartphones affects health. They answered to the question "in your opinion, what are the drawbacks of using digital platforms?" by replying "effects on health. Especially eyes", "*être accroché au téléphone plupart de temps*, spending time on the telephone most of the time".

Moreover, other relevant disadvantages of such instruments were collected. Participants asserted "it is easy to get distracted" by them, "the tasks are fully prepared by a specific teacher, who can be less educated than an author of the textbook", and they also complained about lack of speaking activities.

Nevertheless, a considerable portion of individuals, five out of eighteen, stated there are no drawbacks in using digital tools. In particular, a student gave a remarkable explanation: "I don't think there are drawbacks with digital platforms. Like any other tool, they are meant to help students learn the desired subject along with other learning tools and sources. But, they should never become the ONLY learning tool as we would be limiting ourselves to one type teaching".

Question number eighteen asked learners whether they encountered any difficulties during the activities proposed. Twelve of them stated they had no difficulties in completing the interactive tasks. However, a rather intermittent connection represented a problem for three students who did not manage to fully understand what was being told by the author. "Lack of vocabulary" and difficulties in "fully understanding the translation" are other difficulties underlined by two participants.

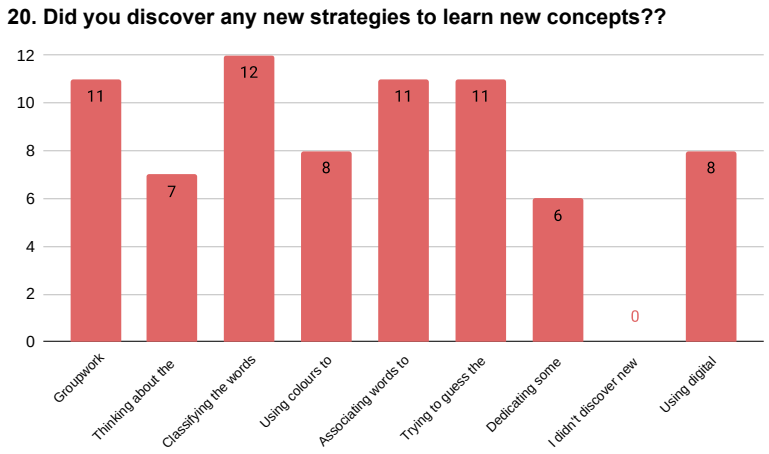

Figure 29: "20. Did you discover any new strategies to learn new concepts?" bar chart results.

Question number twenty aimed at investigating whether new strategies were discovered by students thanks to the activities proposed (Figure 29). Results collected show the positive impact of the Wooclap presentation on students. The strategy "classifying the words into categories" obtained the highest result, as it was selected by twelve people. "Groupwork", "associating words to images as memorisation strategy", and "trying to guess the meaning of words through images or definition instead of looking up the words in the dictionary" were selected by eleven participants each. "Using colours to differentiate the different categories" and "using digital platforms and website to do extra exercise" have been discovered by eight students. "Thinking about the information I already know at the beginning of the lesson" and "dedicating some time to reflect upon the lesson and the activities performed" received the lowest consensus, seven students out of eighteen and six students respectively.

None of the participants asserted they discovered no new strategies, confirming the effectiveness of the interactive presentation proposed as a means of conveying new learning strategies to be implemented in the language learning process.

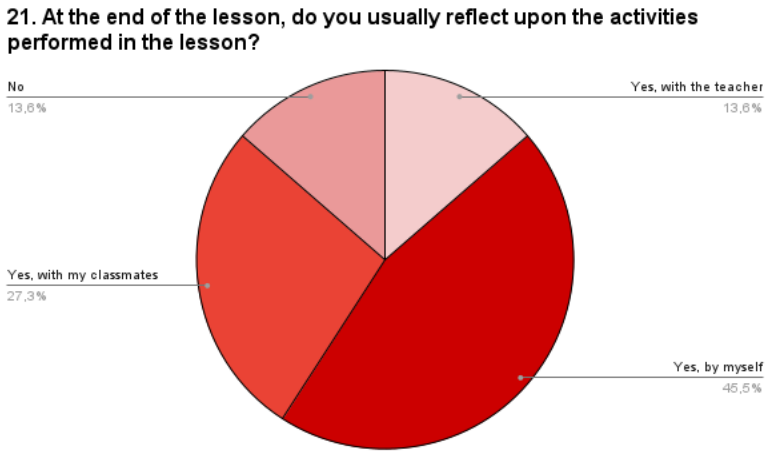

Figure 30: "21. At the end of the lesson, do you usually reflect upon the activities performed in the lesson?" pie chart results.

Furthermore, reflection habits were investigated in depth to grasp the overall students' attitude towards metacognition. Fifteen learners of the sample reported that they generally reflect upon the activities performed in the lesson (Figure 30). Ten students declared they reflect by themselves, six students usually reflect with classmates and a smaller portion of the sample, three individuals, normally reflect with the teacher.

Moreover, the relationship between metacognitive reflection and learning strategies was investigated in question number twenty-two (Figure 31), "do you feel dedicating some time to reflection helped you identify effective learning strategies to employ while acquiring new words or information? Why? Why not?".

22. Do you feel dedicating some time to reflection helped you identify effective learning strategies to employ while acquiring new words or information? Why? Why not?
Yes I end up remembering better
Yes
Yes, I thought more about the words, that's why I learned them
Yes, because spending time like this will save time and sanity during education
Yes
It definitely did. analyzing the new working process helped to identify the new and effective working plan that I could use in the future
Yes, because it makes you remember all the tasks you've done and the new words you've learnt
Yes, I realized that I remember words better with photographs
Yes, because you identify new strategies or ways for learn more fast and better
Yes, I do. Every person has own study strategy and he or she or others has to identify it
Yes, it helped me highlight my issues and errors, which is pretty helpful when it comes to studying in the future as it enables me to focus on my weaknesses
Yes, because I've learned new words
Si
Yes because reflection reinforces what I have learned
Si, mi piace imparare
Oui
Sì
It helps to relate the new words with aspects of your own life

Figure 31: "22. Do you feel dedicating some time to reflection helped you identify effective learning strategies to employ while acquiring new words or information? Why? Why not?" table results.

Only positive answers were collected, as students all agreed about the effectiveness of such practice. Reflection fostered language acquisition and learning strategies acquisition as well. Some students furthermore underlined “it helped me highlight my issues and errors, which is pretty helpful when it comes to studying in the future as it enables me to focus on my weaknesses”, “reflection reinforces what I have learned”, “analyzing the new working process helped to identify the new and effective working plan that I could use in the future”. Reflection is thus considered a very useful instrument in language learning, as all participants declared.

In addition, sixteen students confirmed the effectiveness of reflecting upon the activities performed to monitor their language learning progress, as shown by results of question number twenty-three. “Without reflecting on what I have learned I wouldn’t be able to identify where I was before, thus meaning I wouldn’t be able to monitor my progress” a student stated, “it helps to referesh the words that I already know. And helps to identify the words that I don’t know” is reported by another participant.

On the other hand, two people of the sample did not find reflective strategies useful to detect their language learning progress “because I prefer talking, while I talk it is easier for me to notice my weaknesses, I also don't think much about my strengths, because... why would I? It won't help me”.

The questionnaire also aimed at detecting whether those strategies discovered by learners were likely to be employed in the future as a means to improve the language learning process. Fifteen students answered to the question affirmatively and by highlighting their effectiveness, two students claimed they might implement them and a student only reported he or she is not likely to include strategies learnt during the exploratory study in the future.

Moreover, some students added some details to their answers and explained “I would definitely use the matching word-with its definition exercise, since it helps to learn new words”, “I will try and if it [learning strategies] will boost my learning of Italian, I will use it on a weekly basis”, “yes, especially thinking about the information that I already possess. I believe this strategy was very helpful as it exposed me to what I could potentially expect to see in the exercises and questions”. A student specified he or she would use new strategies only when studying languages.

Lastly, students were asked to rate the activity format performed from one (I didn't like it at all) to five (I liked it a lot), as shown in Figure 32.

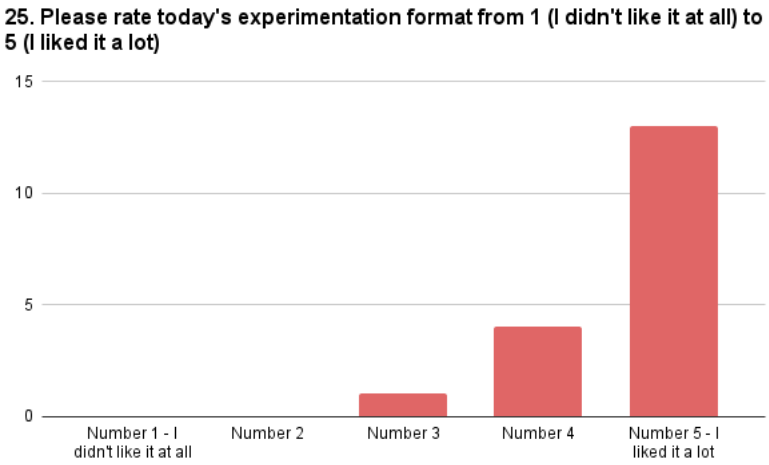

Figure 32: "25. Please rate today's experimentation format from 1 (I didn't like it at all) to 5 (I liked it a lot)" bar chart results.

The exploratory study received general positive feedback, as thirteen students declared they liked the format a lot, four students assigned four out of five and one student assigned three out of five. The lowest score obtained is three out of five, whereas 72% of the participants are very satisfied (five out of five) with the activities proposed.

4.3. TEACHER QUESTIONNAIRE RESULTS

The two teachers providing the Italian course for the classes involved in the exploratory study were asked to fill in a questionnaire as well. The Google Forms questionnaire aimed at detecting their familiarity with digital tools and investigating the relationship between their teaching habits and metacognition.

The questionnaire was composed of ten items, and it included both close-ended and open-ended questions. Results are reported below.

The two teachers have been working in the educational field for more than twenty-five years, the former, and for three years, the latter. They both made use of digital resources in their Italian lessons, as they declared to employ such instruments every

lesson or at least every week. Thus, digital tools are a relevant component of their courses.

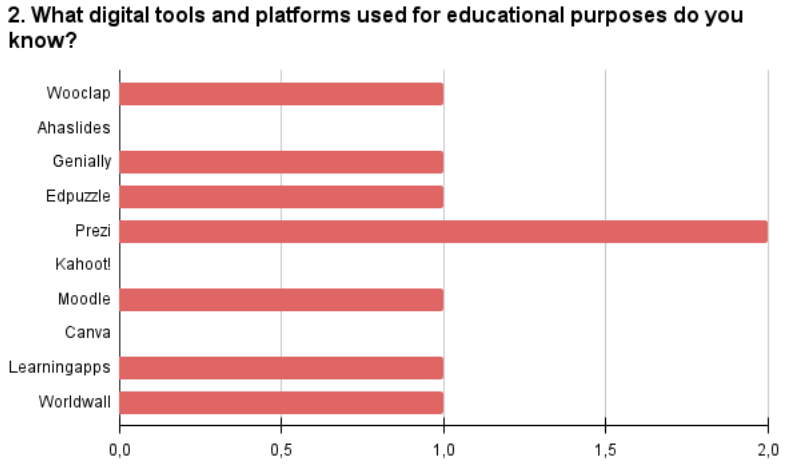

Figure 33: "2. What digital tools and platforms used for educational purposes do you know?" bar chart results.

