Corso di Laurea Magistrale
in
Scienze del Linguaggio

Tesi di Laurea

An Exploratory Study of Co-teaching in CLIL Method: Teachers' Perceptions

Investigating Perspectives and
Collaborative Practices in a Primary School

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Anno Accademico
2023 / 2024

INDEX

Abstract

This thesis aims to explore co-teaching in primary school, perceptions that teachers attribute to collaboration, assessment, and limits may hinder cooperation. It is investigated the potential correlations between teachers' perceptions of co-teaching and its actual practice. Starting with the analysis of the research literature, we will present the practice of co-teaching and, through an exploratory study, analyse teachers' responses. The research tool is a questionnaire addressed to a group of primary school teachers using co-teaching with CLIL. The exploratory study involves curricular and CLIL specialised teachers. The method is mixed (qualitative and quantitative) as it consists of closed and open questions, which allow reaching many respondents and to better interpret data. Questions investigate perceptions and experience related to co-teaching aspects: collaboration, objectives, class and spaces management, behaviours, inclusion, assessment. Open questions investigate teachers' perspectives on their personal experience. The data analysis allows us to verify the use of co-teaching in the context of investigation. It also examines whether it is a resource for CLIL. The results will be discussed and presented. The aim is to expand existing literature research and to investigate co-teaching in primary school. Further reflection could arise from the present research by involving primary school teachers in our territory who use co-teaching with CLIL.

Abstract

Questa tesi ha lo scopo di esplorare il co-insegnamento nella scuola primaria, le percezioni che gli insegnanti attribuiscono a collaborazione e valutazione e agli eventuali limiti che possono ostacolare la cooperazione. Dall'analisi della letteratura di ricerca presenteremo la pratica del co-insegnamento e, attraverso uno studio esplorativo, analizzeremo le risposte degli insegnanti. Lo strumento è un questionario rivolto a un gruppo di insegnanti di una scuola primaria che usa il co-insegnamento con CLIL. Lo studio esplorativo coinvolge docenti curriculari e specializzati CLIL. Il metodo di ricerca è misto (qualitativo e quantitativo) e consta di domande chiuse e aperte, che consentono di raccogliere un buon numero di risposte e di interpretare i dati. Esse esplorano percezioni ed esperienze correlati ad aspetti del co-insegnamento: collaborazione, obbiettivi, gestione di spazi e classe, comportamenti, inclusione, valutazione. Le domande aperte indagano percezioni ed esperienza personale degli insegnanti. L'analisi dei dati permetterà di verificare l'uso del co-insegnamento nel contesto di indagine. Verrà inoltre indagato se il co-insegnamento è una risorsa per il CLIL. I risultati verranno discussi e presentati. Lo scopo è ampliare le ricerche esistenti e indagare il co-insegnamento nella scuola primaria. Ulteriori riflessioni possono emergere dal presente studio coinvolgendo docenti di altre scuole primarie del nostro territorio che adoperano co-insegnamento e CLIL.

Introduction

Co-teaching is a practice that allows teachers to work together to support all students through the development of an inclusive learning environment (Cook and Friend, 1995). This practice, in association with the CLIL method (Content and Language Integrated Learning), allows the integration of language and content. Teachers involved in the collaborative practice present to their students the disciplinary contents in a foreign language through different tools, methods and techniques, favouring the encounter between two disciplinary worlds. The research field discusses the themes of co-teaching and CLIL extensively, as will be noted in the following chapters of this study. In this regard, the literature pertaining to the use of co-teaching at school in different forms (including with CLIL) and at various levels is extensive, and will be mentioned in the subsequent chapters (Ianes and Cramerotti, 2015; Ghedin and Aquario, 2016; Chitiyo, 2017; Fazzi and Menegale, 2017; Krammer, Rossmann, Gastager, Gasteiger-Klicpera, 2018; Ghedin and Aquario, 2023). In relation to the topics of the research questions that this study intends to investigate, some studies have examined the topic of teachers' perceptions about the implementation of co-teaching in schools (Chitiyo, 2017; Ghedin and Aquario, 2016, 2023).

In this context, the aim of this thesis is to provide a contribution to enrich and broaden the basis of study regarding the above-mentioned topics. Specifically, this thesis aims to examine the use of the practice of co-teaching within primary schools by deepening teachers' perceptions of collaborative dimensions and the assessment stage. The dimensions of co-teaching and evaluation are deepened through the division into categories in order to facilitate their identification and subsequent analysis. Furthermore, the results of the study indicate potential limitations and barriers observed by teachers that may hinder co-teaching practice. The research is therefore an exploratory study that attempts to investigate the teachers' perceptions of co-teaching, considering these research questions: how do teachers perceive collaborative dimensions of co-teaching? How do teachers perceive assessment stage in co-teaching practice? Which elements do teachers perceive as obstacles to the practice of co-teaching?

In order to delineate the aforementioned themes and to find the answers to the research questions, the study was divided into four chapters according to the main topics they will deal

with. The subdivision of the study and its chapters will be briefly presented in the next few lines.

The first chapter introduces the practice of co-teaching and describes its distinctive characteristics and the phases that compose it, namely co-designing, co-instructing, and co-assessing. The theme of inclusion is considered in relation to the nature of co-teaching, in conjunction with the Italian school context. It is defined as an inclusive opportunity. Furthermore, co-teaching is associated with the CLIL method, which takes into account the components (language and content), strategy solutions, features, skills, and class organization.

The second chapter explores and deepens the concept of collaboration in the practice of co-teaching, with the first section presenting collaborative effort as a key element of the relationship between co-teachers. Moreover, the second section of this chapter discusses the strengths and weaknesses of this practice. Subsequently, the identification of the main practices and benefits of co-teaching, particularly in terms of learning assessment, highlights the significance of the observation activity in the teaching context. Finally, the last section of Chapter II presents existing research on the subject of collaborative teaching perceptions and collaborative practice. The comprehensive examination of articles and research explores the subject matter that this study aims to enrich through its pages.

In the last chapters, the research topics and the questions to which this study intends to find answers through the analysis and discussion of the data will be introduced.

The third chapter concerns the presentation of the exploratory study, which essentially guides this thesis. The chapter starts by outlining the research context, which is the background of the research. Therefore, the first part, which follows a resume of the existing research, is devoted to an explanation of the aspects that the study intends to examine and the fundamental motivations underlying the investigation. The methodology section provides an explication of the research method, which is both qualitative and quantitative (mixed). The third chapter also indicates the instrument used in the study, which is a questionnaire that includes both closed and optional open questions. It is divided into sections according to the corresponding aspects of co-teaching that the study aims to deepen. The sections are described in detail, and connections to the research questions of the study are provided. Part of the chapter is devoted to the presentation of the participants in the study and the setting in which they operate. It is important to consider the physical and environmental context in which the research is conducted in order to properly interpret the responses of the participants.

The fourth and last chapter of this study focuses on the results of the research and it includes a detailed presentation, and subsequent analysis of the responses of the participants. The chapter collects and resumes teachers' responses under analysis through tables and representations in order to understand clearly the results. The chapter concludes with a presentation of the research limitations and possible future developments in this field.

Chapter I: Exploring co-teaching: phases, inclusion, and the correlation with CLIL

1.1 Origins and characteristics of co-teaching

In this chapter, we will present the model of co-teaching and consider its origins and main characteristics. We will cover the three phases that characterize this type of teaching: co-planning within the classroom, the actual practice of co-teaching (co-instruction), and co-assessment. We will then focus on the theme of co-presence in the Italian school context and in primary school. Finally, the last section is devoted to the correlations between co-teaching practice and the CLIL method.

Co-teaching developed in the American educational and scholastic context, more precisely in the United States and Canada in the 1990s (Ghedin and Aquario, 2023). It was originally designed to support students living with disabilities in general educational settings. Cook and Friend (1995) developed the co-teaching practice, a teaching methodology that aims at inclusion. Collaboration between educators working together to support students with special needs in inclusive settings was the main feature of early forms of teaching. This provided equal learning opportunities for every student, as well as social inclusion. Thus, the practice of co-teaching stems from the intention to assist students and provide them with quality instruction, regardless of their distinct characteristics. The aim of achieving scholastic inclusion underlies the origins of co-teaching and this purpose has been supported by documents of an academic and ministerial nature. These documents have helped to establish the practice of co-teaching in countries such as the United States and Italy. Starting with the development of collaborative teaching, a wide variety of teaching models in the educational-school context has been established, such as those that will be illustrated later.

The practice of two (or more) teachers sharing the teaching activity is the definition of co-teaching. "Co" at the beginning of the term itself, stands for cooperative (teaching). In co-teaching practice, teachers collaborate with other teachers and specialists (special educators and psychologists) with the purpose of implementing the collaborative practice efficiently. It intends to meet the educational needs of both students with and without disabilities.

The close collaboration established between teachers, who work closely, fosters a synergy that Roth and Tobin (2004) define as "elbow to elbow". This expression clearly exemplifies the synergistic work resulting from the collaboration, which allows teachers to carry out successfully the practice of co-teaching. At the same time, teachers aim to meet the individual and collective needs of students.

In order to implement an effective and efficient collaboration relationship, teachers must have developed specific skills. The skills necessary to carry out the collaborative practice successfully include those of a communicative and interpretive type. In addition to skills, it is also necessary to master interpersonal communication, which is generally one of the focus topics of teacher training programs.

The development and enhancement of interpretive and communicative skills is essential for both mutual understanding and co-teaching (Pituła and Kowalski, 2022). Therefore, in addition to competencies related to content knowledge, problem-solving, and flexibility (which we will explore further in the following lines), there are also skills related to collaboration and communication. The combination of these different skills and abilities is a prerequisite for teachers to work together. According to Pituła and Kowalski (2022), interpretive and communication skills should be part of the professional training programs of future teachers, and then be improved over the years of their teaching career. This would ensure that educators would begin their teaching careers with a solid educational foundation in both theory and practice.

Cook and Friend (1995) assert that co-teaching supports students with disabilities in an inclusive learning environment, where the general education and the special education teachers work together in the same class in order to support students with and without disabilities. The authors identified four key principles that resume the main features of co-teaching practice and they are outlined below:

1. the practice encompasses two professionals in the field of education, and occasionally, additional individuals;

2. teachers are actively involved in the teaching process, providing comprehensive instruction;

3. teaching activities are addressed to a diverse group of students, including students with special needs who learn together with other classmates through individualised programs;

4. co-teaching is provided within a single physical space/classroom.

The authors additionally defined flexibility as a fundamental characteristic that underlies co-teaching. It allows teachers to act effectively in order to modify and adapt their strategies to the needs and characteristics of students. The flexibility of co-teaching allows teachers to adjust their teaching approach in accordance with the diverse variables that may naturally change during the teaching period, such as the availability of resources or the dynamics within the class group. Educators indeed make and share significant decisions regarding both initial and ongoing programming, and they possess the capacity to effect modifications through the flexibility that defines this approach.

The distribution and sharing of didactic planning result in the subsequent allocation of responsibilities among the teachers participating in the teaching process. Co-teaching is a practice that allows numerous opportunities for development and improvement in terms of learning for both teachers and students. Roth and Boyd (1999) define the practice of co-teaching as a teaching-learning process. Students have the opportunity to learn in differentiated and personalized ways, and at the same time, teachers can deepen new facets of teaching activities through teamwork.

Different types of variations characterize the practice of co-teaching, conditioned by the relationship established among the involved teachers during the teaching process. Moreover, the forms co-teaching may vary based on the needs of the students and the format (or model) teachers choose to employ in order to address them. Friend and Cook (2007) identified six different models of co-teaching that teachers can adopt in the classroom. The identified models are outlined as follows: one teach/one assist, station teaching, parallel teaching, alternative teaching and team teaching. The format that teachers choose to use affects the roles and responsibilities of the educators involved in the teaching process. In their research study, Ghedin and Aquario (2023) summarized the models.

Figure 1 Co-teaching models. Supporting Student and Preservice Teacher Successes Through Co-teaching (vol. 9, p. 68), by Barron, T.L., Pinter, H., Winter, K.K., 2019, Theory and Practice in Rural Education (TPRE).
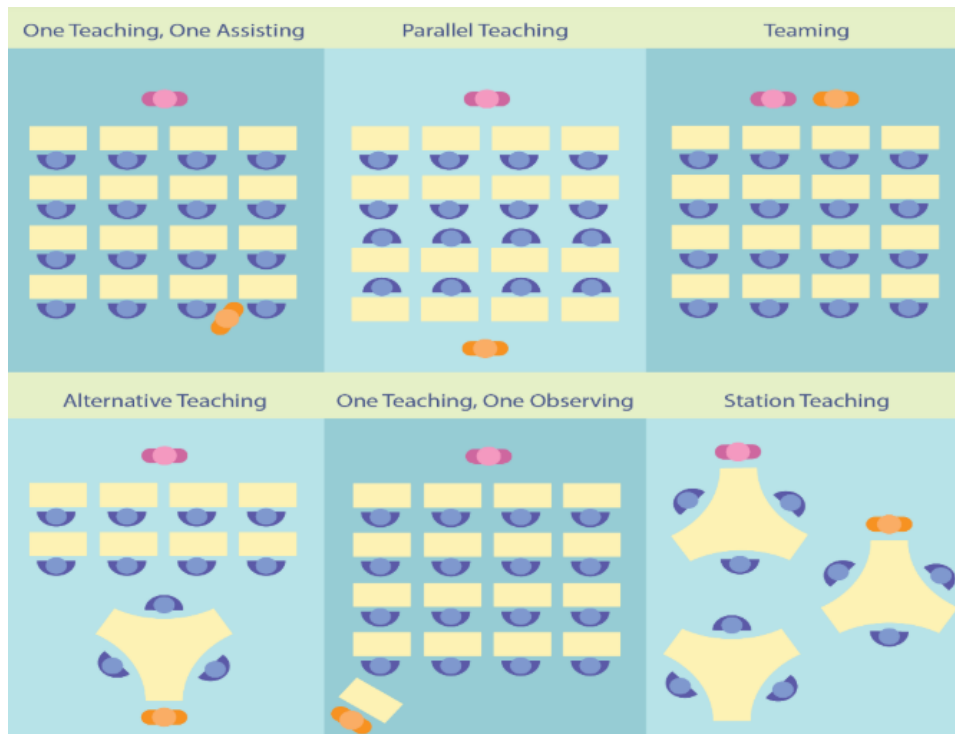
One teaching/one assisting model refers to the situation where one of the two teachers takes care of the teaching activity, while the other assists, where necessary, students who need support. It was also observed that a declination of this variant can be defined as one teaching/one observing, where one teacher teaches while the other is dedicated to the observation and collection of data that will be analysed later for educational purposes (Ianes and Cramerotti, 2015).

In the case of station teaching (teaching in the classroom), instead, teachers support students in different stations created in the classroom space. The model facilitates the division of teaching content into several sections. In addition, it is possible to present the material at different stations, among which students can rotate periodically (Cook and Friend, 1995). The number of stations varies and is at the discretion of the teachers. When the class is divided into two stations, each teacher is responsible for teaching some of the contents (Ianes and Cramerotti, 2015). It is essential to prepare learning content and materials in advance in order to offer a clear and successful presentation of topics. Therefore, the degree of shared responsibility is high. Teachers could choose to add another independent station to the ones described earlier, where classmates collaborate with each other and, for instance, complete

individual tasks. There are factors that could limit the effectiveness of this model, such as the confusion that can arise during the exchange of locations between teachers or students (Friend and Cook, 2000).

Parallel teaching involves teachers teaching content of the same nature to different groups. This model involves the presence of two teachers and the division of the class group into two subgroups. Consequently, the class group splits in half. Each group therefore has a reduced number of students compared to the original number. This allows teachers to lower the student-to-teacher ratio (Ianes and Cramerotti, 2015). The two teachers give lessons to both groups simultaneously. During the planning phase of the lesson, the teachers agree on the topics and teaching objectives beforehand. While the contents are the same for both groups, the way of teaching and approach can change. Indeed, the way of teaching adopted for the lesson depends on the specific needs of the learners. Teachers may decide to divide groups randomly or according to mutually agreed-upon criteria. Several factors could influence the subdivision, such as gaps in specific themes identified by teachers, the need for support and clarification on complex topics, common abilities and knowledge among learners, or the evaluation of prior tests.

Another variant is alternative teaching, characterized by the division of the class into two groups, but in this situation, the lesson taught by the teachers is not the same. It is possible to divide groups into either one half-equivalent or two groups, one larger and one smaller. One teacher holds a kind of lesson with the largest group while the other teacher takes care of the smallest group, which may have special needs or a level of learning different from the general class.

In the models above mentioned, we have observed how teachers arrange student desks in various ways during classes. Flexibility is a common feature of these models, as it is possible to change the organization and arrangement of the workstations according to the individual needs of the learners that the teachers wish to satisfy. This allows the same individuals to more easily get in touch with each other, getting to know the classmates better while developing a network of relationships that promotes a positive classroom climate. As seen above, classmates can be grouped completely randomly or based on their behaviours, skills and learning styles. In order to avoid stigmatization, factors such as intellectual functioning or the presence of BES should not be solely at the base of the subdivision of learners (Fitzell, 2010). It is important to support the creation of heterogeneous groups where learners can capture positive effects from

each other and experience new ways of learning and sharing. Experimenting with group activities on different occasions is a source of personal and educational enrichment for each student. The same holds true for teachers, who continually compare with each other and agree on models for teaching material and lessons.

The latest model involves team teaching (or teaming), where teachers address the entire class group simultaneously and interactively. In this approach, teachers collaborate on the teaching activity during the same lesson, providing both assistance and support to their students. As stated by Cook and Friend (1995), teachers work together to plan lessons and take care of student education. Teachers (usually two) have equal authority and are therefore perceived as subjects placed on an equal footing in the class context hierarchy by students. There is not one teacher of the two recognized as a leader, while another is just left in the background. This kind of sharing and mutual recognition climate requires great commitment from both the teachers. They need to find efficient ways to communicate and share objectives and strategies. Teachers need to work together effectively in order to create a sort of synergy between them and their roles.

Regardless of the declination it may assume, the co-teaching approach has specific features that outline its character. We can determine which characteristics are particular to the previously mentioned teaching approach by beginning with an examination of the definition of co-teaching. The practice of co-teaching involves teachers working together with a diverse group of students in order to accomplish learning objectives through shared design, instruction and evaluation (Ghedin, 2009). A key component of the co-teaching approach is thus collaborative action. It involves some characteristics, such as the sharing of teaching practices, the definition of common objectives, and the search for common values. When teachers achieve a balance of roles and collaborate with each other, the classroom atmosphere and a positive sense of community develop. At the same time, the school performance of students improves, which leads them to feel confident with themselves, with their teachers and classmates. In order to understand its profound importance, a more detailed section is devoted to collaboration in the following chapter.
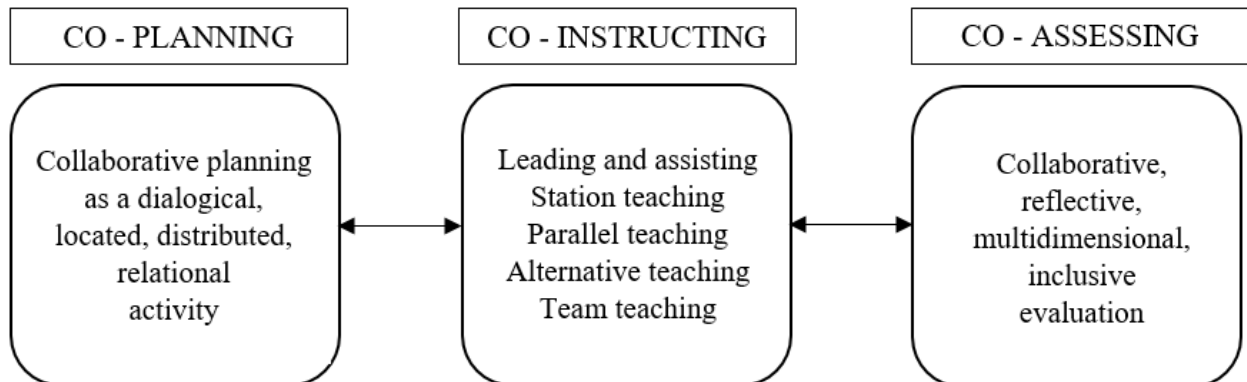
1.2 Co-designing, co-teaching, co-assessing

Co-teaching is the practice of two or more teachers engaging in various tasks and activities with the ultimate aim of supporting students in achieving their learning goals. The purpose of the collaborative practice is to achieve "what none could have done alone" (Wenzelaff, 2002). Activities where teachers work closely together can be summarized in three phases: planning, teaching and evaluation. These three stages summarize the activities that involve close collaboration between teachers.

1.   The co-design phase (or co-planning) is a fundamental part of co-teaching practice. It includes the planning and programming of activities. Educators collaborate during this phase to plan the lessons and all the activities that will take place in class. Additionally, teachers select the instructional materials and the learning goals that students have to achieve through the various activities. At this point, it is crucial to identify common goals and share resources. This is a defining moment because it allows for an effective and, consequently, efficient planning phase.

2.   Co-teaching (co-instruction), on the other hand, refers to the real action of teaching, which is to provide education to learners. As already explained in the previous section, teachers can choose how to alternate their roles in the management of the lessons and can choose the most appropriate way to carry out classroom activities. The flexibility of selecting the most appropriate teaching modality for the scheduled lesson allows varying from simultaneous teaching to station teaching, and all the other variants already investigated in Section 1.1. The co-teaching phase aims to provide a comprehensive teaching that meets at the same time the needs and characteristics of the students.

3.   Co-assessing means developing and providing a shared evaluation of achievements and goals reached by the learners. Both teachers are involved in the assessment process. Collaboration between teachers at this stage should ensure a fair and accurate assessment of student performance. The techniques and tools used in this phase take into account several factors, such as the performance of students and the objectives achieved in the learning process. Teachers evaluate the knowledge acquired by students in different situations, such as through prepared tests, exercises, and presentations in the classroom. It is also very useful for teachers to observe students performing activities in order to evaluate the use of language and content

in different contexts (for example, group or pair work). These assessment methods of content and language acquisition allow teachers to monitor learning in all its forms (writing skills, oral skills and, on request, reading skills). Monitoring progress is the aim of co-assessing.

Figure 2 A co-teaching model for inclusive education. Adapted and translated in English from Co-teaching: a practice to improve inclusive education in Giornale Italiano della Ricerca Educativa (anno VI-n. 11, p. 159), by E. Ghedin, D. Aquario and D. Di Masi, 2013.