Their familiarity with digital tools is represented in Figure 33. Both teachers knew Prezi, whereas other platforms such as Wooclap, Genially, Edpuzzle, Moodle, Leadingapps and Wordwall were selected by one of them each. Ahaslides, Kahoot and Canva are unknown to both of them.

Questions concerning drawbacks and advantages of digital tools were included in the questionnaire as well. The answers to the question "in your opinion, what are the drawbacks of using digital platforms in the educational field?" are the following: "to confuse the instrument with teaching purposes" and "some drawbacks may arise from the available classroom equipement, or from the low digitalization of the course partecipants, especially the older ones".

On the other hand, statements referring to the advantages are the following: "cognitive strategies can be enhanced with tools close to the students' c world and also achieve undoubted facilitation from an educational point of view" and "I think there are many advantages because many applications allow avoiding frontal lessons and keeping the participants' attention high by encouraging them to be more active. Furthermore, many activities can be repeated independently at home".

Teachers reported to actively use digital platforms to approach students' world and reality. Answers collected highlighted the potential of such instruments to propose

activities that suit learners' "language and way of thinking". In addition, technology is reported to be extremely useful when dealing with basic language level students since it provides images and videos to foster comprehension skills and establish a cooperative environment.

Question number seven investigated teachers' opinion regarding the idea of substituting textbooks with technological devices and tools. Both teachers agreed about the irreplaceability of traditional educational devices. Reasons are "no digital tool can replace the creative work of the teacher" and that complementing traditional learning tools rather than substituting them entails a better option. The two teachers also added textbooks should implement technological instruments since they "would lead to an overall enhancement of learning strategies" and improve textbooks quality, consequently making them adequate tools for effective didactics. However, it is further pointed out by a teacher that digital literacy level of the participants must be considered because, whether it is low, digital tools may represent a counterproductive solution.

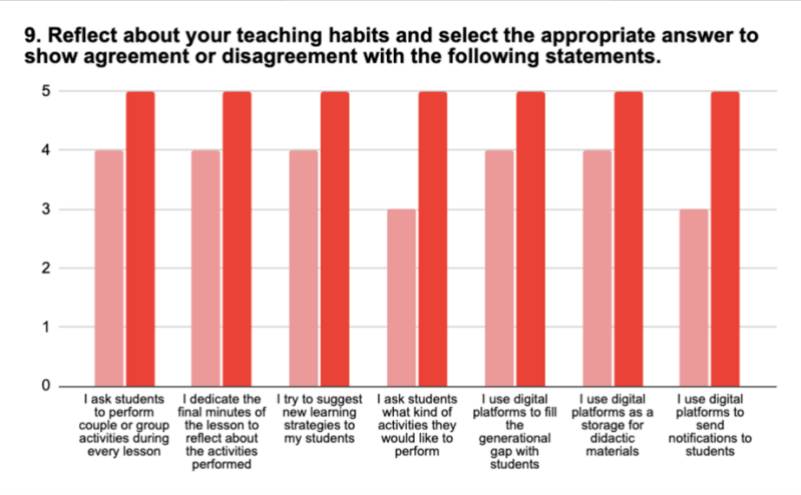

Figure 34: "9. Reflect about your teaching habits and select the appropriate answer to show agreement or disagreement with the following statements" bar chart results.

Lastly, teachers were invited to reflect upon their teaching habits. In detail, they were asked to rate seven Likert scale items from 1 (strongly disagree) to 5 (strongly agree). Items to be rated were "I ask students to perform couple or group activities during every lesson", "I dedicate the final minutes of the lesson to reflect about the activities performed", "I try to suggest new learning strategies to my students", "I ask students what kind of activities they would like to perform", "I use digital platforms

to fill the generational gap with students", "I use digital platforms as a storage for didactic materials", and "I use digital platforms to send notifications to students".

Results (Figure 34) show the actions listed above described the educational habits of both teachers. One of the two declares to repetitively and constantly adopt all the seven strategies, as the maximum score has been assigned to all the seven items. The remaining teacher strongly agreed (score: four out of five) with the employment of strategies such as performing group activities, dedicating the final part of the lesson to reflection, suggesting learning strategies, implementing digital resources, filling the generational gap, whereas asking students the activities they would like to perform and adopting digital tools to send notifications obtained a score of three out of five.

After having completed the questionnaire, both teachers declared it helped them reflect upon their teaching habits and inspired them to improve digital competences: they both assigned a total score of five out of five to the Google Forms questionnaire.

4.4. AUTHOR'S AND TEACHERS' OBSERVATIONS

Considerations about students' behaviour during the interactive presentation need to be made. During the course of activities, the author and the two teachers actively supported learners when necessary and observed them as they were completing tasks and discussing with groupmates. Therefore, significant information worth mentioning, useful to answer this thesis research questions, is described in this paragraph as it represents part of the data collected to elaborate the results as well.

The estimated time to complete the interactive activities and the questionnaires was of thirty-five minutes. SIE class performed both the Wooclap presentation and the questionnaires in fifty minutes, whereas CIT students took about an hour to complete the interactive presentation only. CIT questionnaires have been collected at a later time.

The observations provided in the following lines are the result of an exchange of information between the authors and the two teachers which happened just after having completed the Wooclap presentation.

First, it is important to report that most of the students of both groups participated in the exploratory studying by connecting their personal smartphone to Wooclap. A

minority of participants opted for iPads or tablets, even though smartphones represent the most common device employed to complete the digital tasks.

As regards technology, CIT teacher reported difficulties in interaction by some students of the class, especially by elder participants who needed support to connect to Wooclap and to understand the functioning of the interactive presentation. On the other hand, SIE students did not have any problem related to this aspect. This may be due to the fact that they had worked with interactive presentations prepared by the author before, during the Italian language lessons which the author was personally assisting from October 2023 (as explained in paragraph 3.3).

Technological problems furthermore involved the internet connection, as CIT students, who remotely performed the activities, stated the intermittent audio represented an obstacle to understanding the instruction given by the author. The teacher further specified author's speed of speech was adequate and did not represent a source of problem for students, the audio quality representing the only true obstacle.

Another relevant aspect to analyse is group management and attitude. As specified in the previous chapter, teachers divided participants into small groups, trying to create balanced and functioning teams. Contrasting results were obtained, as some groups actively engaged and cooperated to complete the tasks, whereas some groups were lacking cohesion and interaction. Some of the SIE students, most of all, had difficulties in collaborating with classmates because divided from their friends and asked to work with colleagues they were not close to. This may also explain why the presentation entries collected outnumbered the groups created, even though individual work was not totally contemplated in the exploratory study.

Moreover, interesting data concern students' working strategies implemented to complete the interactive tasks. When asked to discuss in groups about the meaning of the sixteen cinema-related words, participants were given a printed sheet of slide number four, which reported all the words object of the presentation. As they were discussing, some groups actively worked with the printed sheet and noted ideas, classified words by using colours, tried to order the terms given by drawing circles and sets. They were thus already adopting learning strategies to confer effectiveness to their language learning process and build knowledge.

Furthermore, it is necessary to specify that discussion in groups was generally not conducted in Italian for the most part, as students employed English or other languages spoken by teammates when cooperating and completing tasks.

CIT teacher also reported to the author personal and spontaneous feedback given by the class, declaring that some students not very familiar with the digital world appeared fatigued at the end of the presentation since keeping up with this modality of conducting the lesson required considerable effort. It seems thus appropriate to underline that CIT students frequently asked for their teacher's support and asked questions to clearly their doubts, whereas SIE students worked independently and requested fewer support from their teacher or the author.

Moreover, some CIT students stated they would have preferred more difficult exercises to improve their vocabulary knowledge since, as described in the previous chapter, the class was composed of multicompetences students with different proficiency levels and included participants who had been living in Italy for some time, thus possessing more pronounced vocabulary skills compared to their classmates.

All things considered, all participants actively engaged and participated in the activities proposed, showing interest in the topic and in the interactive format implemented.

CHAPTER 5. DISCUSSION

In the present chapter, data collected and analysed in chapter four are discussed by taking into account the results obtained and the literature considered. The chapter is divided into three different sections addressing one research question each. Lastly, limitations to the present exploratory study are described.

5.1. STUDENTS' PERCEPTION OF DIGITAL TOOLS: RESEARCH QUESTION NUMBER ONE

Research question number one aimed at investigating students' perception of digital tools in the educational field. Specific questions concerning language learning and digital resources were furthermore asked, to detect whether such instruments represented an effective means of conveying new concepts. In addition, particular attention was paid towards the bond between answers collected and the age of participants, to determine whether age represented a discriminating factor to answer to this first research question.

First of all, the overall feedback to the activities learners were proposed was positive, as most of the students assigned the maximum score to the questionnaire item "please rate today's experimentation format from 1 to 5" (Figure 32).

Digital tools were not unknown to the sample: fifteen participants declared they already dealt with digital resources during their school experience, and all individuals asserted to know at least one digital tool of the list provided (Figure 27).

In addition, thirteen participants were still completing their studies and consequently were highly exposed to such interactive instruments since nowadays technology has been fully implemented by teachers in the educational field, a concept Favaro and Menegale (2014) addressed by explaining the potential of such instruments to cognitively stimulate learners and to fill the generational gap between teachers and students.

Digital resources are perceived as more stimulating by the sample category of students since it is in their interest to find effective resources to improve their learning

process. Nevertheless, results collected show other participants not currently studying anymore were satisfied with the implementation of technological instruments as well: sixteen out of the eighteen participants asserted they would like to employ digital platforms in the Italian language lessons more frequently.

However, disparate answers regarding the frequency of use of technological tools in the Italian language course were collected, entries varying from "rarely" to always" (Figure 28). These results indicate learners' awareness concerning the utilisation of such tools is rather weak and that the impact of such instruments in their learning process is not completely perceived.

It is also interesting to measure the relationship between digital competences and the score assigned to the interactive presentation. Data collected reveal lower scores (three out of five and four out of five) were assigned to the activities by those participants with little knowledge of digital tools. Among the five individuals who expressed a lower score, four of them only knew one tool, even though the lowest score was assigned by the participant who declared to know five different platforms, namely, Prezi, Kahoot!, Canva, Babel and Duolingo.

On the other hand, individuals with a wider knowledge of digital resources particularly enjoyed the activities proposed. This difference may be related to the frequency of use of digital platforms, as those who are used to employing such resources have more familiarity with them compared to individuals who need, because of their technological inexperience, to understand their functioning first in order to properly be able to complete interactive tasks.

Therefore, a focus on the two participants who did not express the desire to use digital platforms in the Italian course more often is necessary to deepen the investigation. The individuals considered are a worker and a student, the former having a significantly weaker knowledge of digital resources compared to other participants. The two participants both explained they would not completely rely on digital tools since they prefer interaction with real people, claiming social relations enable to deal with real challenges and with different and unpredictable life situations. The two students considered were forty-four and twenty-eight years old.

Moreover, advantages and disadvantages of technological resources have been collected. The advantages highlighted by learners clearly outnumbered the drawbacks

identified. Digital resources aroused interest and were perceived as an effective way of learning, whereas many disadvantages identified did not concern the potential of digital tools but the remote connection: technological resources were mostly perceived as limited and unstable in relationship with the availability and stability of the internet connection. The same drawback was identified by university students participating in a research study conducted by Spinu et al. (2021), together with access problems and lack of available time to complete tasks assigned.

In terms of the digital instruments employed, namely Wooclap, the impossibility to consult the slides and the answers given if not shown live by the presenter narrowed the possibility for students to reflect upon the activities performed and to critically examine the results collected to improve one's performance.

Another fact that needs to be taken into consideration when implementing digital platforms in the educational field involves the recurrent updates and the change in terms of use which could represent an obstacle for the fruition of such tools, especially when they become fee-based, consequently forcing both students and teachers to find alternative, accessible solutions.

Playful methodology features, such as entertainment, interaction and competition, have been furthermore appreciated by several students who felt totally involved in the Wooclap presentation and managed to ease nervousness and the feeling of attending the Italian language lesson, as they underlined this playful modality "makes de lesson more dynamic, interesting, funny and easy to learn". This enthusiasm towards the entertaining aspect was observed by Spinu et al. (2021) as well since Florence university students agreed about the positive impact of dynamic lessons promoting cooperation and differing from traditional teaching methods. A study conducted with Spanish university engineering students (Moreno-Medina, Peñas-Garzón, Belver, & Bedia, 2023) furthermore highlighted Wooclap benefits since all students expressed the desire to work with such platform more often and assigned a 4.86 medium score out of 5 on the Likert scale to the statement concerning the platform advantage of making lessons less tough to follow. Results collected therefore showed playful methodology and interactive platforms contributed to deactivate Krashen's filter hypothesis (1982) which established an existing correlation between emotions and learning, according to which negative feelings interfere with language learning. In the

situation examined, favourable and comfortable learning conditions were established, consequently engaging students. Therefore, interaction played a crucial role in determining the active participation of learners in the lesson.

The second point to address is that of the age of participants. The ages of the individuals composing the sample ranged between eighteen and sixty-seven. Different life and educational experiences undoubtedly impact one's perception and attitude towards digital tools: thanks to the questionnaires distributed such impact was therefore made visible.

Before commenting on the data, it is necessary to clarify that the answers collected were those of individuals aged between eighteen and forty-four, meaning older participants' answers are not available.

To be more specific, the two classes involved lent themselves to conduct such analysis: SIE students represented the youngest part of the sample since their ages ranged between eighteen and twenty-one, whereas CIT students' age range lied between twenty-eight and forty-four, thus composing the older part of the sample.

Data collected revealed significant differences among the answers given by younger students and those collected from older students.

First, the difference in digital competences is evident. CIT students possess a limited knowledge of digital platforms compared to that of SIE students, as most of the learners reported to know just one tool. A twenty-eight-year-old CIT student represented the exception since he or she typed five different language platforms, also adding extra tools compared to those selected by the author in item number thirteen of the student questionnaire.

The digital tool older students knew the most was Canva, whereas Wooclap was known by one CIT student only. This non-familiarity with Wooclap furthermore helped to understand the reasons why CIT participants required more time to connect to the platform at the beginning of the experimentation and to complete tasks.

Data collected furthermore revealed the lack of knowledge in the digital field of older students: a forty-three-year-old student was not able to identify advantages, disadvantages or difficulties encountered while completing activities assigned as he or she declared "I don't know enough digital platforms to say". Again, a thirty-year-old student highlighted that a disadvantage of such tools is that they are not unanimously

mastered by all learners, whereas SIE students who possessed remarkable digital competences expressed their concern mostly towards connection stability rather than the non-familiarity of tools employed. Hence, lower scores assigned by older students, in light of what has been reported in the questionnaire, were not surprising. Moreover, the only two students unlikely to employ digital resources more often were forty-four and twenty-eight years old.

Two completely different patterns, corresponding to divergent perspectives, thus revealed answers collected were significantly influenced by the variable of age. Some points in common of the two age ranges existed as well and involved the positive connotation of interaction and flexibility of digital platforms, and the interest aroused thanks to such instruments.

Moreover, older students expressed their preference for peer interaction rather than for devices in order to overcome real-life situations and additionally recognised the relevance of cooperation to develop team-based learning and problem-solving skills. These data confirm the effectiveness of social interaction recognised by Baschiera and Borg (2023). However, working with classmates represented an obstacle for younger students who had difficulties in relating to colleagues they were not close to, a factor hindering the implementation of cooperative methodologies listed by the authors as well (*ibid*.).

Data collected in this study were not that different from the results of the study conducted by Spinu et al. (2021), which aimed at investigating Wooclap in the academic context. Their results outlined that Wooclap promoted cooperation and quickly reduced shyness in participants, thus totally engaging learners in spontaneous interactions.

All things considered, positive results to this first research question were obtained, as the appreciation mean score given to the Wooclap presentation collected is 4.6 out of 5 (in detail, a mean score of 4.9 and of 4.1 were collected from SIE students and CIT students respectively). Therefore, it is possible to declare that a general enthusiasm towards interactive tools was shown, even though feedback differed on the basis of the age of participants. Students identified both advantages of digital platforms and a number of disadvantages as well. To be more specific, older students challenged themselves in combining technology and language learning, even though they

remarked the importance of interaction and cooperation with peers, thus remaining still loyal to a traditional learning practice as well.

5.2. DIGITAL TOOLS TO MONITOR LANGUAGE LEARNING PROGRESS AND FOSTER METACOGNITION: RESEARCH QUESTION NUMBER TWO

The second research question investigated the possibility to monitor participants' language learning progress through digital platforms and to detect how such instruments fostered metacognitive reflection and invited students to reflect about their learning process. Wooclap presentation results and five items of the student questionnaire were taken into consideration to answer this research question.

Wooclap offers the possibility for presentation developers to set a timer for each activity, a crucial aspect which allows this instrument to be implemented in the didactic field. The possibility to set a precise time to perform a task is essential both for students and teachers since it establishes order and fosters learners' autonomy. When time runs out, the platform automatically collects results and offers the possibility for the speaker to visualise the answers obtained on the screen, thus offering the possibility to collect immediate feedback.

Considering the interactive presentation specifically prepared for this study, students' performance produced overall correct answers according to the results obtained. Data collection modalities employed by the platform are therefore analysed in-depth to evaluate their effectiveness. Different types of interactive slides were implemented: word cloud, brainstorming, label spots on the image, matching and sorting.

Word cloud results (Figure 16 and Figure 17) allowed the presenter to read single entries on a grid or to visualise the cloud in which more frequent terms were bigger than less frequently used words. This useful data organisation allowed the author to detect the lexical competence of each individual composing the class and to grasp the overall language level, thus serving as a powerful instrument to support teachers in lesson planning in order to adapt following activities to students' competences,

strengths and weak points. Similarly, the brainstorming modality employed to divide words into the three categories (Figure 18 and Figure 19) made visible all the answers given by participants, both correct and incorrect. To be more specific, Wooclap results slide simply showed all the entries collected without highlighting answers correctness since there is no similar function for these two types of interactive slides.

However, it was possible to trace the author of each of the entries collected. Showing all participants' answers in the result slide represents both an advantage, as a precise representation of knowledge possessed by students is provided, and at the same time a disadvantage for those students who feel uncomfortable when answers are shared with the entire class, hence afraid of making mistakes which are collectively identified.

Nonetheless, among the existing Wooclap interactive functions, some task typologies such as the multiple choice enable teachers to hide the answers collected in order not to influence students (Lebbe & Barbieri, 2018).

Labelling spots on the image results (Figure 20 and Figure 21) were shown via percentages instead. In this case, the result slide was not completely trustworthy since spelling mistakes, capital letters and special characters compromised the final percentage reported on the screen. When implementing this task type, it is therefore necessary for presenters to intervene and personally examine data collected in view of minor mistakes in order to obtain reliable results.

Matching exercises (Table 3) and the sorting exercise (Figure 22) showed the combinations obtained by reporting the most frequent results, thus not allowing presenters to establish a connection between answers collected and the individual who is responsible for them. These modalities are thus rather limited, especially when teachers' aim is to investigate students' learning progress.

A detailed analysis of the task types implemented in the interactive platform identified both effective and less accurate testing tools. Word clouds and brainstorming proved their effectiveness since they reported precise and organised information which allowed to grasp learners' competences in a detailed way, whereas labelling spots on the image, matching and sorting tasks grouped data offering an overview of the entries collected which however remained anonymous and rather superficial.

Another relevant aspect of the resource implemented is that Wooclap presentations potentially offer the possibility to keep track of every student's learning progress since learners are all actively involved in the lesson and their participation is required. As reported in the previous chapter, a difference in the number of typing students among the slides was perceived and this thus helped the author reflect upon critical content and question the weaknesses of the presentation elaborated as well. Higher or lower participation may be due to misunderstanding issues (especially concerning instructions), to the difficulty of tasks proposed, to relational group problems and to insufficient time given to complete the activities. Spinu et al. (2021) perceived that, in the study they conducted, competences possessed influenced students' participation: unprepared students had the tendency to avoid answering, especially when anonymity was not guaranteed.

Nevertheless, results revealed that at the end of the Wooclap presentation cinema-related words had been recognised and properly categorised. Students gradually understood words meaning by completing tasks specifically designed to support their learning process through sequential interactive instructions (De Rossi, 2023), according to which the topic of the lesson was carefully divided into separate tasks of increasing difficulty. These different steps favoured a gradual and natural vocabulary acquisition, following the unit of acquisition concept.

Playful methodology was another important component of the presentation: game-based interactive tasks motivated participants who showed enthusiasm for this new modality employed in the Italian language course. Learners declared (via student questionnaire) that playing games during the lesson improved their learning and represented a more natural, dynamic and funnier way of conducting the lesson, thus confirming Krashen's first hypothesis of natural acquisition (1982).