CO - PLANNING	CO - INSTRUCTING	CO - ASSESSING
Collaborative planning as a dialogical, located, distributed, relational activity	Leading and assisting Station teaching Parallel teaching Alternative teaching Team teaching	Collaborative, reflective, multidimensional, inclusive evaluation

The aforementioned phases are interdependent and tightly related to one another. Ghedin, Aquario and Di Masi (2013) represented the three moments of co-teaching as gears, as components of a single structure. The components are therefore interconnected. Each of them allows learners to receive targeted and inclusive teaching. The three dimensions of co-teaching offer benefits not only to students but also to teachers. Educators can benefit from students feedback and each other's knowledge by collaborating in the three dimensions of co-teaching. Teachers have to develop a variety of skills in order to work efficiently together on lesson planning, instruction and assessment. An essential aspect that the teacher accepts and welcomes is the presence of another teacher in the same class. A set of skills that teachers encounter in this setting includes learning to share responsibilities with one another and developing common communication (verbal and non-verbal) skills. The development of specific skills is necessary for a teacher as it allows to effectively carry out educational and professional practices. Teachers must be aware that the teaching world as well as the needs of students are variable and constantly changing (Pituła and Kowalski, 2022). Therefore, the skills necessary for educators to teach - alone or together with another figure - are constantly evolving and may demand changes. Flexibility and adaptability to change are, as a result, essential for teachers. It is worth remembering that successful co-teaching requires the training of teachers involved and

concerned, as this approach requires an additional set of skills and attitudes usually less employed in traditional teaching (Ploessl, 2010).

Co-teaching experience also leads to the establishment of mutually agreed-upon goals and collaborative problem-solving competence in order to overcome challenges that may arise during the teaching process. It is important to keep in mind that the approach and strategies put in place in the co-presence must take into account the educational and individual needs of students. Moreover, as a result, the efficient connection between co-planning, co-teaching and co-evaluation develops a collaborative environment. The second chapter will examine in more detail the strengths and weaknesses, consequently, the benefits and the limits of co-teaching.

1.3 Co-presence as an opportunity for inclusion and the Italian school context

There is a close correlation between co-presence and the concept of inclusion. As previously stated in Section 1.1, the origins of co-teaching practice can be traced back to the notion of school inclusion. Co-teaching is in fact a pedagogical approach designed to promote equal access to education for all students, regardless of their abilities or disabilities. Thanks to its characteristics, co-teaching is a concrete tool for realizing this principle. It also makes it possible to respond effectively to the heterogeneous needs of learners attending the same class. The creation of an inclusive learning environment is a crucial objective for educators who collaborate and work together. Success of inclusion depends on the involvement of specialized teachers and class teachers in the design and execution of teaching activities. It can be asserted, therefore, that co-teaching facilitates school inclusion. The publication of pertinent academic and ministerial documents regarding inclusion highlighted the importance of inclusion and regulated its implementation at the social and educational levels.

In Europe and Italy as well, the teaching approach that involves collaboration between language and discipline teachers was initially employed in distinct forms. The differences also occurred due to different variables, such as objectives, learning paths, and content. The origins of collaborative teaching in Italy lie in the idea of inclusive education, also represented by the principle of inclusion (*principio di inclusione*). This principle is the basis of the right to education in the Italian Constitution and states that schools shall be open to everyone (art. 34, c.1 from the Italian Official Journal website). The Italian school system has developed over time, in a progressive way, the principle of inclusion.

Italy joined the other member states of the United Nations in adopting a convention that marked a significant moment in the Italian educational landscape. In 2009, Italy authorized the ratification of the Convention on the Rights of Persons with Disabilities (CRPD), which became a state law. It asserts that States that acceded to the Convention recognize the right of persons with disabilities to education. Moreover, the article 24 states that, "with a view to realizing this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels". The article emphasizes the significance of providing students with environments that maximize both their academic and social growth, in order to reach the ultimate objective of complete inclusion. It had a direct impact on the approach to inclusion of students with disabilities in our school system, as well as on the practice of co-teaching.

The Italian law collects three representative moments for inclusive education and for the subsequent emergence of co-teaching with the following laws (Ianes and Cramerotti, 2015):

- Law n.517/1977 has provided for the abolition of the special classes originally intended for pupils considered disadvantaged with disabilities and entailed the inclusion in ordinary classes;
- Law n.104/1992 has regulated and recognized the participation and integration in school life of people with disabilities;
- Law n.170/2010 has introduced elements of didactic personalization for pupils with specific learning disorders (in Italian, the acronym is DSA).

These laws have sequentially led our school and educational system to move towards integration first and, later, towards inclusion. In Chapter II, we will explore in more depth the relation between co-teaching and inclusion.

The presence of two teachers, as previously stated, was originally developed to meet the needs of students with disabilities or learning difficulties who required quality and inclusive instruction. Since then, the presence of two teachers has assumed more declinations, depending on the purpose of the presence. As both a response to the intention of including students with disabilities and learning difficulties and as an effective teaching strategy, Italian schools in recent times have progressively implemented co-teaching. The co-teaching proposals seek to develop and adapt to emerging needs in the Italian educational context. Trained teachers who are skilled and constantly updated can help achieve this goal.

1.4 Co-teaching and CLIL

Co-teaching plays a particularly important role in the field of CLIL (Content and Language Integrated Learning), where language and content are both taught and learned through a foreign language. In the title of a volume about CLIL, Coonan (2006) describes this approach as a meeting between two disciplinary worlds. Language and content actually meet in CLIL approach. The acronym C.L.I.L. was introduced and coined in 1997 by David Marsh, a Finnish university lecturer (Trincanato and Amato, 2010). Two teachers are involved in co-teaching practice with CLIL: a content teacher (e.g. science, geography, art, P.E., etc.) and a language teacher (usually English but also French, German, Spanish, for instance).

Essentially, it consists of teaching — and learning — a language and non-language content together. Trincanato and Amato (2010) observe that co-presence allows selecting as a focus the non-linguistic content and, in the meantime, identifying the language as a vehicle for knowledge and information sharing. It is crucial to choose the appropriate target language in order to offer the class effective content teaching. Language assumes a significant role as it conveys knowledge and skills. The CLIL methodology has two primary objectives:
- enhancing disciplinary learning through the strengthening of the foreign language, and vice versa;
- stimulating the development of foreign language competence among learners through the acquisition of subject matter (Serragiotto, 2014).

The acquisition through a foreign language enables the students to enrich their knowledge with the micro-language of the school discipline. Furthermore, the CLIL approach provides the learners with the opportunity to experience the progression of cognitive processes through the foreign language and to enhance their thinking skills, which are applicable to diverse subjects (Coonan, 2010). This transition facilitates the development of a more specific and complex linguistic competence, referred to as CALP (the acronym stands for Cognitive Academic Language Proficiency). It encompasses the use of language to study and perform higher level cognitive operations (Serragiotto, 2014). The acquisition of such competence enables students to master language for daily communication and academic learning purposes. In the context of CLIL, teachers are required to provide their students with the opportunity to enhance their CALP skills by integrating them with basic interpersonal communication skills,

known as BICS (Cummins, 2000). Serragiotto (2014) describes BICS as the use of language to communicate and manage daily relationships, both at school and at home.

According to Coyle (2009), the capability to access new content in a new language enables students to perceive the world in a different way. The author defines it as the ability to see the world "through other cultural lenses" in order to "explore and evaluate beliefs and attitudes". Teachers, through content and language integrated learning (CLIL), can therefore contribute in a valid and concrete way to the personal development and preparation of the students for "global citizenship" (Coyle, 2009).

Four parameters mainly influence the choice of language or, if more than one, of the languages that are more suitable to the school context for applying CLIL method (Serragiotto, 2003):

- the geographical and economic situation of the country or region where the school is located. Where the school is located has a great influence on the choice of one language instead of another;
- the degree of similarity between the mother tongue and the foreign language may impact the choice;
- the nature of the subject taught through the foreign language and its characteristics;
- the availability of resources of the various local school contexts, such as the presence of available language teachers.

There are no specific disciplines that are more suitable than others for conveying content in a foreign language with CLIL (Menegale, 2008). Subjects of a literary and humanistic nature, such as geography, art, and history, require a language less challenging than that of purely scientific subjects such as science or biology. It is possible to overcome the complexity of a disciplinary task in a foreign language by using certain didactic tools. The inclusion of explanatory images, tables, maps, and graphs in the teaching materials can be useful in many situations and allows the student to identify meanings that may not be immediately clear and strengthen the message. In such circumstances, the input becomes comprehensible to the student, thus agreeing with the Krashen comprehensible input hypothesis (1985). Fazzi and Menegale (2023) assert that is also fundamental to "build a supportive and stress-free environment in which pupils' learning is scaffolded through the use of multimodal inputs and learning games".

Clegg and Barbero (2005) observed that the introduction of disciplinary concepts by using a foreign language attracts and holds more students' attention. The above-mentioned authors identified other useful strategic solutions to make the input understandable and facilitate the output, for instance:

- the use of diagrams and visual elements (objects) to support explanations;
- the collection of words in lists;
- the correction of the error through model responses;
- the use of redundancy (synonyms, repetitions, paraphrases);
- the adoption of a clear pronunciation (possibly at a slower pace).

To facilitate the output, there are many strategies that can help learners in their understanding and subsequent production of foreign language content. Several strategic and interactive activities aimed at learners' output, which include cloze, gap filling, matching, grids, multiple choice, and true/false activities (Clegg and Barbero, 2005; Serragiotto, 2003).

Language learning turns into a means to reach other contents, not only linguistic knowledge. In this specific instance, teachers deal with everything related to the organization of the lesson and the evaluation of the results obtained by the students in a cooperative way. They also are in charge of designing and scheduling activities and, in concrete, the actual realization of the lessons. In the planning phase, teachers are also responsible for the selection of materials. It is necessary to adapt and integrate them very frequently, according to the approaches adopted and the levels of competence of their class.

In the phases of the co-teaching practice explored at the beginning of Section 1.2, the co-teachers aim to identify learning objectives and implement strategic solutions directed at their achievement. The following table shows the objectives of a CLIL learning path.

Table 1 Objectives of the learning path. Translated in English from Programmare percorsi CLIL by Barbero, T., Clegg, J., 2005.

Content	Thinking skills	Language
Knowledge of: • subject areas • topics • sub-topics	Analysing Describing Processing Summarizing	Knowledge of: • vocabulary • language structures • communicative functions • text forms

Ianes and Cramerotti (2015) resumed in the following points the aspects teachers have to deal with while using CLIL teaching method:

- everything that includes planning and implementation of lessons;
- the selection of training objectives;
- the identification of topics - which must be stimulating and appropriate for the class group;
- processing and preparation of material; finally, the shared evaluation of the results achieved by students.

With regard to what has been observed so far, it can therefore be inferred that adequate preparation is needed to be a CLIL teacher. Firstly, teachers, both of discipline and of language, should have a good command of the foreign language. It is possible therefore for teachers to support students in learning concepts that are more complex and to understand their possible difficulties (Trincanato and Amato, 2010, Serragiotto, 2003). Certainly, teachers also have experience and good knowledge of the disciplinary contents they transmit to learners. Teachers involved in CLIL teaching have to work together as a team with common goals in order to guide their students to achieve good learning results. On this matter, G. Serragiotto (2003) argues that CLIL teachers "will have to demonstrate to be truly quality teachers and, by cooperating with each other, pool their unfamiliar knowledge and skills in order to grow professionally".

The CLIL methodology, which provides benefits and positive outcomes, largely depends on the pedagogical skills of teachers. In fact, educators implement solutions to promote the linguistic, cultural and cognitive skills of learners. They also guide the students but leave

them with enough freedom to become confident and, at the same time, autonomous in learning content and language (Barbero and Clegg, 2005).

Coonan (2003) observed that some variables might affect the tasks that teachers are asked to perform:

- the distribution of responsibilities;
- the objectives and expected results;
- the importance assigned to L1, L2, and content;
- the classroom organization and teachers' movements in the classroom;
- the alternation of roles, namely leadership and/or support.

Many of the aforementioned elements will be recurrent in this and subsequent chapters, as they are elements characterizing the activity of collaboration and co-presence between teachers.

The CLIL approach integrates two components: the foreign language and the academic content. The following diagram can exemplify the integration of language and content (school discipline) that defines the CLIL practice:

Figure 3 Diagram. Adapted and translated in English from Programmare percorsi CLIL by Barbero, T., Clegg, J., 2005.
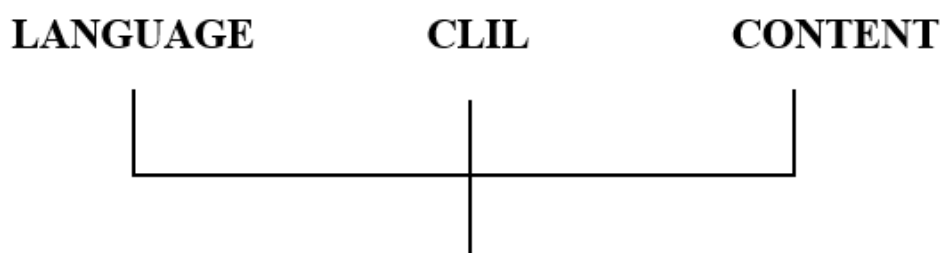
The authors Barbero and Clegg (2005) explain that the shape of the diagram has a precise meaning: "CLIL is the segment on which knowledge and skills converge". The CLIL methodology is thus characterized by the integrated learning of these two elements. The lack or absence of one of the two elements (Language and Content) would compromise the functionality of the CLIL. Integrated and efficient learning is the result of a solid connection between language and content.

Among the six co-teaching models examined in Section 1.1, the collaborative one (team teaching) best exemplifies the CLIL methodology. According to Menegale (2008), teachers

create a role balance that enables them to engage continuously with both the class group and each other. There are no distinct and alternating planned interventions (Fitzell, 2010), but rather various inputs that aim to engage students and encourage participation in the lesson. This is truly synergistic work for teachers, who place the student's well-being and learning at the centre of teamwork.

The picture below shows the organization of the traditional class in a school. The arrangement of desks and chairs is favourable for a frontal lesson, where the teacher imparts information and learning content to the students.

Figure 4 The arrangement of the classroom space during a conventional lesson. Translated in English from Apprendere le lingue in ambiente CLIL. Aspetti teorici e percorsi applicativi in Team teaching in CLIL: tecniche, pianificazione e gestione (p.173) by M. Menegale, Bari, Cacucci.
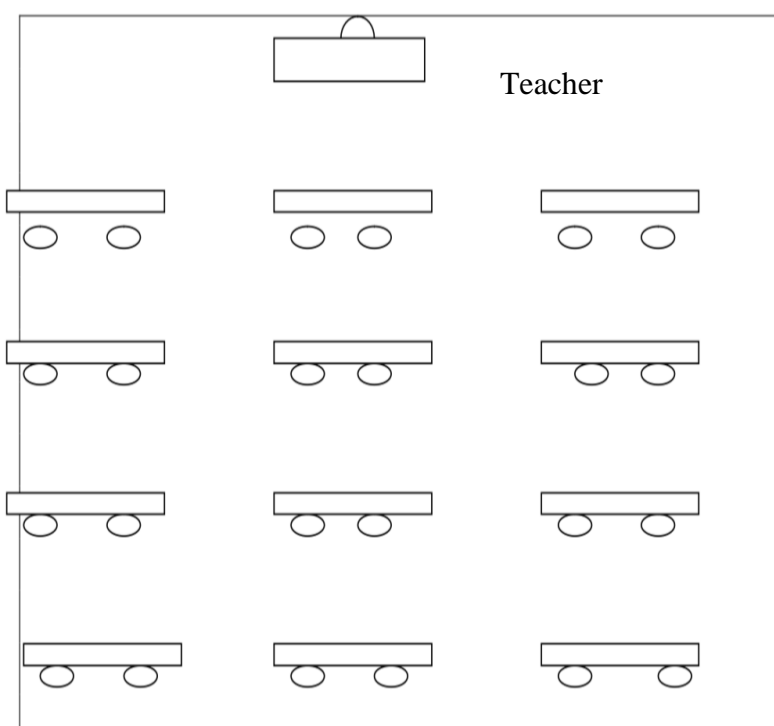
The frontal class space organization does not contemplate the importance of collaboration and communicative exchange, crucial elements that characterize teaching with the CLIL method. The representative image shows that in this organization, there is a lack of interaction between students, who have fewer chances to participate actively in the lesson and to interact with their peers and teachers. The static nature of the frontal class layout does not

promote the use of collaborative teaching methods such as co-teaching, parallel teaching, and those discussed in Section 1.1.

The communication exchange between classmates and between classmates and teachers can instead be encouraged by different space organizations. Figure 1.4 below shows an "unconventional" arrangement of desks and chairs that differs from the traditional one.

Figure 5 Arrangement of classroom space during CLIL lessons (the communicative exchanges of the class are outlined and coloured). Translated in English from Team teaching in CLIL: tecniche, pianificazione e gestione (p. 174) by M. Menegale, Bari, Cacucci.
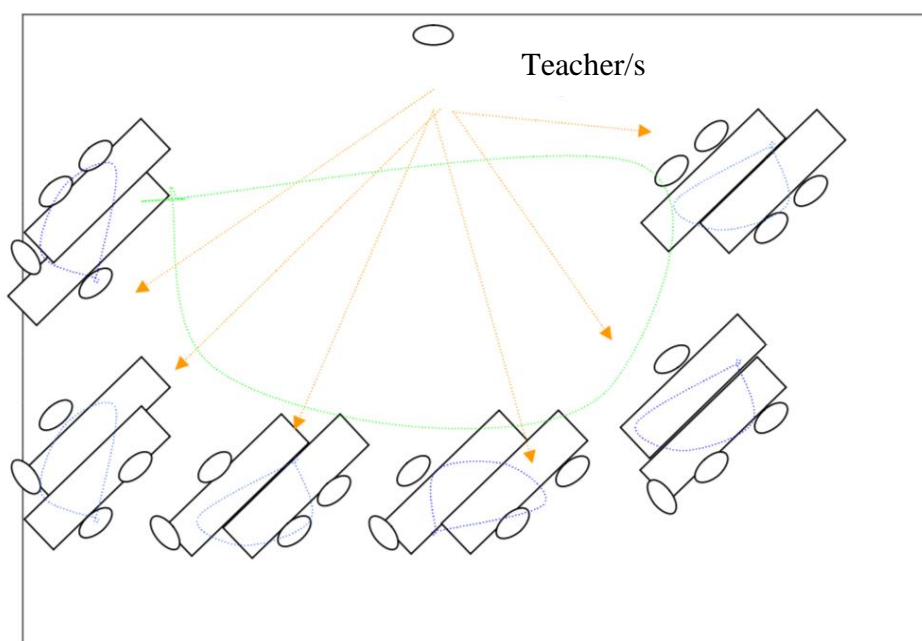
Tables and chairs may be moved if necessary, and consequently reorganized in various ways depending on the activities that the teachers intend to conduct with the students. As shown in Figure 1.4, the potential communication exchanges through the layout of the classroom space are multiple. In addition, the sharing of materials and group work activities are thus stimulated and facilitated. The exchange of information in this way is much simpler and more immediate. The teacher (or teachers) can interact with all students at the same time or individually, walking between the desks to check the progress of exercises and, for example, to provide support and clarification. The organization just examined enables teachers to have increased opportunities for interactions with one another as well as with the learners themselves.

Co-teaching in the CLIL method has the opportunity to be smoothly integrated as an important part of the learning process. In any type of school. The opportunities for use are

many, for instance, in laboratories of activities that integrate the curriculum for middle and primary schools, thematic modules, or pre-professional paths in technical schools (Barbero and Clegg, 2005).

Allowing and encouraging the growth of skills both in the discipline and in a foreign language is the aim of the CLIL method. To accomplish this goal, CLIL planning must take into account two fundamental aspects: the difficulty of content and the level of language proficiency of learners. Teachers should consider the time needed to complete the CLIL course, selecting topics and materials appropriate to the skills and interests of the class.

Chapter II: Efficient and effective collaborative practice in co-teaching

2.1 Collaboration between teachers: a key element

Effective and efficient collaboration in co-teaching requires the presence of a number of elements that we will explore in these pages. In general, collaboration between teachers is established when there are strong communication and mutual respect between colleagues. In addition, they share goals and resources. The possibility of sharing resources, including the exchange of ideas, is enhanced through collaboration (Clement and Vandenberghe, 2000). Therefore, it is of fundamental importance to work together in order to achieve a common set of objectives. Collaboration is an effective tool that teachers can employ to overcome the obstacles and challenges they may encounter along the way.

The Italian word *collaborazione* (collaboration) literally means "to work with" and derives from the Latin etymology *con-* and *labōrare*. "Actively participate together with a work mostly intellectual, or participate in the realization of a take, an initiative, or a production", with this expression the Treccani Italian dictionary defines collaboration.

Teachers involved in a collaborative teaching activity "both […] participate in the presentation of the lesson, provide instruction, and structure the learning activities" (Gately and Gately, 2001). Collaboration allows teachers to accomplish their work successfully and effectively. Teachers communicate constantly in order to agree on the teaching material, the activities, and tasks to complete in class, the topics, and organisation of the lessons. Collaborative practices allow teachers to carry out the proposed activities in the classroom effectively and efficiently.

"A style for direct interaction between at least two co-equal parties voluntarily engaged in shared decision making as they work toward a common goal", with these words Friend and Cook (1992) defined interpersonal collaboration. As Friend and Cook point out, the selection of shared objectives and the willingness to work together to achieve them are important elements from the collaborative perspective. The authors also state that they recognize the difficulties inherent in the implementation of an effective teaching collaboration, but they also recognize the great benefits.

It is important to keep in mind that collaboration requires involvement. Teachers are involved in collaborative work as they carry out, through a collective effort, the necessary actions to attain the shared objective (Friend and Cook, 1992). Several studies have shown that the following elements make it possible and feasible for teachers to work together productively (Aquario, Ghedin and Urli, 2015; Cramerotti and Cattoni, 2015; Friend and Cook, 2000; Ghedin and Aquario, 2016; Tardif and Lessard, 1999):

- the school order, since exist disparities in the practice of collaboration between primary, where co-design and co-assessment activities tend to be more diffuse than in secondary schools;
- the institution size and physical organisation of the spaces, which determines the ease of collaborating between colleagues (in smaller classes and institutions the communication exchanges are simpler);
- the time needed to design shared learning activities, which will be explored in the subsequent section, may be an obstacle to collaboration;
- the relationship of trust between teachers, who must have self-confidence and self-awareness;
- the compatibility between collaborators, determined by characteristics, interests and similar professional formation that can encourage collaboration;
- the stability of the teaching staff, often hindered by the turn-over of teachers, is a feature that makes collaborative practice efficient
- the school climate, which must be as serene and relaxed as possible in order to foster the development of collaborative relationships between teachers.

Besides the above-mentioned characteristics, collaboration is also defined by the degree of dependence (interdependence or independence) between the two colleagues (partners). The greater the degree of interdependence, the deeper the level of collaboration (Krammer, Rossmann, Gastager, Gasteiger-Klicpera, 2018). It is possible to define the closeness of the relationship that develops among educators as a collective synergy. The efficacy of the cooperation is greatly dependent on its depth and the teachers' willingness to exchange perspectives and knowledge.

Teachers can greatly benefit from the collaborative perspective and learn a lot from their peers. Individuals with diverse cultural backgrounds, knowledge, skills, and experiences are in close contact and interact through teamwork. In a collaborative context, repeated and frequent

communication exchanges can often turn into learning opportunities. As Ghedin and Aquario (2016) point out in their studies, collaboration is a useful context that allows teachers to improve their skills. Teachers have the opportunity to enrich their knowledge and abilities and draw from those of their working partner. Educational advice and feedback provided by teachers, for example during regular meetings, stimulate mutual collaboration.

Collaboration is influenced by the attitudes of teachers towards collaboration, which is a determining and relevant factor of collaboration practice (Ghedin and Aquario, 2023). It is crucial for teachers to have a positive perception of collaborative work in order to realize it efficiently. Teachers' attitudes towards collaboration can either support or hinder collaborative practice. Ianes and Cramerotti (2015) report in their book about the didactic co-existence a table that summarizes the conditions necessary to experience oneself and develop relational potentialities. The authors identify three conditions that, when taken together, will foster the success of the collaboration activity (conditions were first identified, as the authors state in the table, by Rogers in 1973):

- congruence, it implies being oneself within the relationship established with the colleague;

- acceptance (originally, unconditional positive regard), which means welcoming the other individual without judging their behaviour, actions or thoughts, and embracing them as they are;

- empathy, that is, understand the other person in order to perceive feelings and emotions.

According to Little, joint work can lead teachers to develop a solid collaborative relationship, which he defines as "the shared responsibility of teaching work" (Krammer, Rossmann, Gastager, Gasteiger-Klicpera, 2018). The concept of shared responsibility encourages teachers to provide mutual support and collaborate in order to achieve the objectives established in a common agreement. It has been observed that collaborative activities implemented by teachers are strictly influenced by their own personal attitudes (Avramidis and Norwich, 2002).

Furthermore, collaboration is based on the development of mutual goals and responsibilities, shared capabilities, and trust and respect (Friend, Cook, Hurley-Chamberlain, and Shamberger, 2010). The sharing of the workload and its subdivision implies a distribution of leadership functions among colleagues. There are few benefits to consider: use of

communicative and social skills, lack of coordination assigned to a single teacher, and surpassing traditional hierarchies. In addition, the advantages of enhanced involvement and commitment, as well as the prospect of active and equal participation in decision-making, were noted (Johnson and Johnson, 1999).

Several studies in the research literature identifies the elements in the following list as dimensions associated with the concept of collaboration (Cramerotti and Cattoni, 2015; Friend and Cook, 2000; Gately and Gately, 2001; Schratz, 2003; Thousand, Villa and Nevin, 2006; Villa, Thousand and Nevin, 2008): willingness to work together, equality among teachers, sharing responsibilities, resource and objectives. The dimensions and their connection with collaboration are reported in the explanatory diagram below.

Figure 1 Dimensions of collaboration. Exploratory diagram. Summary and representation of the dimensions outlined in Cramerotti and Cattoni, 2015; Friend and Cook, 2000; Gately and Gately, 2001; Schratz, 2003; Thousand, Villa and Nevin, 2006; Villa, Thousand and Nevin, 2008.
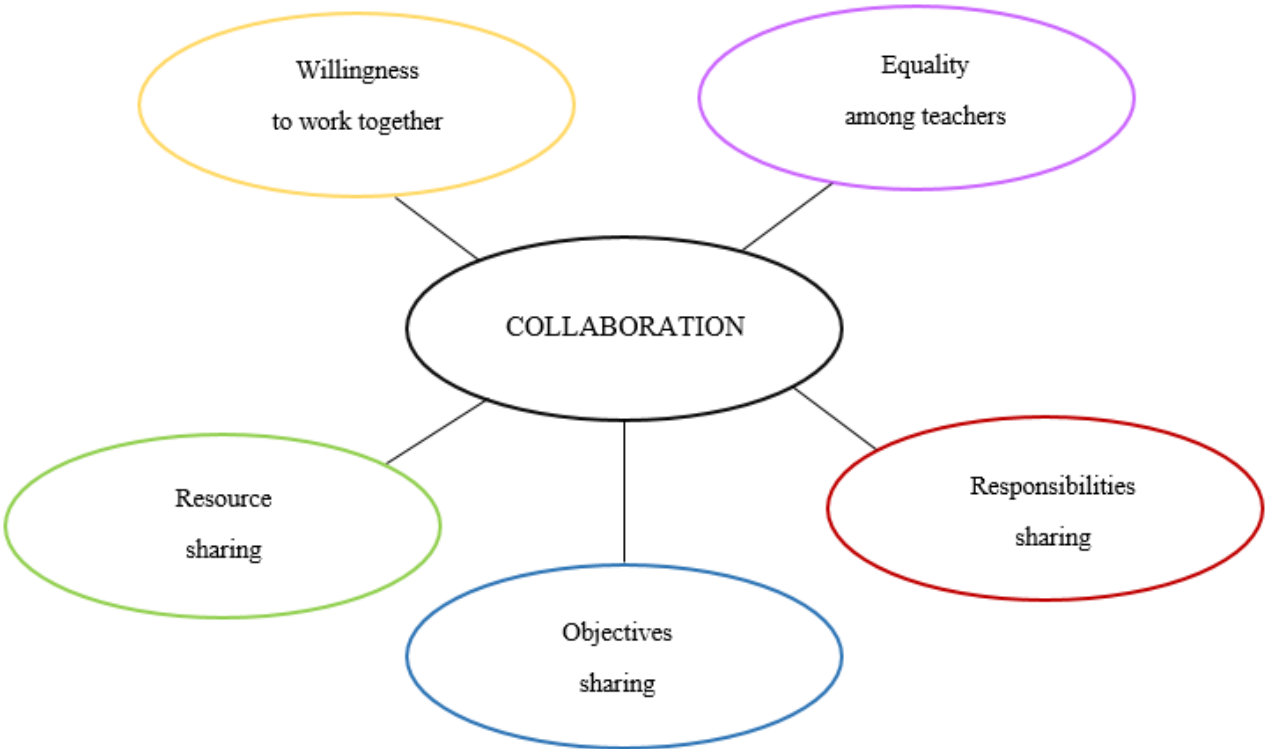
Friend and Cook (1992) state that the aforementioned elements, together with the implied shared responsibility for the decisions-making activity, constitute the characteristics of a successful collaboration.

Ianes and Cramerotti (2015) have summarized in the six following points the essential elements that define the collaboration between two (or more) teachers in the educational and didactic field: voluntary cooperation, equality of teachers, objectives sharing, responsibilities sharing, resource sharing and cooperative process. We can find a more detailed explanation of the points listed above in the following table:

Table 1 Elements of collaboration. Resume and adaptation from Compresenza didattica inclusiva. Indicazioni metodologiche e modelli operativi di co-teaching (p. 41-42-43) by Ianes and Cramerotti (2015), Trento, Erikson.

Elements	Description
1. Voluntary cooperation	It refers to collaborating with others motivated by a true desire to do so. When two individuals simultaneously participate in activities and planning phase due to pressure from the school management or administrative arrangements, but are not actively involved in the collaboration, they are not truly collaborating.
2. Teacher roles equality	Mutual respect and free exchange of ideas and opinions are the basis for the creation of a situation of equality among teachers. When all involved educators have equal decision-making power and contribute equally to the teaching activity, the relationship is truly collaborative.
3. Objectives sharing	The desire to collaborate arises from the sharing of one or more specific teaching objectives. The identification of common goals leads teachers to reach a mutual agreement that allows for a deeper, formalized type of interaction.

4. Responsibilities sharing	The theory of the distribution of leadership functions involves the sharing of responsibility, which instead usually falls on a single teacher. Regardless of the outcome, each individual involved is responsible for the collaborative effort.
5. Resource sharing	The valuable resources that each individual possesses facilitate a productive collaboration to achieve the agreed-upon objectives.
6. Cooperative process	Communicative exchanges between teachers characterize the cooperative process. It consists of the following sub-processes, which are essential for successful collaboration: face-to-face planning, positive interdependence, interpersonal skills, monitoring progress, and individual responsibility. These subgroups will be further examined afterwards.

The above-mentioned authors also noted that educators, despite sharing decisions and activities, may find themselves performing different tasks. Part of the collaboration process involves the division of labour. Clement and Vandenberghe (2000) observed that the kind of relationship developed between teachers usually has positive implications for the professional growth of both work partners.

A solid and positive relationship between teachers can foster and promote a learning-friendly classroom climate. A collaborative relationship between teachers allows developing a positive, safe and respectful classroom environment. Moreover, a collaborative approach creates a good learning environment and, at the same time, motivates students (Aquario and Ghedin, 2016).

2.2 Co-teaching: strengths and weaknesses

> Strengths

It is beneficial for learning to have two teachers in the classroom who guide and support students in the learning process. Before considering the benefits of co-teaching, it is worth remembering that this practice aims to improve the quality of teaching offered to all pupils in

the class group, including those with BES or DSA. Moreover, it promotes inclusivity. We will now explore the positive effects of co-presentation further.

Students and teachers can benefit in different ways from a shared cooperation. Collaboration therefore can have a positive impact on students as it serves as an imitative teamwork model (Ghedin and Aquario, 2023). It is inspiring for learners to see their teachers working well together and in harmony. Collaborative practices represent positive academic and social models for learners.

Co-teaching has the potential to improve learners' proficiency in writing and reading. Positive outcomes include behavioural enhancement in students with BES and a rise in self-esteem throughout the class. Students with special educational needs thus have seen positive effects on teaching and on social relations. The planning and implementation of co-teaching has resulted in the enhancement of academic and behavioural performance among students with disabilities, observed Hang and Rabren (2008). Furthermore, results deriving from the same study show that both educators and learners expressed positive perceptions of co-teaching.

The table presented below summarizes the main advantages of implementing co-teaching for students.

Table 2 Summary table of students benefits from co-teaching.

Students benefits
o Exposure to positive academic and social models
o Possibility of enrichment, growth and improvement of learning performance
o Increased engagement for the lessons
o Presence of classroom education
o Access to a variety of teaching strategies supported by two qualified and trained teachers
o Opportunities for peer interaction
o Reduced stigma for students with disabilities

The various stages of co-teaching involve the collaboration of educators. The sharing of the planning, teaching, and evaluation phases allows a division and lightening of the workload among the colleagues involved. Furthermore, teachers share the responsibilities about the results of the collaboration. Both respond to the effects of teamwork, whether they are positive or negative. A sense of membership subsequently develops. Learning success therefore affects both teachers. Teachers themselves thus recognize the benefits of learning in their students (Mofield, 2020).

Teachers who collaborate in teaching achieve more effectively the goals set for their students, are happy with their work and are inclined to work together in the future (Villa, Thousand and Nevin, 1999). Collaborative practice develops a sense of growth among teachers regarding the teaching techniques they employ every day in the classroom. In particular, there are benefits in terms of differentiation strategies related to high-level questions, critical thinking and creative thinking (Mofield, 2020). The awareness of developing and improving teachers skills increases confidence in themselves and in their collaborative colleagues.

Table 3 Summary table of teachers benefits from co-teaching.

Teachers benefits
o Growth in teachers' competencies in differentiation
o Shared responsibilities for planning, teaching, and evaluation phases
o Shared responsibility for student learning success
o Develop a variety of skills
o Selection and achievement of common goals
o Building confidence
o Sense of membership

Through the practice of co-teaching, teachers can create a shared professional identity (Ghedin and Aquario, 2016).

> Weaknesses

As research that highlights the advantages of co-teaching is available, studies that identify its potential limitations can also be found. Studies and research have identified weaknesses in the implementation of co-teaching, which will be explored below. According to Chitiyo (2017), only by analysing the barriers that limit the success of co-teaching, these limits can be subsequently removed. By doing this, more effective implementation of the practice is favoured. Through his research, the author identified barriers that limit the use of co-teaching. Chitiyo has identified environmental and individual barriers. These barriers can be considered weaknesses that characterize this practice. The study addresses issues that recur in the following lines of this paragraph, such as the need for more resources, poor support from colleagues, and the lack of adequate knowledge and skills.

First, it must be considered that the planning of an educational path with co-presence requires a lot of time and organization. As we had the opportunity to deepen in Chapter I, the design phase (co-design) consists of several activities, such as the elaboration and development of lessons and the selection of content and materials. Teachers have to take out time for common planning activity in order to ensure that they have an appropriate workload and provide students with adequate teaching. In a study conducted in 2020 (Mofield, 2020), the lack of adequate time for teachers was identified as a significant obstacle to collaboration and, consequently, to co-teaching. Solis (2012) also highlighted the need for sufficient planning time for teachers. Moreover, teachers may consider collaborating as an additional task to be undertaken in addition to their regular workload (Ianes and Cramerotti, 2015).

Another limitation that teachers may encounter in the exercise of joint teaching may be the diversity of teaching approaches adopted. Teachers are required to strike a balance and reach an agreement on a teaching method that is compatible with both of them. If the equilibrium condition described previously does not become concrete, all attempts at collaborative planning will be unsuccessful.

In addition, it frequently happens that educators are unfamiliar with this particular form of collaboration, and they have no prior experience with it. The development of skills that are suitable for co-teaching requires appropriate opportunities. Such opportunities may not always be readily available, resulting in teachers not being adequately trained and/or updated regarding collaborative teaching. Friend and Cook (2000), in this regard, state that both the

responsibilities and the roles of participating in an inclusive and collaborative organization are closely linked to professional development.

The limited availability or lack of resources necessary for the implementation of co-teaching can often be an obstacle. This is a kind of *en*vironmental barrier, and it may impede the use of co-teaching or its effectiveness. Other limits may include routines and systems, policies, competing priorities and senior leadership support (Chitiyo, 2017).

2.3 The importance of observation

In the educational field, observation is an activity that plays a significant role in teaching. Through the observation process, educators have the ability to monitor both the conduct of students within the classroom dynamics and the efficacy of their teaching practices.

The previous chapter shows that identifying the individual needs of students enables efficient teaching. It is important for teachers to understand the individual needs and characteristics of the learners in order to develop appropriate strategies to transmit their knowledge.

In the practice of co-teaching, the action of observing is crucial. Teachers can monitor the effectiveness of teaching strategies adopted through observation and possibly modify them according to their own needs or those of their students. Through careful observation of situations and attitudes, co-teachers may notice nuances relevant to the development of the teaching process. Ianes and Cramerotti (2015) refer to the mutual observation of the teaching activity. Teachers can develop and improve their skills by mutually observing their work practices.

Observation aims at identifying the strengths or limitations of teacher collaborative practice, as well as targeting student feedback and their needs. It is possible to identify gaps in the relationship between teachers and take steps to improve them. The identification of barriers to cooperation may lead to the development of strategies with the aim of removing barriers and improving the implementation of collaborative practice. When educators observe each other's teaching practices, both the exchange of feedback and comparison moments facilitate strong professional development.

The conduct and actions of the students during the lessons enable the educators to gather significant data regarding the didactic and educational path they are pursuing. It is possible to observe and explore different aspects, including their learning progress or their emotional well-

being feeling within the class group. Through observation of students during co-teaching activities, the level of engagement and learning can be noticed in a clearer way. D' Odorico and Cassibba (2001) highlight that the use of evaluation grids for conducting a formal observation activity facilitates a systematic observation. The systematic observation made by the educator through an evaluation grid requires a careful and appropriate scheduling of times and contexts for observation.

The authors also state that, in order to obtain an effective observation, teachers must plan other elements, such as the choice to observe a child at a time or the whole group class and the organization of the observational context. The decision whether to use video cameras to record students' behaviour during the lesson is an additional element educators may consider during observation.

Guidance questions are frequently helpful in guiding teachers in observation, as demonstrated by the experiences reviewed by Cramerotti and Ianes (2015). Observation in the final programming phase, for example, allows teachers to verify which learning outcomes learners achieved up to that moment and any topics they need to reinforce in the last teaching period. Teachers can thus reveal the intensity of their participation and knowledge about topics by observing students during co-teaching activities. Learning how to observe is therefore one of the main objectives that a teacher, especially during a training period, must achieve (D'Odorico, Cassibba, 2001).

2.4 Perceptions of co-teaching and collaborative practice: a review of existing researches

This research aims to explore co-teaching as a collaborative practice in primary school in a CLIL context. In particular, it seeks to explore the theme of the use of co-teaching in primary school, especially the importance and perceptions that teachers attach to collaboration, evaluation and any limitations that may hinder the implementation of the cooperation. With the aim of investigating the research literature related to the topics just mentioned, some relevant studies will now be presented.

In recent years, several research paths thus have been launched about the exploration of the dimensions of collaboration and its use in co-teaching. In the context of research, the connection between teachers' perceptions and their practices towards collaboration is

examined. Studies have been carried out in different directions, including various methods of investigation. The existing research literature on co-teaching and teacher perceptions related to it, investigates the collaborative attitudes and practices adopted by teachers in the classroom (Ghedin and Aquario, 2016; Ghedin and Aquario, 2023).

Ghedin and Aquario conducted a study in 2016 that explored teachers perceptions about the importance of the collaborative practice of co-teaching. The two authors investigated the importance that teachers attribute to the collaborative dimension of teaching. Furthermore, they examined which aspects of co-teaching were most effectively implemented in their daily work. Two points of view (ideal and real) were used to compare the average responses of questionnaire and interview respondents. The authors then explored the gap between the data obtained by comparing the two perspectives, concluding that the importance attributed to an ideal level to the components of co-teaching is higher than in the actual daily teaching situation. The results suggested that, for teachers involved in the study, co-teaching is perceived as an important element.

In 2023, the same authors carried out a further study that increased the panorama of collaboration related to the practices and attitudes of teachers. Aquario and Ghedin conducted the aforementioned study, utilizing questionnaires and exploratory interviews to examine the utilization of collaboration by educators and their attitudes towards the same practice of collaboration. The research examines the attitudes and collaborative practices of teachers working at different school levels. The two experts say that attitudes and perceptions of the team members are considered more critical for the quality of the collaboration compared to the structural characteristics. Literature has shown that a relevant aspect in encouraging or hindering collaboration is the importance of teachers' attitudes towards collaboration.

Some useful materials are available to further understand some aspects and dimensions of co-teaching. The part relating to the didactic experiences with co-presence strategy in the book of Ianes and Cramerotti (2015), and the article by Chitiyo (2017) about barriers to the use of co-teaching are examples of useful research material. The connection between the article written by Fazzi and Menegale article (2023) about the use of the CLIL method in primary school and the theme of this study suggests a thorough reading of the article.

Ianes and Cramerotti (2015) reported numerous examples of inclusive collaborative learning experiences. The analysis of the stages of identification of objectives, co-teaching, and co-evaluation for each presented experience allows the reader to fully understand the teaching

practice in that specific context. Additionally, the authors provide a brief analysis of strengths and weaknesses encountered during each of the collaborative experiences.

Chitiyo (2017) explores the obstacles (environmental or individual) that can hinder the success of co-teaching. Several limitations emerge from the study, such as the need for teachers to possess skills appropriate for collaborative teaching. It also highlights that sufficient resources are also needed to implement co-teaching in any school contest. The article additionally considers, based on the responses of the respondents, whether co-teaching is a profitable practice or not.

In addition, as this project aims to investigate primary school teachers' perceptions of co-teaching in the CLIL method, some primary school CLIL studies may support research. Menegale and Fazzi (2023) explore the advantages of CLIL for primary learners in the 21st century. The authors deal with the guiding principles that can implement CLIL effectively and generate favourable impacts on students.

The existing research examines the dimensions of co-teaching collaboration and teachers' perceptions of co-teaching by involving curriculum teachers and support teachers. The school levels at which the teachers participated in the surveys worked are diversified. Research previously explored in this section thus carried out involving teachers working in classes of different school levels (elementary, middle and high). This reflection led us to propose an investigation into teachers' perceptions of collaborative practice in CLIL, using a sample population and a specific teaching level, specifically CLIL specialised teachers and primary school curricular teachers. The objective of this study is to broaden existing research in the literature and investigate co-teaching paired with the CLIL method in primary schools, a field that is less explored compared to the secondary and high school ones.

Chapter III: An exploratory study

3.1 Background to the research

This chapter will present the research work and the elements that characterize it. In order to understand this study, it is necessary to investigate the field of research to which it belongs.

As was pointed out in the last part of the previous chapter (Chapter II, Section 2.4), in recent years there have been several avenues of investigation launched with the aim of exploring co-teaching as a collaborative teaching practice. In the context of research, the connection between co-teaching and the CLIL method is explored, but it is not widely explored in the field of primary school.

As previously noted in the final section of the preceding chapter, thus, research studies involved teachers working in classes of various school levels (elementary, middle, and high school). Indeed, numerous studies that have been conducted so far have focused on the domains of middle and high school or in included primary school domain in a reduced manner (Ghedin and Aquario, 2016; Chitiyo, 2017; Krammer, Rossmann, Gastager, Gasteiger-Klicpera, 2018; Ghedin and Aquario, 2023).

For instance, Chitiyo (2017) explores the obstacles (environmental or individual) that can hinder the success of co-teaching. Several limitations emerge from the study, such as the need for teachers to possess appropriate skills for collaborative teaching. It also highlights that sufficient resources are also needed to implement co-teaching in any school contest. The article additionally considers, based on the responses of the respondents, whether co-teaching is a profitable practice or not. The research involved general and special teachers employed in elementary, middle and high schools, and it collected participants' responses through a questionnaire. Some items will be taken up in the subsequent paragraphs as they are related to the theme of one of the research questions of this study. However, the issue of barriers to the implementation of co-teaching will be addressed completely within the context of primary school, which Chitiyo's study addresses partially since the teachers involved in primary school comprise 45% of the participants of the study.

The study by Ghedin and Aquario (2016) presented in Chapter II explored teachers' perceptions of the significance of collaborative co-teaching practice. The authors deepen the teachers' perceptions of the importance of teaching collaborative dimensions. The aspects most

implemented in teachers' daily work were also examined. One of the research questions of Ghedin and Aquario is similar to one of those that prompted this study, namely, "What importance do teachers attach to the collaborative dimension of teaching?".

Furthermore, Ghedin and Aquario (2023) addressed the issue of collaborative practice linked to the attitudes and practices of co-teachers. Teachers expressed their perspectives regarding the dimensions of co-teaching. Since the research respondents are teachers of a secondary school, it is interesting to further investigate the elements of the co-teaching practice in a primary school context.