Moreover, Wooclap competition mode was activated to increase students' motivation and participation in the lesson. Participants' motivations in attending the Italian language course were rather disparate, as some students were studying Italian because they wanted to live in the country, others for study or work reasons and others for personal interest. Nevertheless, most of the students agreed about the effectiveness of such platform in engaging their active participation, respecting Caon's idea of

motivation as the motor for meaningful learning which could be potentially developed through playful methodology (2020).

In addition, playful methodology also offered the possibility to foster cooperation among learners and simultaneously favoured an active implementation of the Italian language, a concept acknowledged by Sudati (2013) as well, who underlined the need for socialisation and acquisition of basic communicative skills for immigrant students.

Language competences were also considered in this study. In particular, detecting whether participants had previously studied foreign languages before helped to contextualise the sample. In the present study, all participants possessed competences in at least two languages and hence had already attended a foreign language course.

Moreover, linguistic differences did not represent an obstacle as all groups successfully managed to complete the activities, thus confirming Caon's concept of trans-cultural and origin-independent games, even if influenced by the cultural system in which they are played (2020).

Furthermore, this second research question also aimed at investigating how metacognitive skills could be improved through the implementation of technological resources. Reflection was fostered by slide 10 of the Wooclap presentation in which participants were asked to chronologically order the activities performed.

Results obtained revealed no student identified the correct order, even though difficulty in understanding the lexicon of the sentences was also to be contemplated as a factor influencing this scarce result: the answer given by a participant to the item aiming at identifying difficulties encountered in the presentation indeed stated, "lack of vocabulary". Therefore, the final group reflection conducted by the author was necessary to support students in the effective identification of the strategies employed together with their pedagogical implications, and to invite them to reflect upon their performance.

Metacognitive reflection was fostered by the student questionnaire as well: questions aspired to support students in the recognition of their reflecting habits and of effective learning strategies to implement in language learning, focusing on the language process and not on the results, as suggested by Zappaterra (2004).

Close-ended questions and open-ended questions were employed to invite students to conduct an introspective analysis of the activities performed and of the learning

strategies employed. Results showed fifteen out of eighteen students considered reflection to be essential to retain more information and to discover effective strategies facilitating the language learning process. Nevertheless, disparate answers concerning the frequency of use of digital resources in the Italian course suggested the need for more guided group reflections supported by the teacher since students' awareness of the didactic methodologies implemented in the course was rather low.

This study aimed at introducing metacognitive reflection by implementing digital resources. Data collected allow to assert that digital tools represented an effective way to guide students in their reflection, especially via close-ended questions through which it has been possible to collect data about specific metacognitive aspects. On the other hand, Wooclap interactive tasks did not represent a sufficient instrument to promote an autonomous student reflection since an *in-plenum* metacognitive discussion conducted by the teacher was subsequently necessary to clarify the main points and to summarise the pedagogical implications of the activities performed.

Therefore, combining technological resources with in-class reflection conducted by the teacher seems the best option to improve metacognitive skills in language learning. Open-ended questions and close-ended questions represent a suitable starting point to promote reflection, but a subsequent group discussion to compare answers collected and to address the topics through different perspectives remains necessary.

In addition, it is not to forget that open-ended questions and close-ended questions include both advantages and disadvantages: the former are a useful way to collect detailed answers but they might obtain superficial or unfocussed answers as well; the latter allow teachers to obtain precise answers concerning a specific topic but do not consider personal features and limit students in explaining their position or justifying their ideas since the answers to be selected are non-modifiable.

In addition, metacognitive reflection necessarily requires verbal investigation and qualitative analysis as explained by Cornoldi (1995), since metacognition cannot be investigated objectively but it is compulsorily related to individuals' personal traits and personality, elements easily subject to change over time.

Thanks to the study conducted, it was possible to state that digital tools thus represent an effective way to monitor language learning progress, even though a selection of the interactive instruments available is necessary in order to employ

platforms that are suitable to the didactic field. In terms of metacognition, technological resources determine a functional starting point to promote students' metacognitive reflection, but still require teachers' intervention to favour a deep and subjective reflection to introduce students to all the relevant elements of the lesson worth mentioning, and to improve attention, memory, cognitive skills and soft skills, as reported by Cottini (2006).

5.3. TEACHERS' RELATIONSHIP WITH DIGITAL TOOLS: RESEARCH QUESTION NUMBER THREE

The last research question aimed at investigating teachers' relationship with digital tools and the reasons underlying the choice of their (possible) implementation. In addition, teachers' and students' familiarity with technological resources was analysed to detect whether a correlation between the answers collected in the two questionnaires existed and was able to affect the language teaching and learning process of the two classes considered.

The two teachers involved in this exploratory study differed in the teaching experience possessed as one of the two had been teaching Italian as second language for more than twenty-five years, whereas the second teacher had been practicing this profession for three years.

Both teachers declared to implement digital tools in their Italian language classes, every week and every lesson, respectively. Their knowledge of technological resources made this possible: they both knew many platforms among those provided in the list included in the questionnaire.

The reasons for the implementation of such tools in their classes differed. One of the two teachers underlined the importance of employing digital resources to approach to students' world and to keep up to date with technological progress, whereas the second teacher focused on the advantage of the utilisation of such tools with basic level Italian learners who successfully work with images and videos that are authentic, which is one of the requirements of the implementation of digital instruments identified by Ballarin (2007), and also offer the possibility to practice cooperative learning.

Despite recognising technological platforms efficacy, both teachers stated textbooks could not be replaced by such resources, but a combination of digital instruments and traditional learning is possible and beneficial in the language learning field. Moreover, a teacher declared "no digital tool can replace the creative work of the teacher", a statement which underlined teachers' refusal to be substituted and downgraded in their role by technology, as previously asserted by Favaro and Menegale (2014). Technology analyses data objectively, whereas classroom dynamics require subjectivity since students' individual characteristics must be taken into consideration. According to the answers collected, teachers are considered an irreplaceable presence in the language learning field.

The listed drawbacks of digital resources differed as well. On the one hand, a teacher claimed that technological instruments may be confused with teaching purposes hence distracting from the didactic aim. On the other hand, inadequate equipment and low digitalisation, especially concerning older participants, was underlined. Additionally, teachers participating in the study conducted by Spinu et al. (2021) highlighted the great deal of time required to prepare effective Wooclap presentations.

In adequate conditions, both teachers would employ digital tools more often. Thus, they agreed with students in recognising their efficacy and their positive impact on the language learning progress, also attested by other studies conducted (*ibid*.) which also reported attention span improvements. Hence, both participants and teachers were likely to employ digital platforms more often in the Italian language course.

Results collected showed teachers and learners knew different digital platforms: for instance, Canva and Kahoot! were known by thirteen students but not by the teachers, whereas both teachers knew Prezi but only a student did.

Despite the differences highlighted, technological resources implemented by teachers clearly influenced students' knowledge of digital platforms. For instance, Moodle was known only by SIE participants since it is the official platform provided by university and implemented by their teacher for communications, to store material and to provide interactive activities, whereas it was unknown for CIT students. This demonstrates the power teachers possess to shape students' learning and to influence their growth and personal skills development. Thus, it is essential for teachers to learn

how to properly use and implement digital resources in their courses in order to be able to create interactive and inclusive lessons favouring personal growth and self-realisation of their students.

However, digital competences depended on the age of participants as well, since younger students possessed a stronger connection with technology and interacted with digital platforms more easily compared to older students. In addition, digital platforms employment in the language course determined the development of such skills, as shown in the results collected.

Therefore, teacher training represents a useful solution to increase teachers' digital competences and consequently teach students how to implement technology to positively support their learning process and not only for entertainment purposes.

All things considered, the success of technological resources directly depends on teachers' skills (Torsani, 2015) and their willingness to engage themselves in adapting traditional didactics to technological progress, hence reshaping their teaching practice in order to establish a favourable learning environment that promotes meaningful learning.

5.4. CONCLUSION OF THE RESULTS DISCUSSION

A careful analysis of the results collected gave the author the possibility to answer the three research questions of this degree thesis.

First, digital platforms were positively embraced by most of the participants, even though opinions differed according to participants' age. Learners explained digital resources and playful methodology transformed the class into an entertaining context. Nonetheless, older students marked the importance of peer interaction and showed a fewer enthusiasm towards technological resources overall.

Second, Wooclap digital platform was carefully considered to examine possible functions suiting language learning practice. Among the available task typologies, word cloud and brainstorming tasks represented a very detailed tool to be implemented during the lessons. Furthermore, digital tools were investigated in relationship with metacognition: data collected reported that metacognitive reflection could not be fostered via technological resources only but required teachers' intervention to address

topics subjectively. Therefore, the combination of online platforms and guided *in-plenum* reflection remains the best modality to enhance students' metacognition.

Third, teachers' attitude towards technological resources was deepened. Both teachers declared such tools represented an integral part of their learning practice and identified both advantages and disadvantages of their implementation. Despite knowing different platforms compared to their students, teachers impacted students' digital competences. In addition, both teachers and learners agreed about the potential of digital resources and asserted to be likely to employ them more often, even though teachers' role is still considered irreplaceable by technology.

A wider consideration of the data collected thus outlines the favourable impact of digital tools and playful methodology to convey new vocabulary and to promote metacognition for Italian as a second language students.

5.5. LIMITATIONS TO THE RESEARCH STUDY

The case study conducted presented a number of limitations to be necessarily considered. First, the results obtained could not be generalised to a wider population as the research involved a specific sample of two Italian language classrooms only (twenty-six students in total participated into the research).

Another limit to the presentation proposed to students concerned the lack of reiteration of the methodologies implemented and of the data collection instruments which prevent the author from evaluating the long-term benefits of digital platforms as a means of conveying new vocabulary and metacognitive reflection. The comparison of higher quantity of entries and results to detect advantages and disadvantages of technological resources was thus not possible and represented a limit to the research. Despite these limitations, the study conducted allowed the author to grasp useful data about the relationship between technological resources and the language learning field anyway.

From the metacognitive point of view, the answers collected were self-reported, hence needed an attentive analysis since subjective and not completely trustworthy. However, as highlighted by Cornoldi (1995), qualitative methodology through verbal

analysis is the only instruments currently at disposal to investigate student metacognition.

The last point to make concerns CIT students involved in the study. Not knowing the class and meeting students for the first time during the experimentation represented a first issue for the author. Information about the participants that was relevant for the research was necessarily communicated beforehand by CIT teacher to the author. This also leads to the second issue which refers to the language level of the vocabulary included in the presentation and in the activities prepared: tasks proposed were developed to be potentially performed by all participants according to the UDL principles; nonetheless, some students found the tasks rather simple and stated they would have preferred to perform more difficult activities. This declaration clearly represented a possible scenario in mixed-ability classes such as the CIT class involved.

Lastly, insufficient time did not allow CIT learners to fill in the questionnaires after having completed the Wooclap presentation, thus reducing the number of entries collected and limiting the possibility to support students during the compiling of the Google Forms questionnaire.