In the second chapter of this study, the research of Menegale and Fazzi (2023) was presented and it, among all investigations we considered, focuses more clearly on doing CLIL teaching with primary students. The authors aimed to explore potential benefits and related issues connected with the implementation of CLIL with primary pupils. However, the authors take into consideration the principles and practices of the CLIL primarily pertaining to co-teaching learners and, do not consider in depth the teachers' perceptions of this practice in the context of primary education, which is the aim of this Chapter.

In the final section of Chapter II, it was stated that prevailing research examines the dimensions of co-teaching and the perceptions of co-teaching teachers by involving curriculum teachers and support teachers. The studies explored in the previous paragraphs also curricular and support teachers in the survey context. From the research literature, thus, the area of the collaborative relationship between the discipline teacher (curriculum) and the CLIL teacher in primary school is not sufficiently and intensively investigated.

What emerges from this introductory part of Chapter IV is that the aim of the research is to explore co-teaching as a teaching practice related to the CLIL method, particularly in the field of primary school. It has also been observed that, in primary education, CLIL is mainly employed for inclusion and special education purposes for pupils with specific learning disorders and disabilities, and to a lesser extent, for content and language integrated learning. Finally, it is evident that this form of co-teaching is evidently more widespread in secondary or high schools as compared to primary schools. Based on these reasons, this chapter intends to provide a modest contribution to the necessity of broadening the boundaries of research and exploring topics such as co-teaching, CLIL, and primary school in a single study.

3.2 Methodology

This study employs both quantitative and qualitative research methods. Consequently, the research method is mixed. As will be explained further in the following paragraph, the tool used to collect the data is a questionnaire with closed questions and some open (optional) final questions.

The questionnaire facilitates the sharing of questions with a significant number of individuals, thereby collecting a substantial number of responses within a brief period. Furthermore, the management of an online questionnaire is straightforward to develop and manage. The teachers' responses enabled the collection of both quantitative and qualitative data. The related obtained results, which will be further examined in the following sections, are:

- specific answers (such as the teaching years for teachers, for instance);
- answers with evaluation through numerical values that identify the degree of agreement of teachers on certain issues (Likert scale that assesses opinions and/or attitudes quantitatively).

On the other hand, the final open-ended questions provide a clearer understanding and interpretation of all the information gathered. The answers allow framing the survey population. Moreover, the data set gives a more complete and integral view of the survey context. The words employed by educators may convey crucial information for data analysis and, in general, for research development.

3.2.1 Research questions

After a thorough review of existing research and relevant literature, this study aims to answer the following research questions:

- How do teachers perceive collaborative dimensions of co-teaching?
- How do teachers perceive assessment stage in co-teaching practice?
- Which elements do teachers perceive as obstacles to the practice of co-teaching?

The research questions just presented guided the study. The significance of the answers that emerge from this survey lies in the expansion of questions to teachers working in a CLIL setting, where the totality is in close contact with CLIL, whereas only a part of the teachers uses

the CLIL method. Furthermore, it is important that teachers are disciplined and specialized. Teachers who are involved in this type of research are usually discipline and support teachers.

In order to further explore the research questions, aspects such as teachers' experience with co-teaching and their perceptions about the implementation of co-teaching in primary school will be analysed in Chapter IV.

3.2.2 Setting

It is important to examine the physical and environmental context in which the research was conducted in order to better understand and interpret the results obtained. Since some details in this section are crucial for understanding the context of the study and the study itself, they are also reported in other sections of this chapter.

The primary school of the teachers who participated in the research claims to offer a kind of innovative, active, and collaborative teaching approach. One of the objectives of the form of instruction employed by educators is to foster cooperative abilities and a sense of self-efficacy among learners. The primary school in question provides a variety of educational paths, which are listed and described below:

- One of the paths involves the learning and improvement of computer and multimedia technology knowledge. The hourly plan provides two CLIL hours per week. These hours are provided for computer science and PE (physical education) subjects;

- Another path among those offered by the school is characterized by a strong strengthening of the learning of the English language. In this case, all teachers involved in the English language enhancement are native speakers. The disciplines taught through the CLIL are science, computer science, geography, art, and P.E (physical education). The modules of science, informatics, geography, and art involve a native teacher who works together with the prevailing teacher in co-presence during the teaching activity. The number of CLIL teaching hours varies from four to five hours per week, depending on the grade of the class (1st, 2nd, 3rd, 4th, and 5th grades);

- The last type of path provides, in addition to the development of basic skills, the development of the English language, the use of computer technologies, and the development of artistic languages. In this case, specialized teachers from different fields support each teacher in each class. One of the specialist teachers who provides support

to the prevailing teacher is the specialist teacher with a specific designation for the English language.

Therefore, in the educational and didactic paths just described, co-teaching (co-presence) is adopted. The teachers comprising the research population are employed in the aforementioned educational programs.

A message containing a brief explanation of the study and a link to the questionnaire was sent to all teachers. When the teachers clicked the link, it automatically directed them to the online questionnaire. Data collection took a month, from mid-March to mid-April 2024. The survey automatically recorded teachers' answers in Google Forms (the instrument employed for the data collection, which will be covered in the Section 3.3 of this chapter).

3.3 Participants

The population of participants chosen for the analysis consists of teachers from a primary school who use the practice of co-teaching within the CLIL method. The selected group includes both curricular and CLIL specialised teachers.

The inquiry that may arise pertains to the rationale behind the selection of this type of population. The reasons behind this choice are different. The main reason lies primarily in one of the kind of teaching that the school where teachers work provides, namely the CLIL method. As demonstrated in the previous chapters, the integrated teaching and learning of content and language may involve the presence of two teachers working together. In the context of the CLIL implemented in the aforementioned primary school, we observe the presence of both content teachers and specialized CLIL teachers.

Moreover, after an examination of the research literature, it emerged that the themes of co-teaching in the CLIL method and teachers' perceptions about it are not addressed unitary but rather as two distinct entities. It is therefore interesting to examine the two elements mentioned above in relation to each other and in the same context of the investigation.

Co-teaching practice is commonly employed in the context of inclusion with students with specific learning disorders or special educational needs. However, in this case, the study takes into consideration the co-teaching as collaborative practice of two teachers who use the CLIL method.

In these lines, certain information derived from the analysis of the collected questionnaires is now anticipated. This is data pertains to the demographic and personal information about the participants.

The questionnaire was sent to a primary school, whose *insegnanti prevalenti* (the teachers who have the greatest number of lessons hours and subjects in the same class) participated in the survey. All participants are employed in the primary school, and only one teacher is employed both in the primary and in the middle school (the distribution of the answers will be illustrated in Chapter IV). The questionnaire collected 20 responses. The majority of the participants were women, accounting for 85%, while the remaining 15% were men.

As regards the age distribution of the participants in the study, it is notable that the majority of respondents (30%) belong to the 40-49 age group, followed by the 30-39 age group (25%).

The summary as well as the distribution of the age of the participants and the other data mentioned in this paragraph will be depicted through a specific table and a graph in the Chapter IV, which is dedicated to the results of the study.

3.4 Instruments

In this study, the data collection tool used is a specially designed questionnaire. It was created and developed using Google Forms to facilitate its dissemination. This instrument has enabled the use of different types of question forms, including checkboxes, multiple choice, and paragraph forms. As previously mentioned, the questionnaire includes both closed and open questions in order to better interpret the data collected through the study.

The questions within the questionnaire were divided into sections to reflect the categories of research questions (teachers' perceptions of collaborative dimensions of co-teaching and of assessment stage, and obstacles to co-teaching implementation). Each section has a brief title that refers to the sub-topic that is considered in that part of the survey.

In the following lines, we will examine in more detail the sections of the questionnaire and which research question is associated with them.

As previously stated, the data were collected through a questionnaire divided into six sections. The first section aims to collect demographic data regarding the participants, such as their age and gender, years of work experience, school level participants work in and disciplines

of teaching, native speaking origins, possession of language certification, teaching and CLIL training course.

The second part examines the co-teaching experience of the participants by posing specific questions (i.e., the professional figure with whom this practice has been experienced, use of co-teaching at the compilation moment). If teachers have never experienced co-teaching before, they can make it explicit through dedicated responses.

The third section deals with teachers' perceptions of aspects of co-teaching. There were 15 items on which participants expressed their level of agreement or disagreement using a scale of Likert values (0=strongly disagree, 1=slightly disagree, 2=quite disagree, and 3=strongly agree).

The fourth section instead deals with teachers' perceptions of assessment phase of co-teaching practice. This part includes 9 items. Respondents can express their perceptions through the Likert scale.

The fifth part investigates the participants' perspectives on personal experiences and perceptions regarding the use of co-teaching, focusing also on the primary school context. The theme of evaluation in co-teaching has also been addressed in order to better understand perceptions regarding this issue, which is addressed in the section devoted to it with closed questions. One of the open questions concerns the barriers to the use of co-teaching, a theme that the study will deepen through the words of the respondents.

In the following paragraphs, the question categories will be presented in detail.

3.4.1 First Section: Personal data

The initial lines of the first section focuses on presenting the research and questionnaire to teachers. It is presented a brief introduction to the study, which aims to investigate teachers' perceptions and attitudes regarding the practice of co-teaching. The section also clarifies how the data are collected and processed, that is in a completely anonymous manner, only for research purposes, and in complete compliance with D.lgs 163/2017, Ex art. 13 D.L. 196/2003 ed ex art. 13 Regolamento Europeo 2016/679. Teachers are required to select a response, by either consenting or declining to participate in the study, in order to proceed with the subsequent section of the questionnaire.

The first section is titled "Personal Data". It encompasses the general personal information and professional training of the participants. The section collects the following information: the age range, gender, years of teaching and school level, teaching discipline(s), English language certificate and at what level, mother tongue teacher, CLIL teacher and, CLIL training course. The requested information is explored in greater detail in the following lines.

The first question concerns the age of the respondent. The age range selection is among six options:

- 18-20 years;
- 21-29 years;
- 30-39 years;
- 40-49 years;
- 50-59 years;
- 60 years or more.

The answers provide an overview of the age of the respondents.

The second question is about the gender of the participant, which answers include three options: "woman", "man" and "I prefer not to answer". Moreover, if the teacher perceives the necessity for a different form of identification, the question presents the possibility to enter a personalized response in the blank space provided below the other options. Participants can choose the answer that best represents their identity.

In the third question, teachers were asked how many years they have been teaching. In the context of the survey, in fact, the period of professional experience of teachers may be a relevant factor. The question on teaching years presents six answer options, with the following choices:

- 1 year or less;
- 1-5 years;
- 6-10 years;
- 11-20 years;
- 21-30 years;
- 31-40 years.

In addition to the choices, an empty space has been inserted to enable teachers to include a different range of teaching years from the ones specified in the answers list. This is to compensate for the lack of age groups that would otherwise be excluded from the study.

Since the questionnaire and the study in general concern co-teaching in the CLIL method, other specific questions were addressed to teachers. Information such as those presented in this section help not only to identify the survey population, but also to understand and justify the responses to subsequent questions and sections.

In order to be able to interpret more accurately the answers given by teachers in the Chapter IV, thus, two questions concern the following topics: the school level at which teachers are employed school level and their teaching discipline(s).

The options available for the school-level inquiry "Which level of education do you teach?" include first grade, second grade, third grade, fourth grade and fifth grade (primary school), middle school and, high school.

The list of responses to the question "What discipline do you teach?" includes both curricular disciplines and those imparted through the CLIL method. Teachers are asked to choose among the following alternatives: Italian, English, mathematic, history, geography, CLIL geography, science, CLIL science, IT, CLIL IT, PE, CLIL PE, art, CLIL art and, music. Furthermore, in the instance of these inquiries as well, the respondent may also provide additional responses in the provided space.

It can be useful for research purposes to know whether the participants in the research are native English teachers and/or possess an English certificate, including the level attained. The question that refers to the teachers' origins and native language is "Are you an English native teacher?". The answer to this question may be either positive or negative.

In order to answer the question "Do you have an English language certificate?", the respondents were presented with the following alternatives (with the option of incorporating an additional response):

- B1;
- B2;
- C1;
- C2;
- native speaker;
- no certificate.

The last aspects that may be of interest for research purposes may be teacher experience and CLIL training, since the research itself focuses on co-teaching in the teaching and integrated learning of language and content. The two last questions are, thus, the following ones:

- Are you a CLIL teacher?
- Have you attended a CLIL training course?

3.4.2 Second Section: Co-teaching experience

The subsequent section is entitled "Co-teaching Experience". The initial question inquires whether educators have ever experienced co-teaching practice. The second question asks participants who have already experienced co-teaching in what context they have implemented it. Those who have never experienced co-teaching can express whether they would like to experience it through a specific question. If teachers have no prior experience with co-teaching practice, they have the opportunity to express thus whether they would like to use it by answering "yes" or "no" to the corresponding question.

A further question explores whether the educator is employing this practice during the current academic year. This data holds significant value for research, as it indicates the number of participants in the study who were engaged in the practice of co-teaching at the time of the data collection.

Finally, it is asked which colleague the teacher worked with in this practice ("Who have you experienced co-teaching with?"). There are many possible answers, and the teacher can choose more than one option from several based on their experience: support teacher, native speaking teacher, "curricular" teacher and/or intern. In addition, it is possible to select the option "I have never experienced co-teaching" in case the respondent never had a chance to use such a form of teaching.

3.4.3 Third Section: Teachers' perceptions of aspects related to co-teaching

The following sections present statements dealing with issues related to co-teaching, which are initially general and then more specific. Teachers have to assign a grade to the statements based on their agreement with the meaning of the sentences. Through the selection

of a number and the correspondent assessment, teachers are required to provide their perceptions on the aforementioned topics. For each statement, the teacher who completes the questionnaire is asked to select a response on a Likert scale from 0 to 3, where each number is associated with an evaluation (an assessment label). Respondents associate a level of agreement or disagreement through assessment labels about a statement. Specifically, the corresponding numbers and evaluations are as follows:

- 0 corresponds to "strongly disagree";
- 1 corresponds to "slightly agree";
- 2 is "quite agree";
- 3 corresponds to "strongly agree".

The third section focuses on one of the research issues presented in the previous paragraphs, in other words, the perception of certain dimensions of co-teaching. The aspects taken into consideration concern pedagogic-didactic principles and fundamentals of co-teaching. Indeed, statements refer to topics related to co-teaching that have been extensively explored in previous chapters such as planning objectives, classroom managements, interaction among teachers. The teachers expressed, through a number, their perceptions about collaborative teaching practice on the fifteen questions of this section.

This section contains items 1 to 15. The items are divided within the section into two distinctive slots (from 1 to 9, from 10 to 15) with the intention of facilitate and streamline the compilation process of the questionnaire.

In order to provide a complete and accurate study, the first set of items has been organized into 4 specific categories. The items are divided as follows:

1. Principles and Fundamentals of Co-Teaching

In Chapters 1 and 2, co-teaching was comprehensively examined, considering its origins, characteristics, and phases (co-planning, co-instructing, and co-assessing), its advantages for both students and teachers, as well as its limitations. As previously noted in this study, therefore, the characteristics of co-teaching include collaboration, respect, sharing responsibility, and inclusion. In the context of co-teaching, teachers have to learn how to negotiate and share roles within the classroom (Ghedin and Aquario, 2016). All these aspects form the fundamentals of co-teaching. The items in this category aim to investigate teachers' perceptions of the main principles of co-teaching.

This section contains items 1 to 5 and item 14. The items relate to the aspects stated in the preceding lines.

- Item 1: Collaboration and sharing are fundamental principles in the practice of co-teaching.
- Item 2: Mutual respect and dialogue must form the basis of the relationship between the two teachers.
- Item 3: The two teachers are two figures at the same level and have equal authority in the classroom context.
- Item 4: Both teachers are responsible for the results of the collaborative effort, whether positive or negative.
- Item 5: Students have to consider the two teachers as two figures at the same level and with equal authority.
- Item 14: Co-teaching promotes inclusion.

2. Planning and Teaching Objectives

The planning (or co-design) phase is fundamental to the implementation of co-teaching as it prepares the basis of the teaching path that teachers intend to pursue with their students. At this specific stage, teachers have to consider both the difficulty of the content they intend to explain to students and the level of linguistic competence of the students themselves. Educators plan the lessons, activities, and teaching materials that they will use in the classroom. In addition, they define the learning objectives (common and specific) and the timeframe necessary for achieving them (deadlines).

This section contain items 6 to 8.

- Item 6: The instructional design is equally distributed between the two teachers.
- Item 7: The objectives set out in the programming and the timescales for achieving them are generally respected.
- Item 8: The objectives established during the teaching planning by the teachers can be specific and personalized.

3. Classroom Management and Interaction

The teachers involved in co-teaching manage its different phases, including the actual co-instructing. The latter includes class management, activities, and communication with students and between teachers. Teachers' perceptions about these dimensions of classroom management is crucial to understand how they actually work together. Moreover, the importance of teachers' communication and interpretive skills in co-teaching is evident in order to facilitate mutual comprehension in teaching activities (Pituła and Kowalski, 2022). The aspects mentioned in these lines are investigated through the items of this category.

This section comprises items 9 to 13 and item 15.

-   Item 9: Class management is an activity equally shared between the two teachers.
-   Item 10: Communication with students is crucial.
-   Item 11: The discussion and dialogue with the students concerns both teachers.
-   Item 15: The possibility to vary the arrangement of the desks and the organization of the spaces during the year is useful for socialization and collaboration between students.
-   Item 12: Group and pairs activities are useful for the experimentation of the language and for the development of learners' learning and autonomy.
-   Item 13: The use of technological supports and multimedia materials (images, videos, audio tracks, interactive exercises, slides, etc.) facilitates learning.

The following table (Table 1) shows a summary of the items of the questionnaire with the related categories.

Table 4 Aspects of co-teaching: summary of items and categories.

Items	Categories
1. Collaboration and sharing are fundamental principles in the practice of co-teaching.	Principles and Fundamentals of Co-Teaching
2. Mutual respect and dialogue must form the basis of the relationship between the two teachers.	Principles and Fundamentals of Co-Teaching
3. The two teachers are two figures at the same level and have equal authority in the classroom context.	Principles and Fundamentals of Co-Teaching
4. Both teachers are responsible for the results of the collaborative effort, whether positive or negative.	Principles and Fundamentals of Co-Teaching
5. Students have to consider the two teachers as two figures at the same level and with equal authority.	Principles and Fundamentals of Co-Teaching
6. The instructional design is equally distributed between the two teachers.	Planning and Teaching Objectives
7. The objectives set out in the programming and the timescales for achieving them are generally respected.	Planning and Teaching Objectives
8. The objectives established during the teaching planning by the teachers can be specific and personalized.	Planning and Teaching Objectives
9. Class management is an activity equally shared between the two teachers.	Classroom Management and Interaction
10. Communication with students is crucial.	Classroom Management and Interaction
11. The discussion and dialogue with the students concerns both teachers.	Classroom Management and Interaction
12. Group and pairs activities are useful for the experimentation of the language and for the development of learners' learning and autonomy.	Classroom Management and Interaction
13. The use of technological supports and multimedia materials (images, videos, audio tracks, interactive exercises, slides, etc.) facilitates learning.	Classroom Management and Interaction
14. Co-teaching promotes inclusion.	Principles and Fundamentals of Co-Teaching
15. The possibility to vary the arrangement of the desks and the organization of the spaces during the year is useful for socialization and collaboration between students.	Classroom Management and Interaction

3.4.4 Fourth Section: Teachers' perceptions of assessment in co-teaching practice

The fourth section focuses on the issue of evaluation and co-teaching at school. In this part of the questionnaire, several aspects related to the evaluation practice and co-teaching are taken into account, for instance content and evaluation criteria, planning, coordination, and personalization of teaching activity. The subdivision of roles between teachers during the evaluation practice and the criteria adopted are some of the themes explored through the statements. Additionally, the issue of the organisation of periodic meetings, which was already observed in both Chapters I and II, emerges among the topics of the questions.

The section dedicated to the evaluation includes nine statements, namely items 16 to 24. As happened for the first set of items (Section 3.4.3), the second set has been divided into categories. Specifically, in this case, the items were organized into 4 categories. The items are categorized as follows:

1. General Evaluation Practices

The process of involving both teachers in the development of a shared evaluation of the students' results and objectives achieved in the learning activities is called co-evaluation. A collaborative aspect characterizes co-evaluation, as both the educators are actively involved in the selection of criteria and in the use of evaluation practices. According to the authors Ghedin, Aquario, and Di Masi (2013), co-evaluation is characterized by inclusion, multidimensionality, reflection, and collaboration.

The category related to the issue of evaluation practices in co-teaching and it includes items 16, 17, 22 and 23.

- Item 16: The assessment practices are attributed to both teachers equally.
- Item 17: Regular meetings are needed in order to manage the teaching planning and evaluation.
- Item 22: Individual and group behaviour are considered in a student's final learning assessment.
- Item 23: The direct observation of students is important in learning assessment.

2. Content and Language Evaluation Criteria

CLIL teaching is based on the relationship between content and language. Therefore, the meeting and the consequent integration of content and language characterize CLIL. The CLIL approach can be defined as the encounter between two disciplinary realities (Coonan, 2006). As a result, the integrated learning of content and language elements characterizes this methodology. The CLIL assessment therefore refers to the acquisition of knowledge by students in both aspects of this approach. The attention of teachers during the assessment phase of students must encompass both language and content.

The category of items refers to this aspect and it includes items 18 to 21 and item 24.

- Item 18: The assessment criteria for learning should focus on the acquisition of content, leaving the linguistic aspect in the background.
- Item 19: The assessment criteria for learning should cover both the content acquired, and the language concepts developed in equal measure.
- Item 20: The assessment should focus more on knowledge of content rather than on grammatical correctness of language.
- Item 21: The assessment of the language should focus more on the vocabulary rather than on the correctness of grammar and spelling.
- Item 24: The assessment techniques used by teachers must be differentiated and customized for students with BES (Special Educational Needs).

3. Planning and Coordination

In the context of evaluation in co-teaching, it is of crucial importance for teachers to organize and update the content planning and evaluation methods adopted in the course. The frequency of the meetings allows for the modification of the teaching elements (approach, strategies, objectives, timeframes and deadlines, contents) if necessary, for instance in accordance with the learners' needs, the availability of resources and/or the dynamics among the learners group. One of the essential characteristics of co-teaching is the possibility of making changes during the teaching period. This includes flexibility and adaptability to change.

The category comprises item 17, which refers to the aspect above-mentioned.

- Item 17: Regular meetings are needed in order to manage the teaching planning and evaluation.

4. Personalization of Teaching

In the preceding chapters, one of the features of co-teaching has been highlighted several times, namely the possibility of incorporating and developing elements of didactic personalization for students (with specific learning disorders and disabilities) who are in need of them. Referring to this, Cook and Friend (1995) emphasized that co-teaching allows collaborating teachers to create an inclusive learning environment that supports students with special needs while supporting all students (with and without disabilities) in learning.

The item 24 composes the category, which refers to the issue explored in the lines above.

- Item 24: The assessment techniques used by teachers must be differentiated and customized for students with BES (Special Educational Needs).

The table presented below (Table 2) provides an overview of the items and their respective categories.

Table 5 Evaluation practices: summary of items and categories.

Items	Categories
16. The assessment practices are attributed to both teachers equally.	General Evaluation Practices
17. Regular meetings are needed in order to manage the teaching planning and evaluation.	General Evaluation Practices
18. The assessment criteria for learning should focus on the acquisition of content, leaving the linguistic aspect in the background.	Content and Language Evaluation Criteria
19. The assessment criteria for learning should cover both the content acquired, and the language concepts developed in equal measure.	Content and Language Evaluation Criteria
20. The assessment should focus more on knowledge of content rather than on grammatical correctness of language.	Content and Language Evaluation Criteria
21. The assessment of the language should focus more on the vocabulary rather than on the correctness of grammar and spelling.	Content and Language Evaluation Criteria
22. Individual and group behaviour are considered in a student's final learning assessment.	General Evaluation Practices
23. The direct observation of students is important in learning assessment.	General Evaluation Practices
24. The assessment techniques used by teachers must be differentiated and customized for students with BES (Special Educational Needs).	Content and Language Evaluation Criteria – Personalization of Teaching

3.4.5 Fifth Section: Optional questions about co-teaching experiences and barriers to co-teaching implementation

The fifth and final section of the questionnaire consists of four open questions. The latter are optional, and it is up to the teachers to decide whether to complete them. The topics investigated are the personal experiences and opinions of teachers regarding the practice of co-teaching, as well as the context of primary school. It further explores beliefs about the obstacles that limit the implementation of teacher co-presence and perceptions concerning assessment activities.

The questions that the teachers are required to answer to in a maximum of fifteen lines are as follows:

1. Based on your personal experience, what do you think about the use of co-teaching in primary school?
2. What are the possible barriers to the implementation of co-teaching/co-presence teaching?
3. The evaluation in co-teaching takes into consideration the learning process of each student, considering its potential, path taken, autonomy acquired and ability to collaborate. What is your opinion on this matter?
4. Do you have any personal thoughts about your co-teaching experiences during your career or during your training period?

These last questions highlight the perceptive nuances of teachers' answers that, through closed questions, would otherwise remain obscure.

Chapter IV: Analysis of the results

4.1 Analysis of the results

The purpose of this chapter is to present the results of the questionnaire administered to the 20 research participants. The mean, mode, median and IQR (descriptive statistics) have been calculated to make considerations regarding the responses resulting from the compilations. The outcomes obtained from the descriptive statistics have been included in tables. Other results concerning the demographic and informative aspects of the teachers were represented by graphs (pie charts, histograms, diagrams) and compiled in descriptive tables. In this manner, the characteristics of the teachers' responses become more evident, thereby facilitating their analysis.

The presentation of the results in this chapter is organized as follows. Data relating to the participants in the study are initially taken into consideration. Therefore, there is a general initial overview of the personal data and co-teaching experience of the 20 respondents. Subsequently, two tables collect and show results regarding teachers' perceptions of:

- aspects related to co-teaching;
- assessment in co-teaching practice.

The tables are accompanied by paragraphs, which analyse and discuss the data.

This initial paragraph presents personal data and general information pertaining to the participants in the questionnaire. The teachers (*insegnanti prevalenti,* expression outlined in Section 3.3) who participated in the survey are 20. The majority of the participants are women, accounting for 85% (17 respondents). The men participants represent, as a result, the minority accounting for 15% (3 respondents).

As regards the age distribution of the participants in the study, it is notable that the majority of respondents (30%) belong to the 40-49 age group, followed by the 30-39 age group (25%). As a result, six teachers are between the ages of 40 and 49, and five are between the ages of 30 and 39. The number of participants aged between 50 and 59 is 20%. The percentage of teachers between the ages of 21 and 29 is only 15%. The answer with the lowest percentage (10%) is 60 or more. The summary as well as the distribution of the age of the participants are depicted in the table presented above (Table 1).

Table 6

Age (years)	Frequency	Percentage
21 – 29	3	15
30 – 39	5	25
40 – 49	6	30
50 – 59	4	20
60 or more	2	10
Total	20	100,0

The Table 1 shows that the distribution of values is more concentrated in the range 40-49. The concentration of values within the range 60 or more is the lowest among the other ranges. There are no extreme or abnormal (outliers) values.

In the context of the survey, the period of professional experience of teachers may be a relevant factor. Due to this reason, teachers were asked how many years they have been teaching. As regards the period of teaching experience of the participants, most teachers claim to have been teaching for 11-20 years. Other age groups that received a high frequency of responses were the age groups 6-10 and 21-30 years. The summary table below shows the distribution and frequency of teacher responses (Table 2). There are no teachers under the age of 21, which is the reason why the 18-20 range was not represented in the table.

Table 7

How many years have you been teaching?	Frequency	Percentage
1 or less	1	5
1 – 5	2	10
6 – 10	4	20
11 – 20	8	40
21 – 30	3	15
31 – 40	1	5
41 or more (43)	1	5
Total	20	100,0

In this case, the table shows a distribution of values that is highly more concentrated in the range 11-20 years. In this range, the greatest concentration of responses is observed, namely 8 answers.

The results emerging from the answers may help identify better teachers' experiences in the teaching field. The responses that have emerged enable a deeper comprehension, in conjunction with those provided to the other inquiries, of the educational background of teachers and the main details regarding their professional formation.

Figure 1
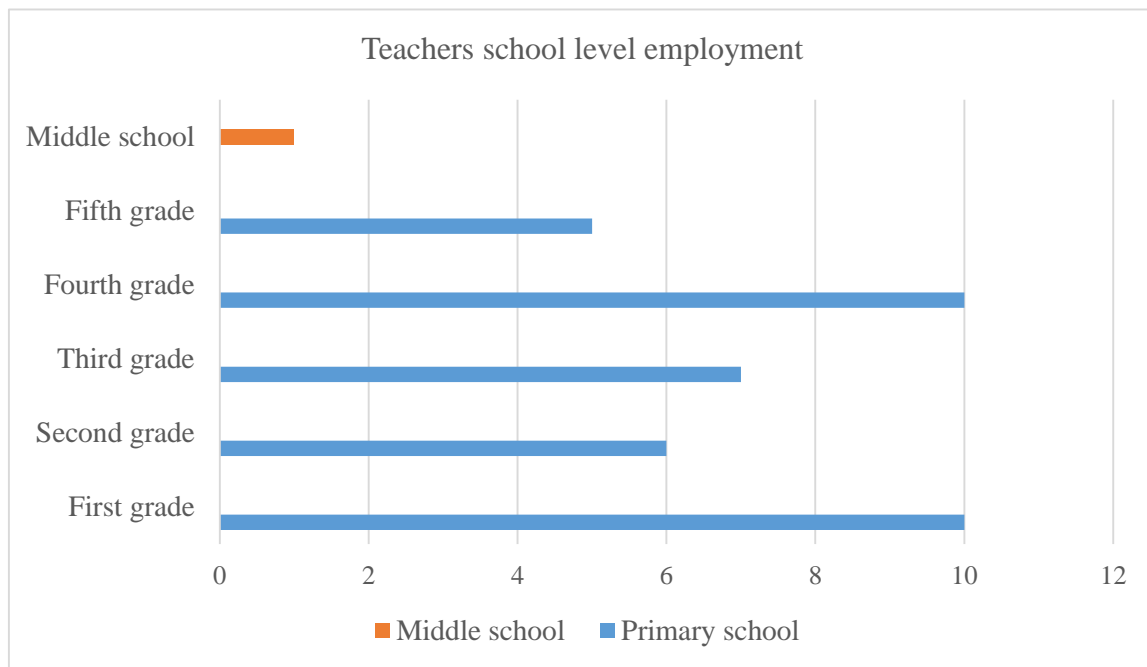
The responses indicate that all teachers are employed in primary schools (100%). A single teacher also works at the middle school. There are no teachers employed in high school.

Regarding teachers' teaching disciplines, the findings suggest that the majority of teachers impart mathematics. History and geography are the subjects with the highest number of answers immediately after mathematics. Italian and CLIL sciences have reached 8 votes each. CLIL Art reached 7 answers, positioned immediately below. Both Science and CLIL Geography were selected by 6 teachers each.

The disciplines that received the lowest number of votes are English, PE, IT, and CLIL IT. On the other hand, the disciplines which have 0 answers are Music and CLIL PE (Physical Education).

Figure 2
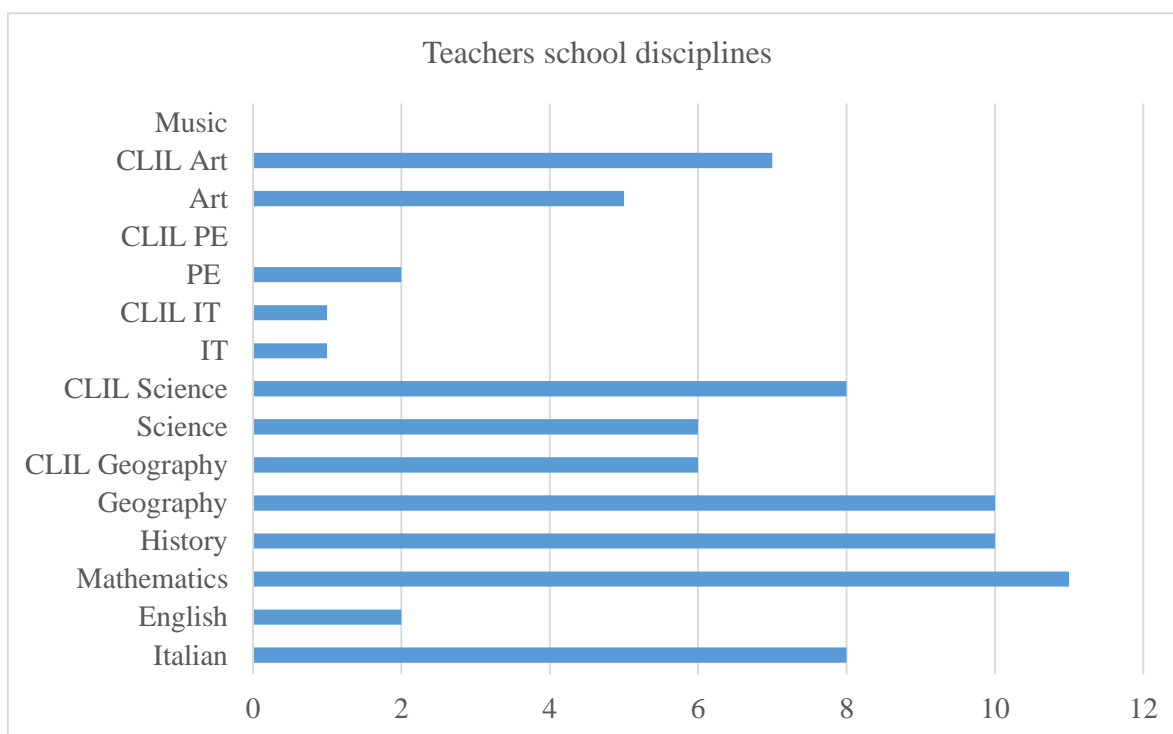
Since the questionnaire and the study in general concern co-teaching in the CLIL method, other specific questions were addressed to teachers. Information such as those presented below can help not only to identify the survey population but also to understand and justify the responses to subsequent questions.

It can be useful to know whether the participants in the research are native English speakers and/or possess an English certificate, including the level attained.

The 10% of the participants in the study are native English-speaking teachers. Other teachers have certification in English language with the following levels:

- B1 (20%);
- B2 (30%).

On the other hand, the 40% of teachers do not possess any language certification. The results are presented in the table and representation below.

Table 8

English certificate possession	Frequency	Percentage
B1	4	20
B2	6	30
C1	0	0
C2	0	0
Native speaker	2	10
No certificate	8	40
Total	20	100,0

Figure 3
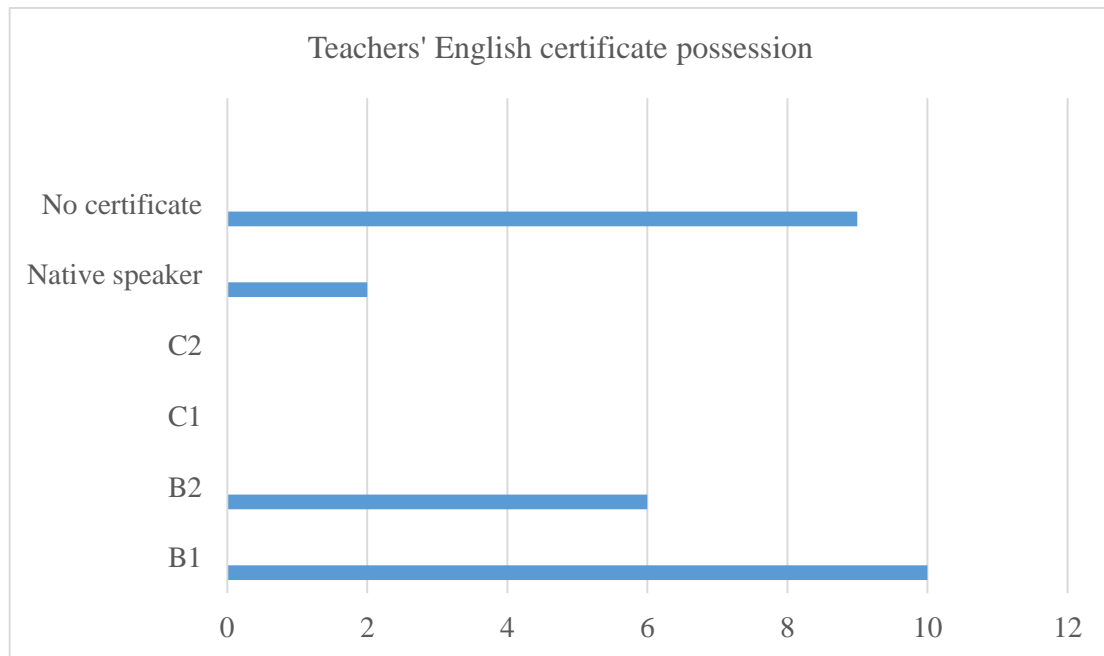
The answers to the following questions provide confirmation of the number of English-mother-tongue teachers within the questionnaire respondent group. According to the findings, the group of twenty teachers includes two educators who are native speakers. They constitute 10% of the respondents to the questionnaire. The comparison of the data in Table 3 and Table 4 confirms what has just been stated.

Table 9

Native speaker	Frequency	Percentage
Yes	2	10
No	18	90
Total	20	100,0

The last aspects that may be of interest for research purposes may be teacher experience and CLIL training, since the research itself focuses on co-teaching in the teaching and integrated learning of language and content.

Based on the results of the questionnaire, it appears that precisely 50% of the teachers enrolled in the study are CLIL teachers. As a result, 10 out of 20 teachers are CLIL-specialised teachers. The pie chart depicted in Figure 4 clearly illustrates the distribution of responses to this inquiry.

Figure 4
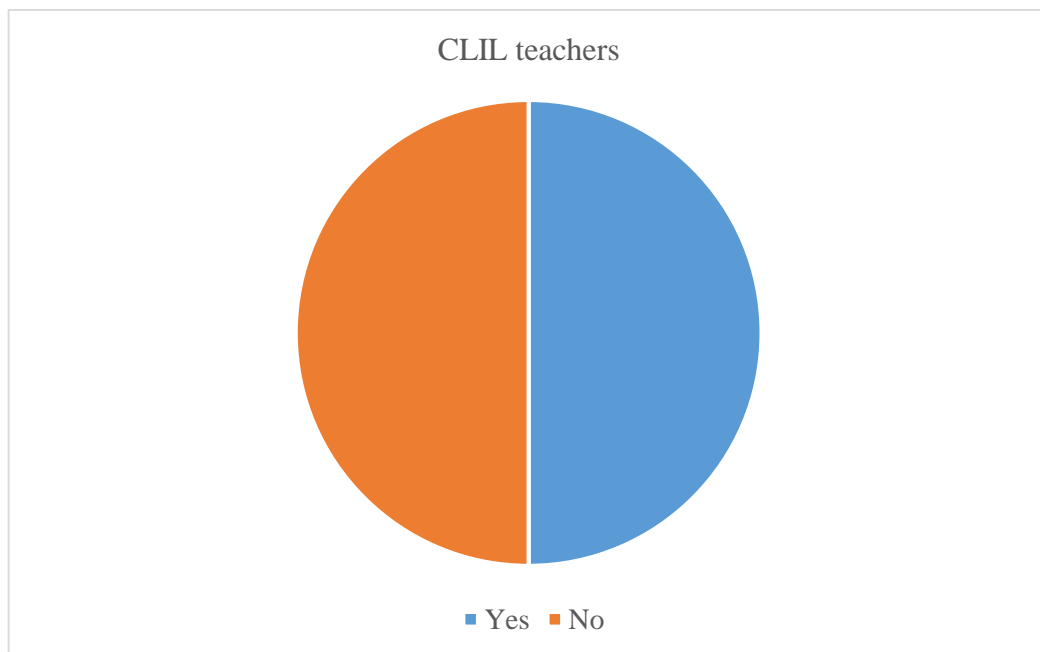
Teachers who have attended a CLIL training course are 5%, as shown from the above table and pie chart. The results indicate that 13 teachers have attended a CLIL training course and have therefore received adequate preparation for the use of this practice.

Table 10

CLIL training course	Frequency	Percentage
Yes	13	65
No	7	35
Total	20	100,0

Figure 5

Teachers who attended a CLIL training course

■ Yes ■ No
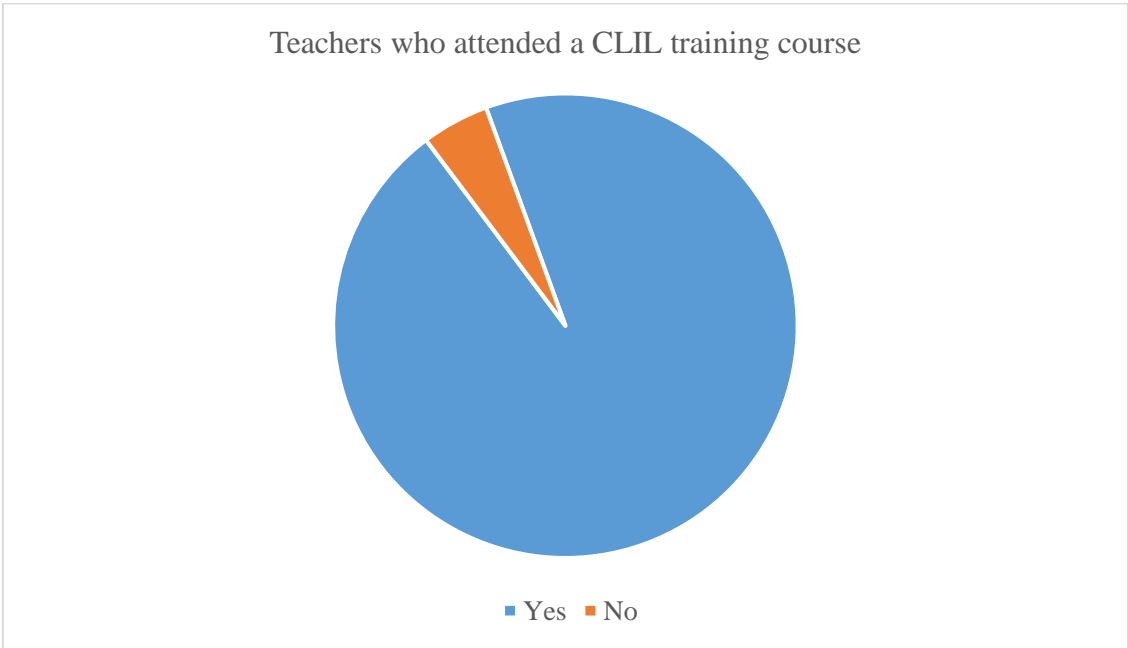
The data presented in Table 5 and Figures 4 and 5 may be cross-referenced since they provide additional consideration about the preparation of teachers engaged in primary school research. It is evident from the results that the number of teachers who have participated in a training CLIL course is higher than the number of teachers who are actively engaged in CLIL teaching.

After presenting the main information concerning the teachers who participated in the research, it is now possible to go into the details of the study.

The questions presented in the second section of the questionnaire are intended to examine the prior experiences of teachers in the field of co-teaching. The inquiries of this section want to deepen if primary school teachers have experience in co-teaching practice. The

information collected pertains to the context of experimentation and the colleague(s) with whom this teaching practice has been experienced with.

"Have you ever experienced co-teaching?" is the initial question of this section. The result reported that 95% of teachers have tried co-teaching practice. Therefore, this information indicates that 19 out of 20 participants had the opportunity to implement this type of teaching at least once. It is interesting to note that almost all of the participants had experience teaching with one (or more) teachers.