CONCLUSION

In the latest years, the educational field has been experiencing a deep change in the methos employed to conduct language lessons. The advent of technological progress significantly influenced teaching and learning practice due to the development of disparate digital platforms. Teachers' current challenge thus consists of balancing traditional learning modalities and interactive instruments with the aim of bridging the gap between the in-class environment and the outside world.

This thesis project aspired to shed light on the relationship between language learning and Wooclap digital platform in Italian as second language students. The literature considered deepened the knowledge of numerous aspects related to didactics: language learning and pedagogical principles, inclusive learning, metacognition, playful methodology and digital resources. The studies taken into consideration allowed the identification of research gaps requiring an in-depth investigation that this thesis aimed at filling through the formulation of three research questions.

A subsequent exploratory study, developed starting from the literature considered, was conducted with adult and young adult Ca' Foscari School for International Education of Venice and Centro Interculturale of Turin students whose ages ranged between eighteen and sixty-seven. Since considering a two-class sample for a total of twenty-six students, the qualitative method research was hence employed as suitable to answer the research questions of this case study.

The first research question focused on the perception of digital resources as a means of conveying new vocabulary by collecting students' feedback about the interactive activities performed. Particular attention was paid towards the age of participants, to determine whether it represented a discriminating variable in the data collected.

The second research question analysed the interactive tools available on Wooclap and their possible implementation in the educational field, meticulously investigating the functions offered by the platform and their suitability for the language classroom as promoters of a favourable context of learning. The potential implementation of such instruments to foster student metacognitive reflection was considered as well.

The third research question concerned SIE and CIT teachers' perspective: their relationship with technological resources and their active implementation was deepened, paying particular attention to the advantages and to the drawbacks attributed

to such didactic methodology. Data obtained further represented a useful resource to determine whether the teaching practice impacted on students' language learning progress.

In order to address the aforementioned research questions, an interactive presentation about words related to the semantic field of the cinema via Wooclap was developed and a Google Forms questionnaire was distributed to students and teachers. Data collected were grouped together to obtain meaningful and useful content satisfying the research purposes.

An overall enthusiasm towards digital platforms was attested, as both students and teachers approved such instruments to acquire a new language effectively.

The identified digital platforms advantages extensively outnumbered disadvantages since both SIE and CIT participants reported numerous benefits of technological resources implementation to increase their language competences. The entertaining aspect was remarkably appreciated by the participants of this exploratory study and confirmed by previous research conducted with university students of Florence (Spinu et al., 2021) and Madrid (Moreno-Medina, Peñas-Garzón, Belver, & Bedia, 2023) which reported students were considerably engaged and less fatigued in their lessons.

Wooclap playful feature was particularly appreciated as promoting natural language acquisition according to Krashen's first hypothesis (1982) and it furthermore fostered vocabulary skills by proposing multisensorial stimuli (Fiorentino, 2022), by respecting UDL principles for an inclusive teaching and learning practice by providing multiple means of representation, and by offering the possibility to all students to participate in the lesson according to their personal possibilities (Dettori & Letteri, 2021).

Cooperative learning represented a crucial aspect of the case study as well, since interpersonal dynamics were essential to complete the activities proposed and simultaneously contributed to develop cognitive skills (Baschiera & Borg, 2023). The cooperative aspect obtained remarkable approval among older students who underlined the need for peer interaction, which is often lacking in digital activities performance, whereas younger students demonstrated a predisposition for individual work.

Therefore, interactive tools offered the possibility to develop social competences but also to monitor the immediate language learning progress reported by the detailed

results slides directly provided by platform: the research conducted allowed the author to identify a number of suitable task typologies through which it was possible to convey new vocabulary in the in-class context, namely, the word cloud task and the brainstorming task. Other task typologies were discovered to be unsuitable to the educational context since not offering the possibility to outline results in detail, as additionally confirmed in Lebbe and Barbieri (2018).

Nonetheless, as regards metacognitive reflection, which is essential to shape cognitive processes, attention, memory and study methods (Cottini, 2006), the functions offered by the digital tools were not totally satisfying as tasks typologies implemented required a consequent teacher intervention in light of the fact that qualitative, verbal analysis is required when addressing metacognition (Cornoldi, 1995). Objective data collection instruments such as Wooclap are thus not sufficient to conduct an exhaustive metacognitive reflection about the lesson conducted and its corresponding pedagogical principles.

Teachers' position towards digital resources was similar to that of students, as they recognised the effectiveness of technological instruments to fill the generation gap and to conduct motivating and functioning lessons. However, both asserted that a complete transition from traditional to digital didacts is currently unfeasible due to the irreplaceable human creativity and the attention paid towards single individuals realisable by teachers only, following Boninelli (2015) study highlighting that the successful learning of all students depends on high-quality teaching and on a favourable learning environment as asserted by the ICF (2001).

Moreover, Zappaterra (2004) reminds that teachers determine a crucial presence in the education of the individual since they are responsible for developing acquisition units and tasks gradually increasing the complexity of the request until learners become aware and responsible for their learning process and thus independent form teachers.

Despite the lack of a considerable sample and of the reiteration of the exploratory study developed, this research project contributed to collecting significant feedback concerning language students' and teachers' relationship with digital tools and their possible implementation in the language courses with the aim of developing

cooperative skills, digital competences, metacognitive reflection, and of fostering vocabulary acquisition.

These findings thus serve as point of departure for further studies in the digital field which is likely to acquire even more relevance in the near future.

PROPOSAL FOR FUTURE RESEARCH

As regards future research proposals, identifying whether participants' nationalities also affect the overall perception of digital resources could generate higher awareness towards students' personal and cultural traits and towards the impact of the educational background on the language learning process of each individual.

Furthermore, deeper research on students with learning disorders is required to collect data with the aim of developing accessible resources and of promoting an inclusive learning context allowing all individuals to participate in the lessons.

Lastly, the advent of Artificial Intelligence is also to be considered as recent trends highlight its spread in many scopes, including the educational field. Investigating its suitability in the learning context is thus crucial to detect its possible implementation in the language classroom and its impact on language students' learning process.

REFERENCES

Atkinson, R. C., & Shiffrin, R., M. (1968). Human memory: a proposed system and its control processes. In Spence, K., W. (Ed.), *The Psychology of Learning and Motivation: Advances in Research and Theory* (pp. 89-195). New York: Academic Press.

Baddeley, A. (2000). The episodic buffer: a new component of working memory?. *Trends in Cognitive Sciences*, *4*(2), 417-423. doi: 10.1016/s1364-6613(00)01538-2

Baddeley, A. (1992). Working memory. *Science*, *255*(5044), 556-559. doi: 10.1126/science.1736359

Baddeley, A., & Hitch, G. (1974). Working Memory. In Bower, G. A. (Ed.), *Recent Advance in Learning and Motivation*, (vol. 8, pp. 47-89). New York: Academic Press.

Balboni, P. (2019). *Le sfide di Babele. Insegnare lingue nelle società complesse* (4 ed.). Milano: UTET Università.

Balboni, P. (2010). L'italiano nei centri linguistici italiani. In Ballarin, E., Begotti, P., & Toscano, A. (Eds.), *L'italiano a stranieri nei centri linguistici universitari*, (vol. 6, pp. 5-23). Perugia: Guerra Edizioni.

Ballarin, E. (2007). Materiale audiovisivo e glottodidattica. In Cardona, M. (Ed.), *Vedere per capire e parlare* (pp. 7-26). Torino: UTET Università.

Baschiera, B. & Borg, J. (2023). Unlocking the power of collaborative learning in secondary schools. A transnational comparative analysis between Italy and Malta. *Italian Journal of Educational Research*, *31*, 50-65. doi: https://doi10.7346/sird-022023-p50

Bassani, G., & Perrello, E. (2020). Le attività ludiche in contesto universitario: uno studio sulla percezione degli studenti di italiano L2 e LS. *Bollettino Itals*, *82*, 25-35. Retrieved from https://www.itals.it/editoriale/bollettino-itals-Febbraio-2020. Last accessed in June 2024.

Begotti, P. (2007). La glottodidattica umanistico-affettiva nell'insegnamento dell'italiano LS ed L2 ad adulti stranieri. *Studi di glottodidattica*, *1*(2), 44-62. doi: https://doi.org/10.15162/1970-1861/243

Boninelli, M. L. (2015). L'approccio metacognitivo come didattica strategica in risposta all'emergenza scolastica. *Formazione & Insegnamento*, *13*(1), 99-107. doi: 107346/-fei-XIII-01-15_08

Borello, E., Luise, M. C., Pederzoli, L., & Tardi, G. (2016). Web 2.0, language learning and intercultural competence. *Open Access Library Journal*, *3*, 1-10. doi: http://dx.doi.org/10.4236/oalib.1102327

Caon, F. (2020). Motivation, pleasure and a playful methodology in language learning. *Educazione Linguistica. Language Education* (*EL.LE)*, *9*(3), 437-460. doi: http://doi.org/10.30687/ELLE/2280-6792/2020/03

Cardona, M., & De Iaco, M. (2023). *Processi cognitivi ed educazione linguistica*. Roma: Carocci.

Caruso, G. (2015). *An emotional framework in foreign language pedagogy. Facing the postmethod challenge*. Jyväskylä: Jyväskylä University Printing House.

Casani, E. (2021). Strategie di studenti universitari nell'apprendimento delle lingue. Verso un modello transculturale di competenza strategica. *Studi sull'apprendimento e l'insegnamento linguistico (SAIL)*, *18*, 357-368. doi: http://doi.org/10.30687/978-88-6969-501-8/032

Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge: MIT Press.

Cornoldi, C. (1995). *Metacognizione e apprendimento*. Bologna: Il Mulino.

Cornoldi, C., & De Beni, R. (2001). *Imparare a studiare 2. Strategie, stili cognitivi, metacognizione e atteggiamenti nello studio* (2 ed.). Trento: Erickson.

Cottini, L. (2006). La didattica metacognitiva. *Università degli studi di Udine*. Retrieved from https://www.fisica.uniud.it/URDF/masterDidSciUD/materiali/pdf/did_meta.pdf. Last accessed in June 2024.

Council of Europe (2020). *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume*. Strasbourg: Council of Europe Publishing.

De Rossi, M. (2023). Costruire l'azione didattica. Lecce: Pensa MultiMedia Editore.

Dettori, G. F., Letteri, B. (2021). L'importanza della meta-cognizione per un apprendimento inclusivo. Un'indagine con docenti di classe e di sostegno. *L'integrazione scolastica e sociale*, *20*(1), 102-123. doi: 10.14605/ISS2012105

Diadori, P. (2022). Interazioni telematiche e didattica della L2 nei documenti europei: prima e dopo il DigCompEdu (2017) e il CEFR Companion Volume (2020). *Italiano LinguaDue*, *14*(2), 65-93. doi: https://doi.org/10.54103/2037-3597/19571

Dörnyei, Z. (2007). *Research methods in applied linguistics. Quantitative, qualitative, and mixed methodologies*. Oxford: Oxford University Press.

Doyé, P. (2005). *Intercomprehension*. Strasbourg: Council of Europe. Retrieved from https://rm.coe.int/intercomprehension/1680874594. Last accessed in June 2024.

Ebbinghaus, H. (1885). Über das Gedächtnis [Memory: a contribution to experimental psychology]. Retrieved from https://home.uni-leipzig.de/wundtbriefe/wwcd/opera/ebbing/memory/GdaechtI.htm. Last accessed in June 2024.

European Commission. (2020). *Education begins with language*. Luxembourg: Publications Office of the European Union.

European Commission, Joint Research Centre, Redecker, C., & Punie, Y. (2017). *European framework for the digital competence of educators – DigCompEdu*. Luxembourg: Publications Office of the European Union.

Favaro, L., & Menegale, M. (2014). La scelta delle tecnologie nel percorso di sviluppo dell'autonomia di apprendimento linguistico: un modello di applicazione. *Educazione Linguistica. Language Education* (*EL.LE)*, *3*(1), 13-29. doi: http://doi.org/10.14277/2280-6792/240

Fiorentino, G. (2022). Giochi linguistici per la didattica dell'italiano. *Italiano LinguaDue*, *14*(2), 220-237. doi: 10.54103/2037-3597/19659

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist, 34*(10), 906–911. https://doi.org/10.1037/0003-066X.34.10.906

Freddi, G. (1993). *Glottodidattica: principi e tecniche*. Italia: Canadian Society for Italian Studies. Retrieved from https://books.google.it/books?id=9JDB104-rTsC&printsec=frontcover&hl=it&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false. Last accessed in June 2024.

Gardner, H. (1983). *Formae mentis. Saggio sulla pluralità dell'intelligenza*. Milano: Feltrinelli.

Haque, M. M. (2019). From cognition, metacognition to autonomy: a framework for understanding language learning dynamics. *Arab World English Journal*, *12*(1), 207-222. doi: https://dx.doi.org/10.24093/awej/efl1.15

Jegerski, J. (2020). Krashen and second language processing. *Foreign Language Annals*, *54*(2), 318-323. doi: 10.1111/flan.12557

Krashen, S. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon Press.

Kumaravadivelu, B. (2001). Toward a postmethod pedagogy. *TESOL Quarterly*, *35*, 537-560. doi: 10.2307/3588427

Lebbe, G. (2018). Imparare in classe con lo smartphone. In Fiorentino, G., & Bondi, M. (Eds.), *Atti del MoodleMoot Italia 2018* (pp. 94-99). Milano: MediaTouch 2000.

Lichtman, K., & Vanpatten, B. (2021). Krashen forty years later: final comments. *Foreign Language Annals*, *54*(2), 336-340. doi: 10.1111/flan.12543

Mollica A. (2010). *Ludolinguistica e glottodidattica*. Perugia: Guerra Edizioni.

Moreno-Medina, I., Peñas-Garzón, M., Belver, C., & Bedia, J. (2023). Wooclap for improving student achievement and motivation in the chemical engineering degree. *Education for Chemical Engineers*, *45*, 11-18. doi: 10.1016/j.ece.2023.07.003

Nitti, P. (2018). *La didattica della lingua italiana per gruppi disomogenei*. Brescia: Editrice La Scuola.

Oxford, R. (1989). Strategy inventory for language learning (SILL). Retrieved from https://richarddpetty.wordpress.com/wp-content/uploads/2010/03/sill-english.pdf. Last accessed in June 2024.

Perry, J., Lundie, D., & Golder, G. (2019). Metacognition in schools: what does the literature suggest about the effectiveness of teaching metacognition in schools?. *Educational Review*, *71*(4), 483-500. doi: 10.1080/00131911.2018.1441127

Polito, M. (2017). *Memoria e mnemotecniche applicate allo studio. Strategie per ricordare e assimilare ciò che si è studiato* (2 ed). Vicenza: Education Psychology.

Polito, M. (2001). *Attivare le risorse del gruppo classe. Nuove strategie per l'apprendimento reciproco e la crescita personale*. Trento: Centro Studi Erickson.

Porcelli, G. (1994), *Principi di glottodidattica*. Brescia: Editrice La Scuola.

Pradal, M. (2014). L'approccio pedagogico della classificazione ICF-CY. *Edizioni Erickson - L'integrazione scolastica e sociale*, *13*(2), 164-175. Retrieved from https://rivistedigitali.erickson.it/integrazione-scolastica-sociale/it/visualizza/pdf/957. Last accessed in June 2024.

Quaggia, R. (2013). La lingua L2 nel web. Prospettive digitali per la didattica dell'italiano a stranieri. *Italiano LinguaDue*, *5*(1), 128-159. doi: 10.13130/2037-3597/3124

Ranieri, M. (2022). Le competenze digitali degli insegnanti. In Biagioli, R., & Oliviero, S. (Eds.), *Il Tirocinio Diretto Digitale Integrato (TDDI). Il progetto sperimentale per lo sviluppo delle competenze delle maestre e dei maestri* (pp. 49-60). Firenze: Firenze University Press.

Reigeluth, C. M. (1999). What is instructional-design theory and how is it changing?. In Reigeluth, C. M. (Ed.), *Instructional-design theories and models. A new paradigm of instructional theory. Volume II* (pp. 5-29). New Jersey: Lawrence Erlbaum Associates.

Scholl, J. (2017). Reconceptualizing post-method pedagogy. *International Journal of Language Learning and Applied Linguistics World*, *15*(3), 96-101. Retrieved from https://www.researchgate.net/publication/318967061_RECONCEPTUALIZING_POST-METHOD_PEDAGOGY. Last accessed in June 2024.

Serragiotto, G. (2020). Il profilo del docente di italiano a stranieri e le sue competenze didattiche. In Serragiotto, G. (Ed.), *CEDILS. Certificazione in didattica dellìitaliano a stranieri dell'università Ca' Foscari di Venezia* (pp. 8-28). Torino: Loescher Editore.

Serragiotto, G. (2017). La valutazione degli apprendimenti linguistici. In S. Assolari, & R. Burlenghi (Eds.), *Atti delle II Giornate di Formazione per Insegnanti di Italiano L2/LS a Cipro* (pp. 109-121). Nicosia: Centro Linguistico – Università di Cipro.

Siemens, G. (2002). Instructional design in elearning. Retrieved from http:// www.elearnspace.org/Articles/InstructionalDesign.htm. Last accessed in June 2024.

Slavin, R. E. (2014). Cooperative learning and academic achievement: why does groupwork work?. *Anales de Psicología / Annals of Psychology*, *30*(3), 785–791. doi: https://doi.org/10.6018/analesps.30.3.201201

Spinu, M. B., Castelli, F., Ranieri, M., Pezzati, F., Bruni, I., Gallo, F., … Švab, M. (2021). Pratiche di valutazione formativa nella didattica ibrida: sperimentazione di uno student response system integrato in Moodle. In Fiorentino, G., Gallo, P., & Rabellino, S. (Eds.), *Atti del MoodleMoot Italia 2021* (pp. 129-136). Torino: MediaTouch 2000.

Sternberg, R. J. (1990). Thinking styles: keys to understanding student performance. *Phi Delta Kappan*, *71*(5), 366-371. Retrieved from https://www.jstor.org/stable/20404156. Last accessed in June 2024.

Sudati, I. (2013). La didattica ludica. Teoria e applicazioni pratiche nell'insegnamento dell'italiano L2 ad adulti. *Italiano LinguaDue*, *5*(2), 211-225. doi: 10.13130/2037-3597/3759

Tessaro, F. (2012). Lo sviluppo della competenza. Indicatori e processi per un modello di valutazione. *Formazione & Insegnamento, 10*(1), 105-119. doi: 10746-fei-X-01-12/10

Tessaro, F. (2006). La costruzione dei saperi. Quando la partecipazione alla conoscenza è benessere. *Quaderni di orientamento*, *29*, 4-13. Retrieved from https://www.regione.fvg.it/quaderni/Quaderno%2029_IIsemestre_novembre2006/files/assets/common/downloads/publication.pdf. Last accessed in June 2024.

Torresan, P. (2022). *Un alfabeto di 73 lettere. Strategie per la didattica linguistica*. Milano-Torino: Pearson Academy.

Torsani, S. (2015). L'integrazione delle tecnologie nell'educazione linguistica come obiettivo della preparazione degli insegnanti. *Educazione Linguistica. Language Education* (*EL.LE)*, *4*(3), 445-462. doi: 10.14277/2280-6792/ELLE-4-3-15-5

Venâncio Faleiros, M. H. (2009). Mixed ability classes: problems, strategies and practical help. *Diálogos Pertinentes – Revista Científica de Letras, 5*(5), 113-128. doi: https://doi.org/10.26843/dp.v5i1.113

Von Humboldt, W. (1999). *On language. On the diversity of human language construction and its influence on the mental development of the human species*. Cambridge: Cambridge University Press.

Vygotsky, L. S. (1978). *Mind in society: the development of higher psychological processes*. Cambridge: Harvard University Press.

Watkins, M. J. (1990). Mediationism on the obfuscation of memory. *American Psychologist*, *45*(3), 328-335. doi: https://doi.org/10.1037/0003-066X.45.3.328

World Organization Health (WHO). (2007). *ICF-CY - International classification of functioning, disability and health*. *Children and Youth version*. Geneva: World Organization Health.

World Organization Health (WHO). (2001). *ICF - International classification of functioning, disability and health*. Geneva: World Organization Health.

Zappaterra, V. (2004). Didattica metacognitiva per un apprendimento significativo, *Federazioni Associazioni di Docenti per l'Integrazione Scolastica*. Retrieved from http://www.integrazionescolastica.it/article/264. Last accessed in June 2024.

WEBSITES

Ca' Foscari School for International Education: https://www.unive.it/pag/43349/. Last accessed in June 2024.

CAST, Universal Design for Learning: https://www.cast.org/impact/universal-design-for-learning-udl. Last accessed in June 2024.

Centro Interculturale di Torino: http://www.interculturatorino.it/il-centro/chi-siamo/. Last accessed in June 2024.

Wooclap: https://app.wooclap.com/. Last accessed in June 2024.