Figure 6

Teachers who have experienced co-teaching

■ Yes ■ No
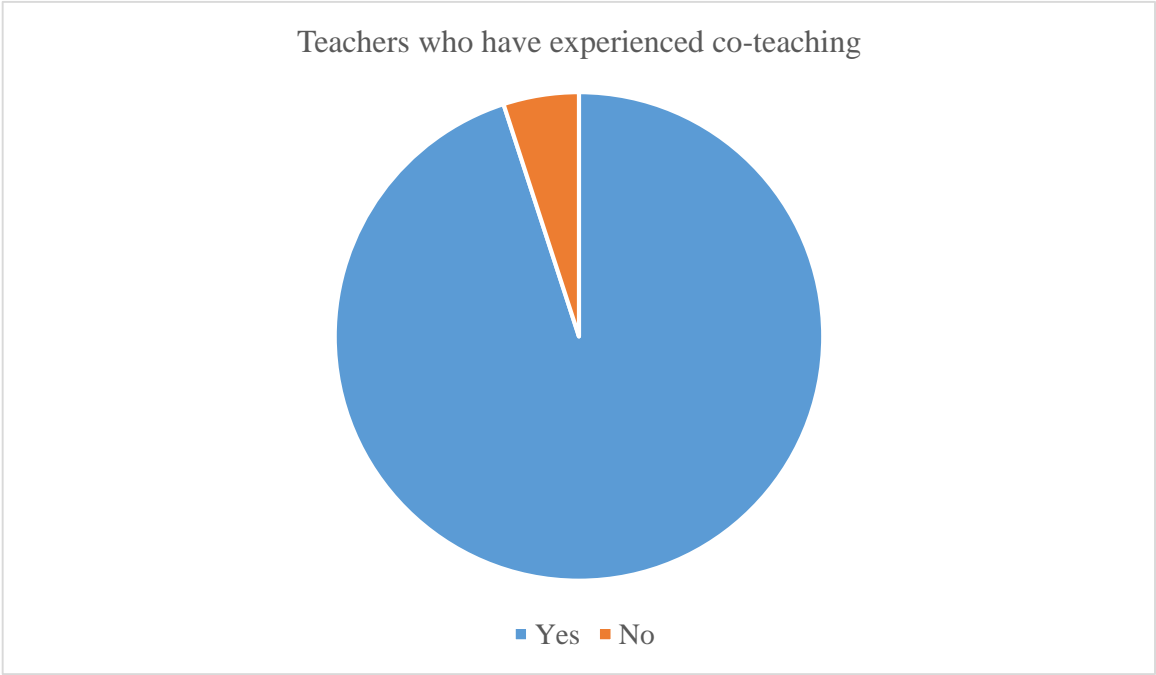
The second question concerning the experience of teachers relates to the context in which co-teaching was used. Specifically, as indicated by the answer categories presented in Table 6. The participants indicated one or more answers between primary school, secondary school, and high school. Teacher who never experienced co-teaching had the opportunity to select "I have never experienced co-teaching" as option. The resulting percentage numbers indicate that all teachers involved in the study used co-teaching in primary school (100%). This fact confirms what is stated in the part of Chapter III dedicated to the participants in the questionnaire, where it is stated that there are 20 of them working in primary school. In addition, an element strikes attention when reading the answers. One of the 20 teachers selected the answer "middle school". According to the results, the survey respondents comprise:

- teachers who have all experienced co-teaching in primary school;
- one teacher who also had the opportunity to experiment with this in middle school.

Table 11

In what context did you experience co-teaching?	Frequency	Percentage
Primary school	20	100
Secondary/middle school	1	5
High school	0	0
I never experienced co-teaching	0	0

Those who have never experienced co-teaching have the opportunity to express their thoughts by stating whether they would like to experience co-teaching. The results that emerge from this question are affirmative since 100% answered "yes" to the question "If you have never experienced co-teaching before, would you like to try it?".

The results related to the following question provide information about the number of teachers who utilized co-teaching during the current academic year. Consequently, the emerging data indicates how many participants involved in the study who were engaged in co-teaching practice at the time of data collection, and they hold significant value for this study. The responses to the questions "Are you utilizing co-teaching during this academic year?" show that 80% of respondents are using co-teaching in this school year (16 out of 20 teachers). Therefore, the majority of respondents are engaged in teaching collaboration with another educator.

Figure 7

Teachers who are using co-teaching during this academic year

■ Yes ■ No
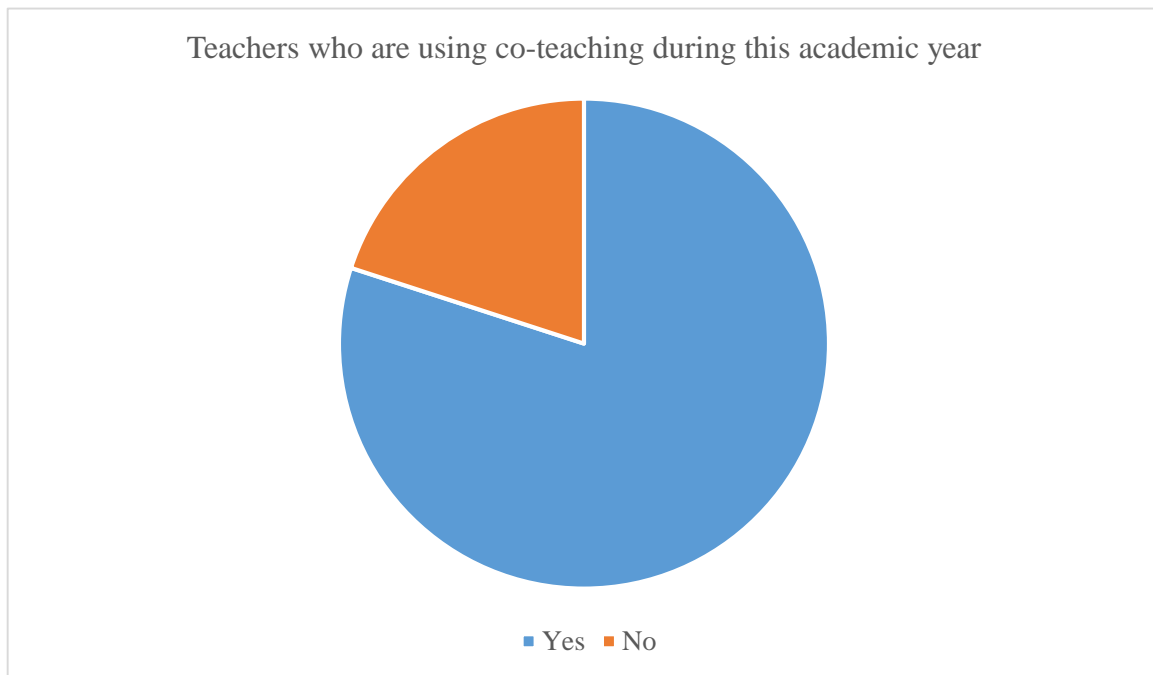
Finally, the respondents clarified which collaborators they used this practice with. The majority of teachers, namely 55%, answered "native speaking teacher" to the question "With whom have you experienced co-teaching?". Another response that received a significant number of votes was "discipline teacher", which garnered 35% of responses. The answers that have collected the lowest number of answers are:

- "support teacher" (15%);
- "intern" (15%);
- "I have never experienced co-teaching" (5%).

The distribution of the results is visible in the table below and is attributed to the nature of the reference population of this study. In other words, the prevailing characteristic among the respondents is that they work in a school that employs co-teaching and the CLIL method. Therefore, it is natural that the most frequent answers are those that include the two figures involved in co-teaching, namely the discipline teacher and the native speaking teacher.

Data on collaboration with an intern in teaching and the support teacher are also important. Both the aforementioned options received 3 out of 20 votes each from the participants in the questionnaire. This indicates that, although it is less frequent, some teachers have experienced co-teaching with a support teacher and an intern.

The only respondent who selected the option "I have never experienced co-teaching" confirms the result of the initial question in this section, namely that 1 out of 20 respondents never experienced co-teaching (as depicted in Figure 7).

Figure 8
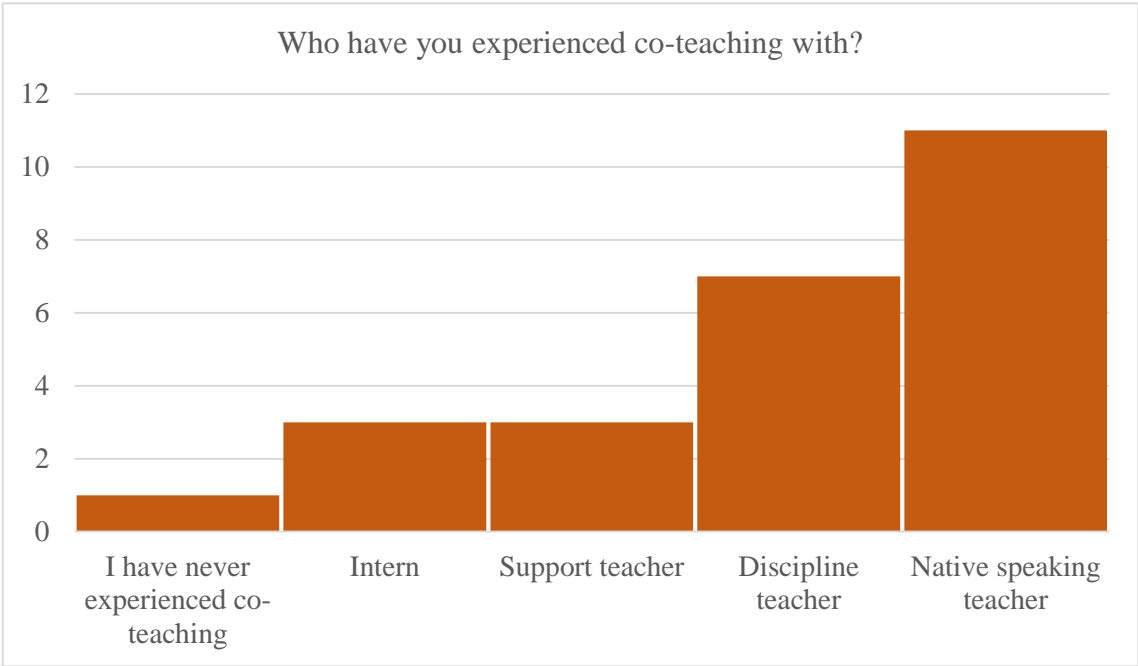
4.2 First research question: Teachers' perceptions about collaborative dimensions of co-teaching

The next section has the aim to answer to the research questions, namely "How do teachers perceive collaborative dimensions of co-teaching?".

The purpose of these brief introductory lines is to give an overview of the statistical measures employed to obtain the results and their organization in the tables provided in following pages. The study considers different statistical indicators in order to analyse the results emerging from the responses in a comprehensive manner. The use of mean, mode, median, and IQR (acronym that stands for interquartile range) provides an overview of the data collected from general to specific. In particular, the mean and mode are numbers that express the distribution of the values that teachers have assigned to the statements of the various

sections. Mean, mode and median are measures of central tendency (of position). IQR is a measure of variability.

The mean measures and expresses the central tendency of the answers to each item. The mode refers to the value of the central tendency, which is the most prevalent measure within a given dataset. The mode value is not sufficiently accurate to convey information about the answers' distribution as a unique measure, which is why it is associated with other statistical measures.

In order to provide additional information about the items and to facilitate the analysis of teachers' responses, the median and interquartile range were included in the tables (see Tables 12, 13, and 14). Furthermore, the use of the Likert scale has led to the inclusion of the median and interquartile range in statistical measurements. The Likert scale in fact includes qualitative ordinal characters, since 0, 1, 2, and 3 are ordinal data. Consequently, the respondents assess the level of agreement or disagreement with a specific statement.

In order to make it easier to identify the items with the highest mean in each category of the two sections and to facilitate the analysis of the tables of data, a specific colour was selected. The item with the highest mean, thus, was highlighted in bold.

The same modality of responses' analysis will be adopted for the categories of Section 4.3.

In the subsequent sections, the responses provided by the teachers will be examined in detail.

This paragraph focuses on the results regarding the third section of the questionnaire, which is dedicated to the 15 items related to teachers' perceptions about Pedagogic-didactic Principles and Fundamentals of Co-teaching. As previously stated in Chapter III (see Section 3.4.3), the set of items was divided into 3 specific categories, which results will be analysed in the next paragraphs. The items have been grouped and subdivided according to the main subject they deal with. This part of the study aims to explore the responses of the teachers in order to answer to the first research question about how teachers perceive the collaborative dimensions that characterize co-teaching practice. The significance that participants attributed to individual items, question by question, will now be examined in greater detail.

4.2.1 Principles and Fundamentals of Co-teaching

Table 12 Descriptive Statistics of Principles and Fundamentals of Co-teaching.

Item	Number of respondents : 20				Statistical data			
	0	**1**	**2**	**3**	**Mean**	**Mode**	**Median**	**IQR**
	«Strongly disagree»	**«Slightly agree»**	**«Quite agree»**	**«Strongly agree»**				
1. Collaboration and sharing are fundamental principles in the practice of co-teaching.	0	0	6	14	2,70	3	3,00	0,00
2. Mutual respect and dialogue must form the basis of the relationship between the two teachers.	**0**	**0**	**4**	**16**	**2,80**	**3**	**3,00**	**1,00**
3. The two teachers are two figures at the same level and have equal authority in the classroom context.	0	1	5	14	2,65	3	3,00	1,00
4. Both teachers are responsible for the results of the collaborative effort, whether positive or negative.	**0**	**0**	**4**	**16**	**2,80**	**3**	**3,00**	**1,00**
5. Students have to consider the two teachers as two figures at the same level and with equal authority	**0**	**0**	**4**	**16**	**2,80**	**3**	**3,00**	**1,00**
14. Co-teaching promotes inclusion.	0	4	7	9	2,25	3	2,00	1,00

The first category comprises 6 items related to principles and fundamentals of co-teaching. As Table 7 illustrates, items #2, #4 and #5 had the highest mean of 2,80. The mode

and median values are respectively of 3 and 3,00. It is evident from the data collected in the table that 16 out of 20 teachers strongly agree with these statements. Thus, the items highlighted in bold are the statements about which students agreed the most. This shows that the majority of respondents gave these questions a positive response.

On the other hand, item #14 had the lowest of the category. Item #14 deals with a topic that has been extensively covered in previous chapters, specifically the inclusion theme in the context of co-teaching. Although 9 out of 20 respondents fully agree with the statement, the mean is lower than all other items (2,25). This aspect is connected to the fact that the other teachers expressed a slight agreement (4 respondents) and quite agreement (7 respondents) with the matter. In other words, the respondents answered the question in a more variable way. It follows that teachers do not all give the same weight to inclusion aspect. The median value thus is 2,00.

To summarize, the statements with the highest mean are: item #2, item #4 and item #5 (2,80).

4.2.2 Planning and Teaching Objectives

Table 13 Descriptive Statistics of Planning and Teaching Objectives.

Item	Number of respondents : 20				Statistical data			
	0	1	2	3	Mean	Mode	Median	IQR
	«Strongly disagree»	«Slightly agree»	«Quite agree»	«Strongly agree»				
6. The educational design of the contents is equally distributed between the two teachers.	1	3	4	12	2,35	3	3,00	1,00
7. The objectives set out in the programming stage and the timescales for achieving them are generally respected.	0	1	11	8	2,35	2	3,00	1,00
8. The objectives established during the teaching planning by the teachers can be specific and personalized.	**0**	**2**	**5**	**13**	**2,55**	**3**	**3,00**	**1,00**

The Table 8 shows the results about the planning and teaching objectives items related to principles and fundamentals of co-teaching. Item #8 has the highest mean, mode and median values of 2,55, 3 and 3,00, respectively. This data suggests that teachers strongly agree with the fact that the objectives set out in teaching planning stage can be specific and personalised. Item 7, by contrast, got the lowest mean, mode, and median values of all three items in the category. The mean, mode and median values are, respectively, 2,35, 2, and 2,00. Item #6 was not selected as the item with the lowest mean, as it has higher mode and median values with respect to item #7 (which was selected as the item with the lowest values). Therefore, item #6 has a mean of 3 and median of 3,00. The different mode and median values of items #6 and #7 depend on the teachers' responses. In the case of item #6, in fact, the answers were more variable (see Table 8).

4.2.3 Classroom Management and Interaction

Table 14 Descriptive Statistics of Management and Interaction.

Item	Number of respondents : 20				Statistical data			
	0 «Strongly disagree»	1 «Slightly agree»	2 «Quite agree»	3 «Strongly agree»	Mean	Mode	Median	IQR
9. Class management is an activity equally shared between the two teachers.	0	4	3	13	2,45	3	3,00	1,00
10. Communication with students is crucial.	**0**	**0**	**7**	**13**	**2,65**	**3**	**3,00**	**1,00**
11. The discussion and dialogue with the students concern both teachers.	0	1	6	13	2,60	3	3,00	1,00
12. Group and pairs activities are useful for the experimentation of the language and for the development of learners' learning and autonomy.	0	1	7	12	2,55	3	3,00	1,00
13. The use of technological supports and multimedia materials (images, videos, audio tracks, interactive exercises, slides, etc.) facilitates learning.	0	0	11	9	2,45	2	2,00	1,00
15. The possibility to vary the arrangement of the desks and the organization of the spaces during the year is useful for socialization and collaboration between students.	**0**	**0**	**7**	**13**	**2,65**	**3**	**3,00**	**1,00**

In the table above (Table 9) there is a summary of the results related to the management and interaction category. The category includes 6 items. The items #10 and #15 are the ones with the highest means, both of 2,65. 13 respondents out of 20 stated they strongly agree with the statements. On the contrary, Item 13 has the lowest mean, mode, and median values of 2,45, 2, and 2,00. Although item 9 has a mean of 2,45, the mode and median values are higher than those of item 13. Therefore, item 9 was not selected as the item with the lowest mean.

4.3 Second research question: Teachers' perceptions about assessment stage in co-teaching practice

This part explores the results of the fourth section of the questionnaire, which includes 9 items on teachers' perceptions of evaluation practices and the evaluation criteria in co-teaching. The participants therefore expressed their level of agreement on the issues just mentioned.

In Chapter III (Section 3.4.4), the 4 distinct categories into which items have been divided have previously been explained. The categories regard Evaluation and Co-teaching. As with Section 4.1, the answers of the teachers have been analyzed using media, mode, median, and IQR. The results of the items will be considered in the following paragraphs. The purpose of this section is to observe the responses teachers provided in order to be able to answer the second research question, "How do teachers perceive assessment stage in co-teaching practice?". The perceptions and importance that teachers attach to items in this category will be explored more clearly in the subsequent paragraphs.

4.3.1 General Evaluation Practices

Table 15 Descriptive Statistics of General Evaluation Practices.

Item	Number of respondents : 20							
	0	**1**	**2**	**3**	**Mean**	**Mode**	**Median**	**IQR**
	«Strongly disagree»	«Slightly agree »	«Quite agree»	«Strongly agree»				
16. The assessment practices are attributed to both teachers equally.	0	4	9	7	2,15	2	2,00	1,00
17. Regular meetings are needed in order to manage the teaching planning and evaluation.	0	1	6	13	2,60	3	3,00	1,00
22. Individual and group behaviour are considered in a student's final learning assessment.	0	2	10	8	2,30	2	2,00	1,00
23. The direct observation of students is important in learning assessment.	**0**	**0**	**7**	**13**	**2,65**	**3**	**3,00**	**1,00**

The table illustrates the results concerning the general evaluation practices used by teachers during co-teaching and their perception about them. Item #23 has a mean of 2,65 and it is the statement about which teachers agreed the most. As a consequence, it is the statement with the highest mean. 13 out 20 participants strongly agree with it and the remaining 7 quite agree with it. The distribution of responses justifies the mode and median values (3 and 3,00). Item #16 conveys the notion that assessment practices can be attributed to both teachers in equal measure and it has, instead, the lowest mean among the items of this category (of 2,15). The majority of the participants quite agree with the statement and the mode value (2,00) confirms this data. The results suggest that the direct observation of students in the context of co-teaching with CLIL could be further explored since it is significant to teachers.

4.3.2 Content and Language Evaluation Criteria

Table 16 Descriptive Statistics of Content and Language Evaluation Criteria.

Item	Number of respondents : 20				Mean	Mode	Median	IQR
	0	1	2	3				
	«Strongly disagree»	«Slightly agree »	«Quite agree»	«Strongly agree»				
18. The assessment criteria for learning should focus on the acquisition of content, leaving the linguistic aspect in the background.	2	6	8	4	1,70	2	2,00	1,00
19. The assessment criteria for learning should cover both the content acquired, and the language concepts developed in equal measure.	1	4	7	8	2,10	3	2,00	1,00
20. The assessment should focus more on knowledge of content rather than on the grammatical correctness of language.	0	5	5	10	2,25	3	2,50	1,00
21. The language assessment should focus more on the vocabulary rather than on the correctness of grammar and spelling.	1	4	11	4	1,90	2	2,00	0,00
24. The assessment techniques used by teachers must be differentiated and customized for students with BES (Special Educational Needs).	**0**	**1**	**8**	**11**	**2,50**	**3**	**3,00**	**1,00**

As Table 11 illustrates, item #24 in the Content and Language Evaluation Criteria category had the highest mean (of 2,50). Additionally, its mode and median values (of 3 and 3,00) are the highest. On the other hand, item #18 had the lowest mean value (of 1,70). The difference between the mean values of the most supported item (#24) and the one less supported by teachers (#18) is significant. Consequently, teachers find the personalization and differentiation of assessment techniques for students with BES very significant.

4.3.3 Planning and Coordination

Table 17 Descriptive Statistics of Planning and Coordination.

Item	Number of respondents : 20							
	0	**1**	**2**	**3**	**Mean**	**Mode**	**Median**	**IQR**
	«Strongly disagree»	«Slightly agree »	«Quite agree»	«Strongly agree»				
17. Regular meetings are needed in order to manage the teaching planning and evaluation.	0	1	6	13	2,60	3	3,00	1,00

As shown in the table above, a single item belongs to the planning and coordination category. The mean of the item #17 is 2,60. The majority of the respondents (13 out of 20) strongly agreed with the necessity of regular planning and evaluation meetings. The other respondents are quite (6) and slightly (1) in agreement with the statement. The mode and median values confirm the previous assertion.

4.3.4 Personalization of Teaching

Table 18 Descriptive Statistics of Personalization of Teaching.

Item	Number of respondents : 20				Mean	Mode	Median	IQR
	0	1	2	3				
	«Strongly disagree»	«Slightly agree »	«Quite agree»	«Strongly agree»				
24. The assessment techniques used by teachers must be differentiated and customized for students with BES (Special Educational Needs).	0	1	8	11	2,50	3	3,00	1,00

The table illustrates the results concerning the personalization of teaching in co-teaching and their perception about it. Item #24 is the only item pertaining to this category. It has a mean of 2,50 and 11 out 20 participants strongly agree with it. The remaining 9 have different perceptions about the importance of this aspect: 8 quite agree with it and 1 slightly agree with it. The distribution of the responses given by the participants explains the mode and median values, respectively 3 and 3,00. The majority of the participants thus find this aspect significant in co-teaching evaluation context. The item #24 states that teachers have to implement assessment techniques that consider personalization and differentiation for students with BES.

4.4 Teachers' perceptions about co-teaching practice: Experiences, barriers, assessment

This part of the chapter discusses the data collected in the sixth section of the questionnaire. The responses of teachers consider issues that have been addressed in the preceding sections of the questionnaire. These themes have been previously described in Chapter III (see Section 3.4.5).

1. Based on your personal experience, what do you think about the use of co-teaching in primary school?
2. What are the possible barriers to the implementation of co-teaching/co-presence teaching?
3. The evaluation in co-teaching takes into consideration the learning process of each student, considering its potential, path taken, autonomy acquired and ability to collaborate. What is your opinion on this matter?
4. Do you have any personal thoughts about your co-teaching experiences during your career or during your training period?