APPENDIX

PARTICIPANTS' CONSENT FORM

Participant Consent Form

Simona Guarnieri Thesis Project - Consent Form

Please tick the appropriate boxes	Yes	No
Taking Part in the Project		
The project has been fully explained to me. (If you will answer No to this question please do not proceed with this consent form until you are fully aware of what your participation in the project will mean.)	☐	☐
I have been given the opportunity to ask questions about the project.	☐	☐
I agree to take part in the project. I understand that taking part in the project will include completing an online questionnaire, working in groups, and using my own device to actively participate in the activities.	☐	☐
I understand that the activities might be recorded for research purposes only, and that the researcher and the supervising teacher exclusively will have access to the recording.		
I understand that my taking part is voluntary and that I can withdraw from the study at any time; I do not have to give any reasons for why I no longer want to take part and there will be no adverse consequences if I choose to withdraw.	☐	☐
How my information will be used during and after the project		
I understand my personal details such as email address, gender, age, country of origin country of residence will not be revealed to people outside the project.	☐	☐
I understand my personal details will be used for didactic purposes only pursuant to Article 13 of the Legislative Decree 196/2003 of the Italian Law.		
I understand and agree that my words may be quoted in publications, reports, web pages, and other research outputs. I understand that I will not be named in these outputs unless I specifically request this.	☐	☐
I understand and agree that the researcher and the supervising teacher only will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.	☐	☐

Name of participant Signature Date

Name of Researcher Signature Date

Project contact details for further information:

Researcher: 976920@stud.unive.it
Supervisor: Barbara-baschiera@unive.it

SIE STUDENT QUESTIONNAIRE

STUDENT QUESTIONNAIRE - FINAL THESIS

After the in-class activity, please complete the following questionnaire to help the researcher collect your feedback.
The questionnaire is composed of 25 items divided into three sections: the first concerning personal information, the second about language background and the third involving today's activity.
Thank you for your help!

* Indica una domanda obbligatoria

1. I have read the consent form and I accept the terms of the experimentation. *

Contrassegna solo un ovale.

- Yes
- No

PERSONAL INFORMATION

This section helps the researcher collect information about your cultural and educational background.

2. 1. What is your age? *
(Please express in numbers)

3. 2. What is your country of birth? *
If you spent childhood in a country other than the one where you were born, please specify it.

4. 3. Please specify the educational centre you are attending *

Contrassegna solo un ovale.

- ◯ Ca' Foscari School for International Education
- ◯ Centro Interculturale di Torino

5. 4. What is your educational level? *

Contrassegna solo un ovale.

- ◯ Primary school
- ◯ High school
- ◯ Bachelor's degree
- ◯ Master's degree
- ◯ Altro: _____

6. 5. Are you a student? Are you a worker? *

Contrassegna solo un ovale.

- ◯ I am a studend
- ◯ I am a worker
- ◯ I am both student and worker
- ◯ I don't work and I don't study

7. 6. If you study and/or work, please specify your study field and/or your current profession.

_____

8. 7. How long have you been living in Italy? *
(Please express the number of months or years)

_____

LANGUAGE BACKGROUND

This section helps the researcher understand your language competences.

9. 8. What is/are your native language/s? *

10. 9. Other languages fluently spoken (B2/C1 level) *

11. 10. What other languages have you studied besides your native language(s)? *

12. 11. How long have you been studying Italian? (Please express the number of months or years) *

13. 12. Why did you start learning the Italian language? *

TODAY'S ACTIVITY FEEDBACK

This last section contains items about the activity proposed, to collect your feedback and useful data for the student's final thesis.

14. 13. What digital tools and platforms used for educational purposes do you know? *
If not in the list, please write other platforms names you know or worked with.

Seleziona tutte le voci applicabili.

- [ ] Wooclap
- [ ] Ahaslides
- [ ] Genially
- [ ] Edpuzzle
- [ ] Prezi
- [ ] Kahoot!
- [ ] Moodle
- [ ] Canva
- [ ] Altro: _____

15. 14. Did you use any digital platforms while you were attending school? *

Contrassegna solo un ovale.

- ◯ Yes
- ◯ No

16. If yes, please specify whether you worked with digital platforms in language courses.

Contrassegna solo un ovale.

- ◯ Yes, I used digital platforms in language courses
- ◯ No, I didn't use digital platforms in language courses

17. 15. How often do you use digital platforms in the courses you are attending? *

Contrassegna solo un ovale.

- ◯ Always (every lesson)
- ◯ Very often (every week)
- ◯ Sometimes (between once and three times a month)
- ◯ Rarely (once every two months)
- ◯ Never

18. 16. Would you rather use digital platforms in the Italian language course more often? *

Contrassegna solo un ovale.

- ◯ Yes
- ◯ No

19. Please specify the reasons why you would or wouldn't like to employ digital tools more often. *

20. 17. In your opinion, what are the drawbacks of using digital platforms? *

21. 18. In your opinion, what are the advantages? *

22. 19. What difficulties did you encounter during the activities proposed? *

23. 20. Did you discover any new strategies to learn new concepts? *

Seleziona tutte le voci applicabili.

- [ ] Groupwork
- [ ] Thinking about the information I already know at the beginning of the lesson
- [ ] Classifying the words into categories
- [ ] Using colours to differentiate the different categories
- [ ] Associating words to images as memorisation strategy
- [ ] Trying to guess the meaning through images or definition instead of looking up the words in the dictionary
- [ ] Dedicating some time to reflect upon the lesson and the activities performed
- [ ] I didn't discover new strategies
- [ ] Using digital platforms and websites to do extra exercise
- [ ] Altro: _____

24. 21. At the end of the lesson, do you usually reflect upon the activities performed in the lesson? *

Seleziona tutte le voci applicabili.

- [ ] Yes, with the teacher
- [ ] Yes, by myself
- [ ] Yes, with my classmates
- [ ] No
- [ ] Altro: _____

25. 22. Do you feel dedicating some time to reflection helped you identify effective learning strategies to employ while acquiring new words or information? Why? Why not? *

26. 23. Do you feel reflecting upon the activities helps you monitor your language learning progress? Does it help you identify your strengths and weaknesses? *

27. 24. Are you likely to employ the strategies discovered today in the future? Why or why not? *

28. 25. Please rate today's experimentation format from 1 to 5. *

Contrassegna solo un ovale.

	1	2	3	4	5	
I did	◯	◯	◯	◯	◯	I liked it a lot

THANK YOU FOR YOUR HELP!

CIT STUDENT QUESTIONNAIRE

STUDENT QUESTIONNAIRE - FINAL THESIS

After the in-class activity, please complete the following questionnaire to help the researcher collect your feedback.
The questionnaire is composed of 25 items divided into three sections: the first concerning personal information, the second about language background and the third involving today's activity.

Dopo le attività svolte in classe, per favore compila il questionario per aiutare la ricercatrice a raccogliere un feedback. Il questionario comprende 25 domande divise in tre sezione: la prima riguarda le informazioni personali, la seconda il contesto linguistico di provenienza e la terza l'attività di oggi.

Après les activités faites en classe, je te demande de compléter le questionnaire pour aider la chercheuse à recueillir ton commentaire. Le questionnaire se compose de 25 questions, divisées en trois sections: la première concerne les données personnelles, la deuxième le contexte linguistique de provenance e la troisième les activités d'aujourd'hui.

Thank you for your help! / Grazie per l'aiuto! / Merci pour votre aide!

* Indica una domanda obbligatoria

1. I have read the consent form and I accept the terms of the experimentation. / Ho letto l'informativa per la privacy e accetto le condizioni della sperimentazione / J'ai lu le formulaire d'autorisation e j'accepte les conditions de l'expérimentation. *

Contrassegna solo un ovale.

- ◯ Yes / Sì / Oui
- ◯ No / Non

PERSONAL INFORMATION / INFORMAZIONI PERSONALI / DONNÉES PERSONNELLES

This section helps the researcher collect information about your cultural and educational background. / Questa sezione aiuta la ricercatrice a raccogliere informazioni sul tuo contesto culturale e formativo / Cette section aide la chercheuse à collecter des informations sur ton contexte culturel et éducatif.

2. 1. What is your age? / Quanti anni hai? / Quel age as tu? *
(Please express in numbers / Per favore scrivi il numero / Indique en nombre s'il te plaît)

_____

3. 2. What is your country of birth? / In quale paese sei nato? / Quel est ton pays de naissance ? *

If you spent childhood in a country other than the one where you were born, please specify it / Se hai passato l'infanzia in un paese diverso da quello in cui sei nato per favore specificalo / Si tu as passé ton enfance dans un pays autre que celui où tu est né, veuille le préciser.

_____

4. 3. Please specify the educational centre you are attending / Per favore indica quale centro educativo stai frequentando / Veuille préciser le centre éducatif que vous êtes en train de fréquenter. *

Contrassegna solo un ovale.

- ◯ Ca' Foscari School for International Education
- ◯ Centro Interculturale di Torino

5. 4. What is your educational level? / Qual è il tuo livello di formazione? / Quel est ton niveau d'éducation? *

Contrassegna solo un ovale.

- ◯ Primary school / Scuola elementare / École primaire
- ◯ High school / Scuola superiore di primo o secondo grado / École secondaire
- ◯ Bachelor's degree / Laurea triennale / Baccalauréat
- ◯ Master's degree / Laurea magistrale / Diplôme de maîtrise
- ◯ Altro: _____

6. 5. Are you a student? Are you a worker? / Studi? Lavori? / Tu études? Tu travailles? *

Contrassegna solo un ovale.

- ◯ I am a studend / Studio / Je étudie
- ◯ I am a worker / Lavoro / Je travaille
- ◯ I am both student and worker / Studio e lavoro / J'étudie et je travaille
- ◯ I don't work and I don't study / Non studio e non lavoro / Je n'étudie pas et je ne travaille pas

7. 6. If you study and/or work, please specify your study field and/or your current profession. / Se studi e/o lavori, per favore indica l'ambito degli studi e/o la tua professione attuale / Si tu études et/ou travailles, précise le champ d'étude et ton profession actuelle, s'il te plaît.

_____

8. 7. How long have you been living in Italy? / Da quanto tempo vivi in Italia? / Depuis combien de temps tu vis en Italie? *
(Please express in numbers / Per favore scrivi il numero / Indique en nombre s'il te plaît)

_____

LANGUAGE BACKGROUND / CONTESTO LINGUISTICO / BAGAGE LINGUISTIQUE

This section helps the researcher understand your language competences. / Questa sezione aiuta la ricercatrice a conoscere le tue competenze linguistiche / Cette section aide la chercheuse à découvrir tes competences linguistiques.

9. 8. What is/are your native language/s? / Qual è la tua lingua madre o quali sono le tue lingue madri? / Quelle est ton langue maternelle ou quelles sont tes langues maternelles? *

_____

10. 9. Other languages fluently spoken (B2/C1 level) / Altre lingue parlate fluentemente (livello B2/C1) / Autres langues langues couramment parlées (niveau B2/C1). *

_____

11. 10. / Quali altre lingue hai studiato oltre alla tua lingua nativa? / Quelles autres langues as-tu étudiées en plus de ton langue maternelle? *

12. 11. How long have you been studying Italian? / Da quanto tempo studi italiano? / Depuis quand étudies-tu l'italien? *
(Please express in numbers / Per favore scrivi il numero / Indique en nombre s'il te plaît)

13. 12. Why did you start learning the Italian language? / Perché hai iniziato a studiare italiano? / Pourquoi as-tu commencé à étudier l'italien? *

TODAY'S ACTIVITY FEEDBACK / FEEDBACK DELLE ATTIVITÀ DI OGGI / COMMENTAIRE DES ACTIVITÉS D'AUJOURD'HUI

This last section contains items about the activity proposed, to collect your feedback and useful data for the student's final thesis. / Questa ultima sezione contiene domande inerenti alle attività proposte, per raccogliere il vostro feedback e dati utili per la tesi finale della studentessa. / Cette dernière activité comprend les questions sur les activités proposées, pour recueillir votre commentaire e les données utiles pour la thèse finale de l'étudiante.