Respondents had the option to dedicate a few minutes of their time to provide some supplementary information useful for the purpose of the research. These final questions are intended to bring to light the teachers' personal perceptions of the themes already explored in the previous sections of the questionnaire. They consist of perceptual aspects that may not fully emerge from closed questions. The answers to open-ended questions may also justify answers to closed-ended questions.

Each question allowed the respondents to use many lines to express their opinions and thoughts. Indeed, respondents can provide an elaborate and extended text by using the option "Paragraph" in Google Forms. This feature allows respondents to express their ideas with no limitations, in contrast to a short answer, which instead offers limited answer options.

4.4.1 Co-teaching in primary school: Teachers' perceptions

The first question focuses on the personal experiences of teachers, as they are asked expressing their opinion about the implementation of co-teaching practice at school. Specifically, the question concerns co-teaching in primary school. "Based on your personal experience, what do you think about the use of co-teaching in primary school?", this is the full first facultative question.

Half of the participants in the study (10 individuals out of 20 participants) contributed to the research by inserting interesting and valuable information aimed at deepening teachers' perceptions.

Table 19

Based on your personal experience, what do you think about the use of co-teaching in primary school?
1. It is an excellent technique to encourage both the learning of the language and the contents of the subject. It is also a great experience when fostering synergy between teachers.
2. I believe that it offers greater opportunities for a teaching practice more focused on active learning by the student, thus emerging more frontal-oriented methodologies.
3. It can be a valuable resource as well as a significant waste of time. It greatly depends on the commitment of the teachers and the programming.
4. I think it gives you the opportunity to see what the other person does not see and vice versa. It is an important opportunity for sharing.
5. It is a good method to compare and deepen content and methodologies.
6. It is an opportunity for discussion and enrichment.
7. I think it is functional to learning.
8. Very useful for class management.
9. Fundamental.
10. Very useful.

The majority of statements emphasize the positive aspects of co-teaching in primary school. Statements 1 and 7 highlight the students' benefits of learning through co-teaching. The respondents stated that co-teaching is a functional approach that promotes both language acquisition and the contents of the subject. In addition, teachers believe that this teaching practice is more focused on active learning by the student than traditional (frontal) practice. It is important to highlight that co-teaching, in the research context, is used in association with CLIL. The answers given by this teacher is therefore even more significant. The chance to

access new content through a new language may be greatly beneficial for learners. According to Coyle (2009), thus, it is possible "through another cultural lens". Furthermore, Fazzi and Menegale (2017) in their study about the implementation of CLIL with primary students stated that CLIL approach fits the primary school curriculum since it helps students to develop intercultural competence.

On the other hand, many respondents highlight the benefits teachers can have from the use of this practice, such as personal enrichment and the opportunity for sharing and discussion. These elements encourage the development of a synergy between teachers and allow the success of co-teaching. Ghedin and Aquario (2016) argue that in the practice of co-teaching teachers' efforts foster mutual learning among teachers. The ability to constantly confront a colleague and work together allows the teachers to understand better the educational and content choices as well as the methodologies adopted by the other co-teacher. Furthermore, collaboration makes it possible to understand the needs and motivations underlying the choices of the other teacher. Regarding the aforementioned aspects, a research participant stated that co-teaching offers teachers "the opportunity to see what the other person does not see and vice versa".

One of the comments stresses the two sides of co-teaching. One teacher believes that this practice "can be a valuable resource as well as a significant waste of time", attributing the cause of variability to the commitment that teachers dedicate to teaching and programming.

The shorter observations (statements 8, 9 and 10 of the Table) confirm the importance of this practice as very useful, even for the organization of the class, and even fundamental.

4.4.2 Third research question: Possible barriers to co-teaching and co-presence implementation

The optional question considered in this paragraph is "What are the possible barriers to the implementation of co-teaching/co-presence?". Nearly half of the teachers responded to the inquiry, specifically 9 teachers. One out of 9 respondents stated "I have never encountered such limits" while utilizing co-presence. Other respondents highlighted issues that may limit the use of co-teaching.

In order to obtain an overview of the elements that teachers may consider as barriers to co-teaching implementation, their responses have been summarized and collected in the following table.

Table 20

What are the possible barriers to the implementation of co-teaching/co-presence?
1. High difference in didactic visions.
2. Incompatibility of character and relationship between teachers.
3. The need for prominence evident on both sides.
4. The low ability of teachers to demonstrate empathy, dialogue, and collaboration.
5. Pupils' difficulties in recognizing teachers.
6. Mutual respect for roles.
7. The effective management of the class.
8. Economic and human resource limits.
9. Costs and creation of schedules.
10. Collaboration.

Teachers could reflect on what may be the factors that limit the use of teaching in co-presence and reported them in the answers. The identification of barriers that limit the effective implementation of co-teaching is crucial since it allows, consequently, developing solutions to remove them.

Based on the data collected and discussed in the previous paragraphs, we have found that 80% of participants practice co-teaching this current year and that 95% say they have experienced co-teaching in their work experience at school. As a result, the information collected in this section of the questionnaire revealed the limitations that most respondents have encountered when implementing co-teaching practices. At the same time, we find in the answers the barriers that may have prevented that 5% of respondents have not yet experienced co-teaching.

As mentioned in Chapter II, there may be several obstacles to the realization of co-teaching with different origins. Limitations have been identified in order to break down barriers

to the use of co-teaching, with the ultimate aim of identifying the origin of such barriers. Research has defined two categories of obstacles, depending on their origin: environmental and individual obstacles (Chitiyo, 2017). Some barriers to the use of co-teaching emerging from current study are similar to those revealed from Chitiyo's research. In the discussion Section 4.2 the similarities of the results of both studies will be explained through correlations.

4.4.3 Co-assessment practice: Teachers' thoughts

The third open question aims to investigate the teachers' perceptions and thoughts on a specific topic, specifically the issue of evaluation in co-teaching. In order to gather the respondents' perspectives on the characteristics of the evaluation activity within this context, a definition was provided to enable them to formulate their own opinions.

The question is "The evaluation in co-teaching takes into consideration the learning process of each student, considering its potential, path taken, autonomy acquired and ability to collaborate. What is your opinion on this matter?". It received 9 answers. The responses were mostly brief and conveyed a consensus regarding the definition expressed in the question (5 answers out of 9). For instance, numerous sentences that respondents submitted in this section of the survey stated, "I agree", "I totally agree" and, "It is correct".

Another answer highlighted the significance of the elements mentioned in the phrase-input of the inquiry, namely the students' potential, their path, autonomy, and acquired skills by stating that all "These elements are important". Moreover, one teacher emphasized the importance of the characteristics of the evaluation activity, stating that the aforementioned features hold equal importance in the kind of teaching characterized by single teacher-students form (frontal lesson). The respondent thus stated agreement with the definition of the question and added that it is appropriate "as well as for a teacher alone". Therefore, the teacher believes that these elements are crucial not only for the co-teaching form, but also for the traditional teaching form.

The last two answers are slightly more articulated and express implications for the evaluation within co-presence practice. The responses of the participants are reported in the following list:

- "I believe that co-teaching offers more possibilities for evaluation";
- "I think that is correct where there is a common vision on both sides".

Respondents emphasize the advantages of evaluation through co-teaching, referring to the opportunities it offers for teachers working together in this setting. In addition, it is evident that the questionnaire participants consider it important that teachers share common perspectives on co-teaching and evaluation.

4.4.4 Teachers' personal thoughts about co-teaching experiences

The final optional inquiry centred on the personal experiences of teachers in co-teaching. The question is "Do you have any personal thoughts about your co-teaching experiences during your career or during your training period?". Six teachers answered this question and the following table collects in full their answers.

Table 21

Do you have any personal thoughts about your co-teaching experiences during your career or during your training period?
1. Personally, I was lucky and created a very positive and enriching work team. However, I have always been used to working in teams as I previously worked in a community for minors where the personal work and team educators were followed by an experienced therapist.
2. When effectively organized and managed, co-teaching is a method that offers great opportunities for methodological experimentation, which is consequently very positive for students.
3. I have always found the possibility of working in class with another teacher to be positive, since it allows you to look at the classroom context through a different lens.
4. I believe that co-teaching experiences lead to greater reflection and deepening, a distribution of the workload, and the possibility of constant confrontation among teachers.
5. Co-teaching experiences were opportunities for personal growth.
6. Co-teaching holds significant importance in terms of collaboration, relationships, and dialogue, as well as the comparison of diverse methodologies.

It will now be examined in detail which aspects of their co-teaching experiences teachers have decided to share in order to enrich their contribution to this study with personal perspectives.

The respondents stressed the importance of proper organization and management for the success of this type of teaching. Moreover, the creation of a positive and enriching work team for teachers is a crucial part of educators' teaching experiences. This element arises from the first answer in the table, and it is supported by an example of the respondent previous work experience.

Teachers expressed positive opinions regarding their previous experiences of co-teaching. Through the implementation of co-teaching, teachers have the opportunity to enrich their cultural, experiential, and working backgrounds. Respondents expressed their perspective, highlighting the great opportunities that co-teaching offers. These are potential occasions for teachers' personal growth and, at the same time, for varied methodological experimentation. Indeed, the skills of the two teachers represent a source from which they can mutually draw new knowledge.

The respondents emphasize the importance of teacher comparison. As we have already noticed in the course of this study, the exchange of feedback and the moments of comparison contribute to the creation of an efficient and collaborative relationship. Indeed, when teachers want to exchange perspectives and knowledge with each other, their collaboration becomes really effective. Furthermore, as a respondent stated, "co-teaching holds significant importance in terms of collaboration, relationships, and dialogue".

One of the teachers' comments that is truly interesting due to the meaning it reveals is "Working in class with another teacher allows you to look at the classroom context through a different lens". Colleagues who collaborate in teaching activities have the opportunity to draw on the knowledge and experience of their partner and vice versa. There are several enrichment and self-development opportunities. With regard to this aspect, it can be said that the practice of co-teaching is a teaching-learning process (Roth and Boyd, 1999). Those in the role of educators who provide notions, at the same time, learn knowledge from colleagues with whom they collaborate. The exchange of knowledge and perspective, thus, is a continuous process.

One of the questionnaire respondents stated that working together with another teacher is a beneficial experience for students since it is "very positive" for them. As previously demonstrated in Chapter II, teachers' collaborative teaching thus can have a positive impact on

learners. The research shows that students have found numerous benefits related to the exposure of models of collaborative teaching and co-teaching (Fazzi and Menegale, 2017; Ghedin and Aquario, 2023; Hang and Rabren, 2008).

Chapter V: Discussion of the results

5.1 Discussion of the results

The following paragraphs will analyse and discuss the data presented in the preceding paragraph of this chapter in relation to the research issues that this study intends to address. The data are considered by making associations among them in order to obtain a more complete picture of the survey situation. The discussion of the data is supported by the research literature, which was previously explored in the preceding chapters of this study.

5.1.1 How do teachers perceive collaborative dimensions of co-teaching?

This section examines the data collected in the part of the questionnaire that examined teachers' perceptions of co-teaching aspects, whose purpose was to determine how teachers consider this practice. Therefore, the ultimate aim is to comprehend which aspects they perceive to be the most significant. In order to comprehend more clearly which aspects teachers agree with and, consequently, which they consider most significant, it was pertinent to consider which items have achieved the highest mean values. The items with the highest mean, compared to the other claims, all comprise mode 3, median 3,00, and IQR 1,00. As previously noted in the tables pertaining to Section 4.2, the items with the highest mean values, are:

- items #2, #4 and #5 for Principles and Fundamentals of Co-teaching category;
- items #10 and #15 for Classroom Management and Interaction category;
- item #8 for Planning and Teaching Objectives category.

The following table reports the items and their related mean values. Furthermore, it is possible to resume the aspects on which teachers agree most about co-teaching through the observation of mean values' items.

Table 1

Items related to teachers' perceptions about co-teaching	Category	Resuming aspects	Mean
2. Mutual respect and dialogue must form the basis of the relationship between the two teachers.	Principles and Fundamentals of Co-teaching	Mutual respect and dialogue	2,80
4. Both teachers are responsible for the results of the collaborative effort, whether positive or negative.	Principles and Fundamentals of Co-teaching	Results responsibilities	2,80
5. Students have to consider the two teachers as two figures at the same level and with equal authority.	Principles and Fundamentals of Co-teaching	Equal authority for students	2,80
10. Communication with students is crucial.	Classroom Management and Interaction	Communication with students	2,65
15. The possibility to vary the arrangement of the desks and the organization of the spaces during the year is useful for socialization and collaboration between students.	Classroom Management and Interaction	Class space organization	2,65
8. The objectives established during the teaching planning by the teachers can be specific and personalized.	Planning and Teaching Objectives	Planning of personalized objectives	2,55

In order to provide a clear comprehension of the distribution of teachers' responses, a graphic representation has been developed and presented below. The histogram facilitates a more intuitive identification of the aspects that have achieved a higher mean and, consequently, on which themes teachers have found greater agreement.

Figure 1

Most important co-teaching dimensions based on teachers' perceptions
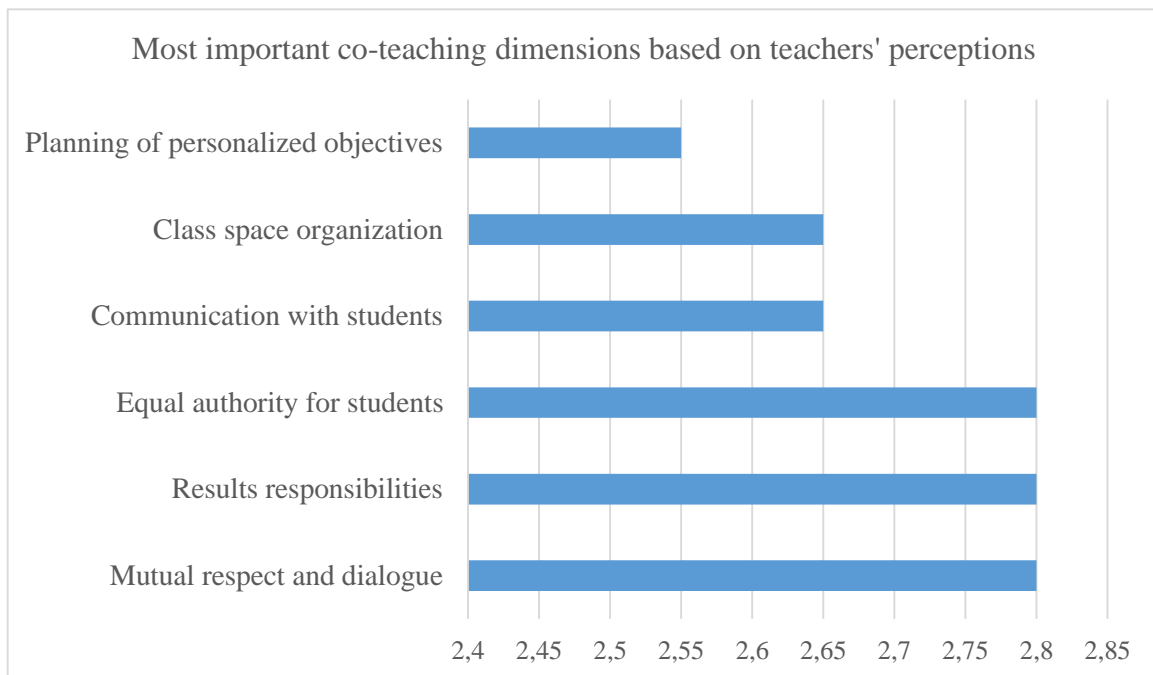
Respondents agreed that students should view the roles of teachers with equal importance and authority (item #5). The mean of the responses is 2,80, as shown in the above table and representation. This is one of the statements with the highest mean value. It is worth noting that, according to the participants' perception, it is more significant that the students consider the teachers at the same level than the teachers' equal consideration of themselves. Therefore, the participants are more in agreement that students have to consider educators with equal authority rather than considering their roles as equitable.

5.1.2 How do teachers perceive assessment stage in co-teaching practice?

As with teacher responses regarding the perception of aspects of co-teaching (see Section 5.1.1, Table 1), the opinions of questionnaire respondents regarding assessment in co-teaching were collected in a summative table. The items with the highest mean values in the various categories of the section on teachers' perception about evaluation in co-teaching were selected. The items that obtained the highest mean values, as already observed in the tables of the Section 4.3, are:

- item #23 for General Evaluation Practices category;

- item #17 for Planning and Coordination category;
- item #24 for both Content and Language Evaluation Criteria and Personalization of Teaching categories.

The arrangement of the items depends on the mean values derived from the responses, starting with the highest one. The answers were summarized in the column "Resuming aspects", in order to clarify the main topic of the teachers' statements.

Table 2

Items related to teachers' perceptions about assessment	Category	Resuming aspects	Mean
23. The direct observation of students is important in learning assessment.	General Evaluation Practices	Direct observation	2,65
17. Regular meetings are needed in order to manage the teaching planning and evaluation.	Planning and Coordination	Regular meetings	2,60
24. The assessment techniques used by teachers must be differentiated and customized for students with BES (Special Educational Needs).	Content and Language Evaluation Criteria - Personalization of Teaching	Differentiated techniques for BES students	2,50

The histogram presented below has the intent to provide the reader with a comprehensive overview of the teachers' responses to the statements and the related mean values.

Figure 2
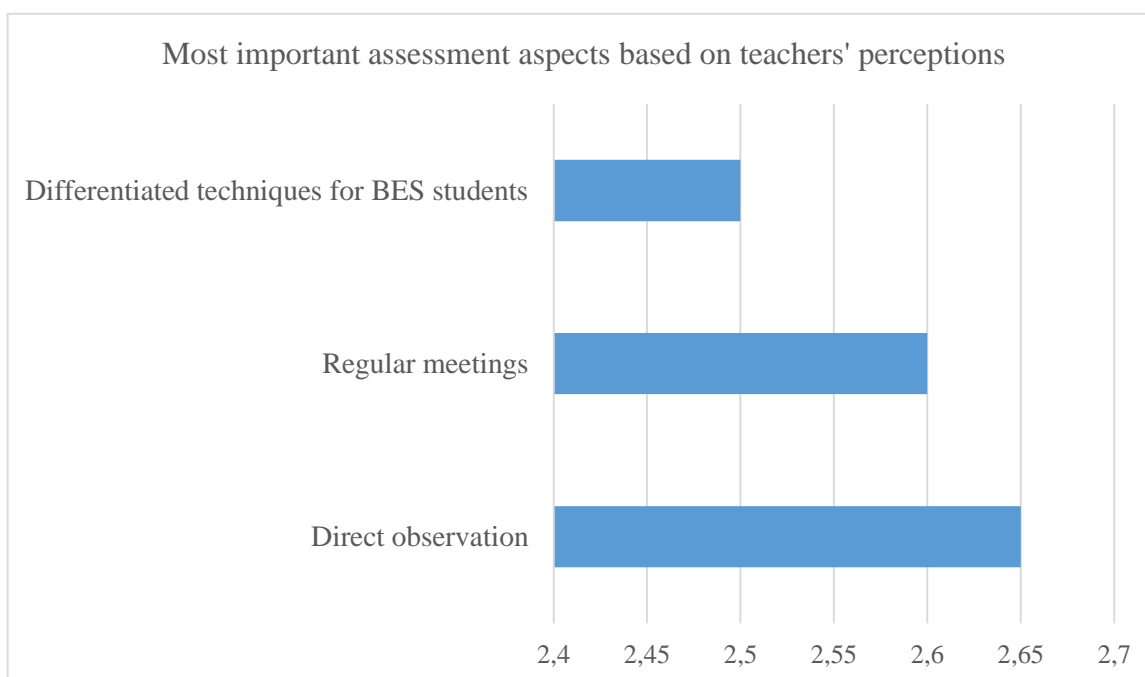
The results show that the co-teaching assessment aspect that teachers most agree on is direct observation (item #23). The item pertains to the category about the General Evaluation Practices. The mean is 2,65, which is the highest among all items about that section dedicated to assessment of the questionnaire (see Table 10). Direct observation by teachers can be very useful in the evaluation of content and language learning in the context of co-teaching. In order to monitor the results of the didactic path, teachers must be able to observe the behaviours and actions of their students. Every teacher has to develop the ability to observe students in class, starting from the first training period (D'Odorico, Cassibba, 2001). Nevertheless, the item regarding student behaviour did not reach a significant mean (2,30) to be included in the aforementioned table about the most voted assessment items.

Teachers agree that it is essential to organize regular meetings since they consider them to be a crucial component in the assessment of student learning. The corresponding item #17, related to Planning and Coordination category, has a mean of 2,60 and it is the second item that teachers most agree with. In order to address the assessment methods for content and language acquisition, colleagues must collaborate through the organization of meetings. It is important for teachers to be collaborative in all phases of co-teaching, including the assessment phase.

93

The results of the study by Ghedin and Aquario (2023) show that the majority of teachers involved in research share the management and development of evaluation procedures.

The differentiation of techniques students with BES (Special Educational Needs) is the main theme of the last statement of the table. Respondents agreed on item #24, since the mean value is 2,50. Although respondents use co-teaching in association with CLIL, teachers are more likely to agree with the need for personalization and differentiation of evaluation techniques than with the focus on content and/or language (items #18, #19, #20, and #21). Indeed, the item is included in both Content and Language Evaluation Criteria and Personalization of Teaching categories.

5.1.3 Which elements do teachers perceive as obstacles to the practice of co-teaching?

The answers to the question about the possible barriers to co-teaching implementation have been summarised in Section 4.4.2. In this part of the chapter, the intent is to identify the common responses among teachers with the intention of deepening them and grouping them into resuming categories. The total number of responses was 10, and the complete list can be found in Table 10.

In order to understand better the nature of the obstacles identified by teachers, it is possible to identify environmental and individual barrier of this research. Most of the obstacles identified by the questionnaire participants can be considered both environmental and individual, since they do not concern the individual teacher but both teachers. The respondent has encountered limitations in both his own work and in the work of his colleague (co-teacher). The respondents identified limitations involving attitudes of both sides involved in co-teaching (differences in educational visions, incompatibility due to different characters, the need for one teacher to dominate over the other and vice versa, the poor ability to empathy, dialogue and collaboration). In general, these elements are all attributed to the capacity for collaboration. On the other hand, environmental barriers can also be economic and resource barriers in general. In fact, 2 out of 10 educators have identified such limitations, referring to the lack of human and economic resources, costs, and the creation of schedules.

With the aim to summarize the limitations identified by the respondents regarding the utilization of co-teaching, the following table resumed the answers in categories:

Table 3

Resuming co-teaching barriers
Roles equality respect
Different didactic visions
Lack of ability to empathize, dialoguing and collaborating among teachers
Creation of school schedules
Management of the class
Students difficulties in recognizing teachers
Costs and (economic and human) resource limits

Teachers have identified several barriers, including different teaching perspectives, the creation of educational programs, resource limitations, and costs related to the implementation of co-teaching. Research concerning barriers to the utilization of co-teaching has collected results that may be easily related to the results of the optional open ended question of this questionnaire we are now analysing (Chitiyo, 2017).

The aforementioned study has demonstrated that co-teaching practice require considerable resources for its implementation. Similarly, some participants in this study indicated that such teaching practices necessitate resources for their success. Therefore, 2 teachers out of 10 emphasized the necessity for economic and human resources while, at the same time, recognizing the occurrence of costs to support co-teaching use at school. Unlike the study we are currently conducting, which incorporates open-ended questions to explore the obstacles to co-teaching practice, the research conducted by Chitiyo attempted to highlight co-teaching barriers by measuring them with a Likert-type scale regarding specific statements. The author has collected teachers' responses on the barriers and it emerged that some participants indicated they agree with the statement "Co-teaching requires a lot of resources". This result is consistent with that of our study, as it is common to think that co-teaching may require lots resources for its use. As a result, costs may be a barrier to co-teaching.

Respondents think that both teachers must respect the equality of roles. Unless agreed in advance between the educators, the role of a teacher should not predominate over that of a colleague in a co-teaching context. The mutual respect of roles is related to the support among teachers. Previous research has also highlighted the barrier of a lack of support among and from colleagues (Chitiyo, 2017). As highlighted in the table above, the participants in the questionnaire highlighted respect for the roles and the need for the teachers as possible barriers to the implementation of the co-teaching. Results from the closed questions portion of the questionnaire confirmed the significance of these components. In particular, item #2 pertaining to Principles and Fundamentals of Co-teaching category (Table 7) shows that the majority of teachers consider mutual respect to be fundamental. The statement "Mutual respect and dialogue must be the basis of the relationship between the two teachers" has one of the highest means of the items (2,80), with 16 teachers in favour of it out of 20.

Another limitation identified by the respondents is the possible difficulty of students recognizing the teachers. Teachers consistently agreed with the closed Likert scale question regarding perceptions about students' considerations regarding their co-teachers. Specifically, teachers have identified the item that states that students should consider the two teachers as two figures of equal level and authority (item #5) as one of the most important. The level of agreement is highly significant, as 16 teachers strongly concur with this statement. The mean value supports this perception among educators (2,80).

The participants observed that one of the limitations of co-teaching is the insufficient empathy, dialogue and collaboration among teachers. Without these fundamental assumptions, cooperation becomes ineffective, and the chances of success decrease. In this regard, as previously observed in Chapter II, Ianes and Cramerotti (2015) have identified empathy as one of the three conditions that can promote the success of collaboration between teachers, alongside acceptance and congruence. The relationship developed between teachers should be collaborative and reach synergy. The majority of teachers expressed agreement with this perspective. The closed question that states that collaboration is one of the fundamental principles in the practice of co-teaching (item #1) has 2,70 mean value, which is one of the highest means (Table 12). According to Chitiyo research, the results highlighted that teachers lack the necessary skills required in order to implement co-teaching. According to the results of the study, 42% of the participants believe that they do not possess the necessary skills to use effectively co-teaching (Chitiyo, 2017, Table 1, p. 61). The lack of empathy, dialogue, and

collaboration is closely linked to the different teaching visions of teachers. Indeed, teachers have also highlighted the differences in educational perspectives as a co-teaching implementation barrier. The authors Ghedin and Aquario (2016) also define the conflicts between teaching styles and, therefore, in general, the didactic and reflective visions as barriers to the implementation of co-teaching practices. The same abovementioned authors, with Di Masi (2013) thus noticed that obstacles in co-teaching implementation might be attributed in individual and personal factors of the co-teachers.

Teachers identified class management as one of the barriers to the implementation of co-teaching. This implies that if class management activity is not properly managed and shared among teachers, it may compromise the collaborative nature of the relationship between colleagues. Furthermore, the respondents also agreed on the importance of class management by answering closed questions. Item #9 states, "Class management is an activity shared equally between the two teachers", thereby confirming the previous assertions. Indeed, 13 teachers strongly agree with this sentence. Although the majority of respondents identified in the closed question that class management may be a potential obstacle to the implementation of co-teaching, the mean score for the corresponding item is not among the highest (2,45). In fact, the item has not been included in the list of statements on which teachers have expressed greater agreement, as illustrated in Table 1.

5.2 Conclusion

The results of the analysis of the participants' responses to the questionnaire revealed the dimensions of co-teaching on which teachers agree more with, and consequently, which aspects they consider more significant. The three dimensions perceived as most important by teachers are mutual respect and dialogue, responsibility for the results, and equal authority for students. The issues of mutual respect between teachers and the equality of roles have been repeatedly identified by respondents as important aspects in the context of co-teaching. Indeed, respondents highlighted respect and recognition for teachers' roles by both teachers and students in the section dedicated to identifying the barriers to co-teaching as possible obstacles. It is therefore evident that they are crucial for teachers, who have to be able to negotiate roles in teaching practice and respect each other. By doing this, students will be able to recognize their teachers as figures at the same level in the classroom context, thereby avoiding any

difficulties with their recognition. According to previous research, co-teaching contexts might lead teachers to believe that their colleagues could be invasive in their professional space, thereby preventing them from being appropriately supportive of sharing instructional responsibilities (Chitiyo, 2017).

Another dimension of co-teaching that research participants considered significant is the shared responsibility for results. As stated in the previous chapters of this study, the collaborative effort involves both co-teachers. Consequently, both co-teachers share the outcomes of the effort, regardless of whether they are positive or negative.

Teachers have identified classroom management as a potential obstacle to the implementation of collaborative teaching. They have to collaborate in this setting, reaching agreements and sharing ideas, spaces, and materials. The management of the class also encompasses the organization of the spaces. According to the results of the first section of this study, the arrangement of classroom space represents an important dimension for teachers. The first Chapter has extensively described the different models of co-teaching that teachers can adopt in the classroom, and the relative arrangements of desks for both students and teachers.

The teachers' responses emphasize the importance of considering the needs and characteristics of the students. Indeed, both in the section on the dimensions of co-teaching and the section on co-evaluation, respondents expressed a high level of agreement with the related items the differentiation and customization of teaching objectives and techniques. In particular, attention is given to the planning of personalized objectives for all students, with or without difficulty, and to the use of differentiated techniques for students with BES (Special Educational Needs). The fact that teachers consider personalization as an important aspect of programming and teaching practice indicates and supports the inclusive nature of co-teaching. The implementation of co-teaching in the school participating in the study is correlated with the CLIL approach. Consequently, the results about personalization and differentiation of both objectives and techniques acquire greater value. Teachers' perceptions emerging from the results indicate implicitly that inclusion is a crucial aspect of CLIL.

With reference to the relationship with learners, the results showed that communication with students holds significant importance for teachers. In the participants' answers to the study, emerged the significance of communication, as well as in the open questions related to the barriers to co-teaching. Teachers, in fact, have identified the insufficiency of the ability to convey empathy towards colleagues as one of the barriers to the implementation of co-teaching.

In addition to the lack of empathy, teachers have identified a lack of dialogue and collaboration. These are essential elements for the success of co-teaching, and their absence or scarcity can lead to an obstacle to its effective and efficient use. Collaboration as well as empathy and dialogue develop when co-teachers are able to find a balance between their teaching visions. The absence of a point of agreement in terms of educational visions, and therefore diversity, can be an obstacle to the implementation of co-teaching. Therefore, respondents to the survey have included this aspect as a potential obstacle to the use of this practice.

Direct observation was the aspect on which teachers demonstrated greater agreement regarding evaluation in co-teaching. Therefore, for teachers, direct observation is important in the context of co-teaching with CLIL. The ability to see the attitudes of students in the classroom, the way they communicate with teachers, and the way they communicate among themselves allows teachers to assess the communicative, content, and language skills of learners. The results indicate and imply the significance of teaching in presence, as it allows educators to see students directly in the context of the class. The degree of agreement among teachers regarding this issue leads to a reflection pertaining to the current topic of distance learning. The development of communication technologies and the succession of events at a global level - such as the 2020 pandemic - that have forced the population in recent years to carry out the usual actions from home, such as working and taking school lessons from home, have encouraged the spread of distance activities. In particular, distance learning has had repercussions in terms of direct observation of students because, unlike in-person teaching, distance teaching allows interaction only through a screen. Consequently, the interaction underwent changes and had to adapt to current needs. These considerations relating to the issue of observation in evaluation in co-teaching with CLIL could be deepened and serve as a starting point for further reflection. In the part of the questionnaire pertaining to the co-assessment dimension, the participants agreed on the significance of organizing regular meetings. The organization of meetings allows teachers to establish methods and criteria for the assessment of the learners' knowledge, considering the degrees of competence and knowledge of the students in both non-linguistic discipline and foreign language (Serragiotto, 2014).

Finally, teachers reported that the costs related to co-teaching and the limitations of human and economic resources related to it may be barriers to the use of co-teaching. The problem of costs includes implicit issues such as the training of properly trained teachers for co-teaching, the creation of school schedules and the creation and research of specific products

such as textbooks suitable for CLIL teaching. Indeed, teachers often have to find, adapt, and integrate teaching materials according to the cognitive and linguistic level of the learners (Serragiotto, 2014). Thereby, students have access to materials appropriate to their characteristics and abilities, and thus to personalized materials.

Based on both the questionnaire responses and the open-ended question answers, it can be inferred that the success of co-teaching depends on the sharing of collaborative visions among teachers. Therefore, teachers have to share what is called a "philosophy of collaboration", which transcends the mere and simple sharing of the same materials and teaching methods (Ghedin and Aquario, 2016). To summarize, teachers reported that the dimensions they consider most important in the field of co-teaching relate principally to collaborative practice: mutual respect, dialogue, responsibility for the results of the teaching practice and equality of teachers' roles. Furthermore, teachers perceive the organization of classroom space and the planning of personalized goals for students to be crucial aspects of co-teaching. With regard to co-assessment, the findings suggest that educators concur on the importance of co-teaching, which involves direct observation of learners, the scheduling of regular meetings, and the development of differentiated techniques for students with special needs. The results also indicate that the barriers identified by teachers mainly concern issues related to the relationship between teachers. The respect and recognition of roles between teachers, the divergence in educational visions among colleagues, and the lack of fundamental attitudes such as empathy, dialogue and collaboration are kind of barriers observed by teachers. Finally, class management, costs and limitation of human and economic resources are other kinds of obstacles to the implementation of co-teaching.

The results suggest ideas for improving co-teaching experiences for teachers, both in service and in training. For instance, teachers' training programs should prepare teachers to work together with a focus on the principles underlying the concept of collaboration, such as respect and responsibility. Co-teaching requires teachers to be collaborative with each other, promoting and supporting the implementation of co-teaching by sharing instructional responsibilities and decision-making practices (Chitiyo, 2017). According to Ghedin and Aquario (2016), it may be an effective solution for educators to identify a repertoire of good collaborative practices. Moreover, in order for co-teaching to be a successful practice, it should receive adequate economic and administrative support, including sufficient economic and human resources for its implementation. Teachers should receive training and work support in

order to effectively manage and organize spaces for collaboration and communication among them.

This study presents some limitations. First, it is important to note that the number of teachers interviewed in this study was limited. Therefore, the target population is not representative of all primary teachers in the school, as it is only representative of the prevailing teachers. It may be beneficial to replicate this study with a larger sample. Furthermore, since the majority of the teachers who participated in the research are involved in co-teaching (80%), it would be interesting to deepen the perceptions of those who are not familiar with this practice or do not use it. In addition, it should be noticed that all the teachers involved in this study are employed in primary school classes, except for one teacher who also works in the middle school of the same educational institution. The involvement of secondary school teachers alongside primary school teachers from the same institution may surpass the limit of the involvement of a small number of teachers, who are limited to a single school level in the current study. Moreover, since the study was conducted in a single primary school in a single city in a single Italian region, the results are not generalizable to the entire population of teachers employed in co-teaching with the CLIL method in Italy. Finally, with regards to the previously mentioned "philosophy of collaboration" and to the idea of educational community that the school should represent, it is possible to assert that one of the limitations of this research is the absence of involvement of other significant actors in the school setting. Significant actors may be teacher educators, school administrators, headmasters, and practitioners working with students. They could offer their perspectives on the topics covered in the study and contribute to the collection of useful valuable data for the purpose of the research.

Despite the limitations abovementioned, the results of this study shed light on crucial aspects related to the implementation of co-teaching, including the teachers' perceptions of the dimensions of co-teaching and on the co-assessment, and the potential barriers that may hinder its utilization. Future researchers could explore how the obstacles identified in this study could be overcome by focusing on the aspects teachers perceive to be most important in co-teaching. In addition, it would be convenient to examine the efficacy of co-teaching within primary schools and in association with the CLIL method, as the research base on this specific practice is still developing.

Possible future research developments may involve a greater number of teachers in order to achieve the most representative population possible. Furthermore, it might be

interesting to conduct research into teachers' perceptions in order to identify any differences between the responses of discipline teachers and language teachers. This would provide a more detailed and comprehensive overview. A kind of future development of research may lie in the inclusion of other actors in order to promote collaborative attitudes not only among teachers but also among other actors involved in school settings, such as students and school administrators (European Agency for Development in Special Needs Education, 2012). For instance, the students' perceptions of aspects of co-teaching, including evaluation, would provide perspective to investigate, which could then be compared with those of teachers. As school administrators and headmasters play a significant and decisive role in the organization they operate in, they may be included in the survey investigation. The issue regarding the costs and lack of human and economic resources, highlighted by respondents to the present study, could be explored starting from the point of view of those responsible for the administration and management of the school.

The analysis of teachers' perceptions of the dimensions of co-teaching may be aimed at investigating perceptions in relation to different disciplines, such as geography CLIL or science CLIL. In this way, it would emerge the aspects of co-teaching related to CLIL disciplines on which teachers agree more with, as well as any critical issues related to the implementation of this practice.

Lastly, this study hopes that co-teaching may be a practice that can benefit all people involved, both students and teachers, through positive experiences in a positive learning environment that encourages communication exchanges and promotes individual well-being. All individuals who experience co-teaching should have the opportunity to benefit from and perceive it positively for their own personal growth in terms of knowledge, skills, collaboration, and communication.

Bibliography

- Aquario, D., Ghedin, E., & Urli, G. (2015). Inclusive assessment design: una ricerca in una scuola secondaria di primo grado. Italian Journal of Special Education for Inclusion, 3 (1), 103-122.

- Avramidis, E., Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of literature. European Journal of Special Needs Education. Vol. 4, n. 2, 3-19.

- Barbero, T., Clegg, J., (2005). Programmare percorsi CLIL. Roma, Carrocci Editore.

- Barron, T.L., Pinter, H., Winter, K.K., (2019). Supporting Student and Preservice Teacher Successes Through Co-teaching. Theory and Practice in Rural Education (TPRE).

- Carriò-Pastor (Ed.), Content and language integrated learning: Cultural diversity, pp.105-124. Peter Lange.

- Chitiyo, J. (2017). Challenges to the use of co-teaching by teachers. International Journal of Whole Schooling, 13(3), 55-66.

- Clement, M., Vandenberghe, R. (2000). Teachers' professional development: a solitary or collegial (ad)venture?. Teaching and Teacher Education, 16, pp. 81-101.

- Cook, L., Friend, M. (1995). Co-teaching: Guidelines for creating effective practices, "Focus on Exceptional Children", vol. 28, n.3, pp. 1-16.

- Coonan, C.M. (2003). Introduzione: CLIL e la lingua veicolare in Serragiotto G. a cura di, CLIL: Apprendere insieme una lingua e contenuti non linguistici, Perugia, Guerra-Soleil, pp. 11-18.

- Coonan, C.M. (2006). Contatto, confronto, condivisione. Cosa succede quando due mondi disciplinari si incontrano? Ufficio Scolastico Regionale per l'Umbria, Progetto CLIL Umbria: uso veicolare della lingua straniera. Perugia: Guerra.

- Coonan, C.M. (2010). CLIL e la facilitazione dell'apprendimento delle lingue straniere. Facilitare l'apprendimento dell'italiano L2 e delle lingue straniere, Torino, UTET, pp. 129-141.

- Coyle, D. (2009). Promoting cultural diversity through intercultural understanding: A case of study of CLIL teacher professional development at in-service and pre-service levels. In M.L. Carriò-Pastor (Ed.), Content and language integrated learning: Cultural diversity (pp. 105-124). Peter Lange.

- Cramerotti, S., & Cattoni, A. (2015). La collaborazione e la co-progettazione tra insegnanti. In D. Ianes & S. Cramerotti (eds.), Compresenza didattica inclusiva. Indicazione metodologiche e modelli operativi di co-teaching (pp. 39-56). Trento: Erickson.

- Cummins, J. (2000). Language, power and pedagogy: Bilingual children in the crossfire. Multilingual matters. Czura, A. & Ankwelicz, A. (2018). Pupils' and teachers' perceptions of CLIL in primary school: A case study. Linguodidactica, 22, pp. 47-63.

- D'Odorico, L, Cassibba, R. (2001). Osservare per educare. Roma, Carrocci.

- European Agency for Development in Special Needs Education (2012), Profile of inclusive teachers, Odense, Denmark, EADSNE.

- Fazzi, F., Menegale, M. (2023). Doing CLIL with primary learners. From principles to practice. Bengas, D. L., Zappa-Hollman, S. The Routledge Handbook of Content and Language Integrated Learning. London, Routledge, pp. 225-237.

- Fitzell S.G., 2010 Co-teaching and collaboration in the classroom. Practical strategies for success, Manchester NH, Cogent Catalyst Publications.

- Friend, M., Cook, L. (1992). Interactions: Collaboration skills for school professional*s*. White Plains, NY, Longman.

- Friend, M., Cook, L., (2000). Interactions: Collaboration skills for school professionals (3rd ed.), White Plains, NY, Longman.

- Friend, M., Cook, L. (2007). Interactions: Collaboration skills for school professionals (5th ed.). New York, NY, Pearson Education.

- Friend, M., Cook, L., Hurley-Chamberlain, D., & Shamberger, C. (2010). Co-Teaching: An illustration of the complexity of collaboration in special education. Journal of Educational and Psychological Consultation, 20 (1), 9-27.

- Gately, S., Gately, F. (2001). Understanding co-teaching components. Teaching Exceptional Children, 33(4), pp. 40-47.

- Ghedin, E., Aquario, D., Di Masi, D. (2013). Co-teaching in action: una proposta per promuovere l'educazione inclusiva. Giornale Italiano della Ricerca Educativa, 11, pp. 157-175.

- Ghedin, E., Aquario, D. (2016). Collaborare per includere: il co-teaching tra ideale e reale. Italian Journal of Special Education for Inclusion, anno IV, n.1.

- Ghedin, E., Aquario, D. (2023). Co-progettare, co-insegnare, co-valutare. Una ricerca sul valore della collaborazione tra pratiche e atteggiamenti degli insegnanti. Trento, Erikson.

- Johnson, D.W. & Johnson, R. (1999). Special and remedial education in the classroom. Theme and variations. Journal of Reading, Writing, and Learning Disabilities, n.6, pp. 419-436.

- Krammer M., Rossmann P., Gastager A., Gasteiger-Klicpera B., (2018). Ways of composing teaching teams and their impact on teachers' perceptions about collaboration, pp. 463-478.

- Krashen, S.D. (1985). The Input Hypothesis. London, Longman.

- Hang Q., Rabren K. (2008). An examination of co-teaching: Perspectives and efficacy indicators. Remedial and Special Education, 30, pp. 259-268.

- Ianes D., Cramerotti, S. (2015). Compresenza didattica inclusiva. Indicazioni metodologiche e modelli operativi di co-teaching. Trento, Erikson.

- Menegale, M., (2008). Team teaching in CLIL: tecniche, pianificazione e gestione in Cadorna. M., (a cura di), Apprendere le lingue in ambiente CLIL. Aspetti teorici e percorsi applicativi, Bari, Cacucci, p. 173.

- Mofield, E. L. (2020). Benefits and Barriers to Collaboration and Co-Teaching: Examining Perspectives of Gifted Education Teachers and General Education Teachers. Gifted Child Today, 43 (1), pp. 20-33.

- Pituła, B., Kowalski M. (2022). Co-Teaching – Everyday Life or Terra Incognita of Contemporary Education? (eds.). Göttingen, Germany, Brill.

- Ploessl, D. M., Rock, M. L., Schoenfeld, N., Blanks, B. (2010). Practical techniques to enhance co-teaching interactions, Intervention in School and Clinic, pp. 158-168.

- Roth, WM., Boyd, N., (1999). Coteaching, as colearning, in practice. Research in Science Education, 29, pp. 51-67.

- Roth, WM., Tobin, K., (2004). Coteaching: From praxis to theory, Teachers and teaching, vol. 10.

- Schratz, M. (2003). From Administering to Leading a School: challenges in Germanspeaking countries. Cambridge Journal of Education, 33(3), 395-416.

- Serragiotto, G., (2003). C.L.I.L. Apprendere insieme una lingua e contenuti non linguistici. Perugia, Edizioni Guerra, pp. 8-9.

- Serragiotto, G., (2014). Dalle microlingue disciplinari al CLIL. Torino, UTET.

- Solis M., Vaughn S., Swanson E. A., McCulley L. V. (2012). Collaborative models of instruction: The empirical foundations of inclusion and co-teaching. Psychology in the Schools, 49, 498-510.

- Tardif, M. & Lessard, C. (1999). Le travail enseignant au quotidien. Expérience, interactions humains et dilemmes professionnels. Bruxelles, De Boeck Université.

- Thousand J., Villa R., Nevin A. (2006). The Many Faces of Collaborative Planning and Teaching. Theory Into Practice. 45 (3), pp. 239-248.

- Trincanato, E., Amato, A., (2010). C.L.I.L. Content and Language Integrated Learning. Apprendere contenuti in inglese o in altre lingue. Palermo, Herbita Editrice.

- Wenzlaff, T., Berak, L., Wieseman, K., Monroe-Baillargeon A., Bacharach, N., Bradfield-Kreider P. (2002). Walking our talk as educators: Teaming as a best practice. Research on Meeting and Using Standards in the Preparation of Teachers (ed.), Kendall-Hunt Publishing, Dubuque, pp. 11-24.

- Villa R., Thousand J., Nevin A. (2008). A guide to co-teaching: Practical tips for facilitating student learning (2nd ed.). Calfornia, Corwin Press.

Reference Websites

- Enciclopedia Treccani https://www.treccani.it/vocabolario/collaborare/

- Gazzetta ufficiale della repubblica italiana https://www.gazzettaufficiale.it

- United Nations website https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-24-education.html