14. 13. What digital tools and platforms used for educational purposes do you know? / Quali altri strumenti e piattaforme digitali a scopo educativo conosci? / Quels autres outils et plateformes numériques utilisés à des fins éducatives connais-tu? *

If not in the list, please write other platforms names you know or worked with. / Per favore, se conosci altre risorse non presenti nella lista indicale / Si tu connais autres resources indiques-les, s'il te plaît.

Seleziona tutte le voci applicabili.

- [ ] Wooclap
- [ ] Ahaslides
- [ ] Genially
- [ ] Edpuzzle
- [ ] Prezi
- [ ] Kahoot!
- [ ] Moodle
- [ ] Canva
- [ ] Altro: _____

15. 14. Did you use any digital platforms while you were attending school? / Usavi le piattaforme digitali quando frequentavi la scuola? / As-tu utilisé des plateformes numériques pendant tes études? *

Contrassegna solo un ovale.

- ◯ Yes / Sì / Oui
- ◯ No / Non

16. If yes, please specify whether you worked with digital platforms in language courses. / Se sì, per favore specifica se hai utilizzato le piattaforme digitali durante le lezioni di lingue / Si oui, précise si tu as travaillé avec des plateformes numériques dans des cours de langues.

Contrassegna solo un ovale.

- ◯ Yes, I used digital platforms in language courses / Sì, ho utilizzato le piattaforme digitali nelle lezioni di lingue / Oui, j'ai utilisé les plateformes numériques dans les cours de langues.
- ◯ No, I didn't use digital platforms in language courses / No, non ho utilizzato le piattaforme digitali nelle lezioni di lingue / Non, je n'ai pas utilisé les plateformes numériques dans les cours de langues.

17. 15. How often do you use digital platforms in the courses you are attending? / Quanto spesso utilizzi le piattaforme digitali nel corso che stai frequentando? / À quelle fréquence utilise-tu les plateformes numériques dans les cours auxquels tu participes? *

Contrassegna solo un ovale.

- ◯ Always (every lesson) / Sempre (ogni lezione) / Toujours (toutes les leçons)
- ◯ Very often (every week) / Molto spesso (ogni settimana) / Très souvent (chaque semaine)
- ◯ Sometimes (between once and three times a month) / A volte (da una alle tre volte al mese) / Parfois (entre une et trois fois par mois)
- ◯ Rarely (once every two months) / Raramente (una volta ogni due mesi) / Rarement (une fois tous les deux mois)
- ◯ Never / Mai / Jamais

18. 16. Would you rather use digital platforms in the Italian language course more often? / Ti piacerebbe utilizzare più spesso le piattaforme digitali durante le lezioni di italiano? / Préférrais-tu utiliser les plateformes numériques dans le cours de langue italienne plus souvent? *

Contrassegna solo un ovale.

- ◯ Yes / Sì / Oui
- ◯ No / Non

19. Please specify the reasons why you would or wouldn't like to employ digital tools more often. / Per favore spiega il motivo per cui ti piacerebbe o non ti piacerebbe utilizzare più spesso gli strumenti digitali. / S'il te plaît précises les raisons pour lesquelles tu aimerais ou non utiliser des outils numériques plus souvent. *

20. 17. In your opinion, what are the drawbacks of using digital platforms? / Secondo te quali sono gli svantaggi dell'utilizzo delle piattaforme digitali? / À ton avis, quels sont les inconvénients de l'utilisation des plateformes numériques? *

21. 18. In your opinion, what are the advantages? / Secondo te, quali sono i vantaggi? / À ton avis, quels sont les avantages? *

22. 19. What difficulties did you encounter during the activities proposed? / Quali difficoltà hai avuto durante le attività proposte? / Quelles difficultés as-tu rencontrées pendant les activités proposées? *

23. 20. Did you discover any new strategies to learn new concepts? / Hai scoperto nuove strategie per apprendere nuovi concetti? /As-tu découvert de nouvelles stratégies pour apprendre de nouveaux concepts ? *

Seleziona tutte le voci applicabili.

- [ ] Groupwork / Lavoro di gruppo / Travail en groupe
- [ ] Thinking about the information I already know at the beginning of the lesson / Pensare alle informazioni che già conosco all'inizio della lezione / Penser aux informations que je connais déjà au début de la leçon
- [ ] Classifying the words into categories / Dividere le parole in categorie / Classer les mots en catégories
- [ ] Using colours to differentiate the different categories / Utilizzare i colori per differenziare le diverse categorie / Utiliser les couleurs pour différencier les différentes catégories
- [ ] Associating words to images as memorisation strategy / Associare le parole alle immagini come strategia di memorizzazione / Associer des mots à des images comme stratégie de mémorisation
- [ ] Trying to guess the meaning through images or definition instead of looking up the words in the dictionary / Provare ad indovinare il significato tramite immagini o definizioni invece di cercare la traduzione sul dizionario / Essayer de deviner le sens à travers des images ou la définition au lieu de chercher les mots dans le dictionnaire
- [ ] Dedicating some time to reflect upon the lesson and the activities performed / Dedicare del tempo per riflettere sulla lezione e le attività svolte / Consacrer du temps à la réflexion sur la leçon et les activités effectuées
- [ ] I didn't discover new strategies / Non ho scoperto nuove strategie / Je n'ai pas decouvert de nouvelles stratégies
- [ ] Using digital platforms and websites to do extra exercise / Utilizzare piattaforme digitali e siti web per fare esercizio extra / Utiliser des plateformes numériques et des sites web pour faire de l'exercice supplémentaire
- [ ] Altro: _____

24. 21. At the end of the lesson, do you usually reflect upon the activities performed in the lesson? / Alla fine della lezione, di solito rifletti sulle attività svolte in classe? / À la fin de la leçon, tu réfléchis habituellement aux activités effectuées dans la leçon? *

Seleziona tutte le voci applicabili.

- [ ] Yes, with the teacher / Sì, con l'insegnante / Oui, avec le professeur
- [ ] Yes, by myself / Sì, da solo / Oui, tout seul
- [ ] Yes, with my classmates / Sì, con i miei compagni di classe / Oui, avec mes camarades de classe
- [ ] No / Non
- [ ] Altro: _____

25. 22. Do you feel dedicating some time to reflection helped you identify effective learning strategies to employ while acquiring new words or information? Why? Why not? / Pensi che dedicare del tempo alla riflessione ti abbia aiutato a scoprire strategie efficaci da utilizzare per imparare nuove parole e informazioni? Perché? Perché no? / As-tu l'impression que le fait de consacrer du temps à la réflexion a aidé à identifier des stratégies pour un apprentissage efficace pour l'étude de nouvelles mots et informations? Pourquoi? Pourqoui pas? *

26. 23. Do you feel reflecting upon the activities helps you monitor your language learning progress? Does it help you identify your strengths and weaknesses? / Pensi che riflettere sulle attività ti aiuti a monitorare i tuoi progressi nell'apprendimento? Ti aiuta a trovare i tuoi punti di forza e di debolezza? / Pensez-tu que la réflexion sur les activités aide à suivre les progrès d'apprentissage des langues? Aide-t-il à identifier tes forces et tes faiblesses? *

27. 24. Are you likely to employ the strategies discovered today in the future? Why or why not? / Pensi che utilizzerai le strategie scoperte oggi in futuro? Perché o perché no? / Tu penses que tu va utiliser les stratégies découvertes aujourd'hui dans le futur? Pourquoi ou porquoi pas? *

28. 25. Please rate today's experimentation format from 1 (I didn't like it at all) to 5 (I liked it a lot). / Per favore dai un punteggio da 1 (non mi è piaciuta per niente) a 5 (mi è piaciuta molto) alla struttura organizzativa della sperimentazione / Évalue le format d'expérimentation d'aujourd'hui de 1 (je ne l'ai aimé pas du tout) à 5 (je l'ai beaucoup aimé). *

Contrassegna solo un ovale.

1	2	3	4	5
◯	◯	◯	◯	◯

THANK YOU FOR YOUR HELP! / GRAZIE PER L'AIUTO! / MERCI POUR L'AIDE!

TEACHER QUESTIONNAIRE

TEACHER QUESTIONNAIRE - FINAL THESIS

After the in-class activity, please complete the following questionnaire to help the researcher collect your feedback.
The questionnaire is composed of 10 items.
Thank you for your help!

* Indica una domanda obbligatoria

1. I have read the consent form and I accept the terms of the experimentation. *

Contrassegna solo un ovale.

- ◯ Yes
- ◯ No

TEACHERS' FEEDBACK

2. 1. How long have you been teaching Italian as a second language? *

_____

3. 2. What digital tools and platforms used for educational purposes do you know? *
If not in the list, please write other platforms names you know or worked with.

Seleziona tutte le voci applicabili.

- ☐ Wooclap
- ☐ Ahaslides
- ☐ Genially
- ☐ Edpuzzle
- ☐ Prezi
- ☐ Kahoot!
- ☐ Moodle
- ☐ Canva
- ☐ Altro: _____

4. 3. How often do you employ digital platforms in your lessons? *

Contrassegna solo un ovale.

- ◯ Always (every lesson)
- ◯ Very often (every week)
- ◯ Sometimes (between once and three times a month)
- ◯ Rarely (once every two months)
- ◯ Never

5. 4. In your opinion, what are the drawbacks of using digital platforms in the educational field? *

6. 5. In your opinion, what are the advantages of using digital platforms in the educational field? *

7. 6. What are the reasons why you use or do not use digital tools? *

8. 7. In your opinion, could digital tools substitute textbooks to teach new content? Why? Why not? *

9. 8. Would you like to use digital tools more often during your lessons? Why ? Why not? *

10. 9. Reflect about your teaching habits and select the appropriate answer to show agreement or disagreement with the following statements. *

Contrassegna solo un ovale per riga.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I ask students to perform couple or group activities during every lesson	◯	◯	◯	◯	◯
I dedicate the final minutes of the lesson to reflect about the activities performed	◯	◯	◯	◯	◯
I try to suggest new learning strategies to my students	◯	◯	◯	◯	◯
I ask students what kind of activities they would like to perform	◯	◯	◯	◯	◯
I use digital platforms to fill the generational gap with students	◯	◯	◯	◯	◯