

UNIVERSITY OF THESSALY



SCHOOL OF HUMAN SCIENCES

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**Η ΔΙΔΑΣΚΑΛΙΑ ΟΜΗΛΙΚΩΝ ΩΣ ΜΕΣΟ ΕΦΑΡΜΟΓΗΣ ΤΗΣ ΕΝΤΑΞΗΣ ΠΑΙΔΙΩΝ  
ΜΕ ΕΙΔΙΚΕΣ ΕΚΠΑΙΔΕΥΤΙΚΕΣ ΑΝΑΓΚΕΣ: ΔΙΑΔΙΚΑΣΙΑ ΚΑΙ  
ΑΠΟΤΕΛΕΣΜΑΤΙΚΟΤΗΤΑ/ PEER TUTORING AS A MEANS TO  
IMPLEMENTING INCLUSION: PROCESS AND EFFICACY**

A Thesis Submitted for the Partial Fulfillment

of the Requirements of the

*Degree of Doctor of Philosophy*

2019

«This research is co-financed by Greece and the European Union (European Social Fund- ESF) through the Operational Programme «Human Resources Development, Education and Lifelong Learning» in the context of the project “Strengthening Human Resources Research Potential via Doctorate Research” (MIS-5000432), implemented by the State Scholarships Foundation (IKY)»



**Επιχειρησιακό Πρόγραμμα  
Ανάπτυξη Ανθρώπινου Δυναμικού,  
Εκπαίδευση και Διά Βίου Μάθηση**

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*....Dedicated to my mother and to  
all the teachers who are trying to  
make the notion of inclusion  
practice....*

## **Acknowledgments**

First and foremost, I would like to express my deep and sincere gratitude to my supervisor, Pr. Elias Avramidis, for being such a great mentor. I would like to thank him for the scientific guidance, the valuable advice, the time he spent, the moral support he provided me throughout this work, and, most importantly, for his understanding and patience he showed towards me during our collaboration. He always had the answer in my questions and the solution to my problems.

I also want to express my gratitude to Dr. Vasilis Strogilos for his guidance and collaboration and for introducing me to the concept of peer tutoring. I would like to thank him for offering me invaluable support, assistance and guidance throughout this study. Without him, this study and my PhD journey would not have started. Special thanks also go to the third member of my supervisory committee, Pr. Anastasia Vlachou, who provided valuable feedback on the first draft of my thesis.

I would also like to thank my thesis committee members, Pr. Philippos Vlachos, Dr. Eleni Didaskalou, Assist. Dr. Sotiria Tzivinikou, and Dr. Magda Nikolarazi, for accepting to be members of this committee, for generously sharing their expertise and for their time in reviewing this thesis and providing their valuable input.

Words cannot express how grateful I am to the headteachers, teachers and students who kindly and voluntarily participated in my study, supported my efforts and had the kindness to share their time and their classrooms with me.

I am indebted to all my friends, who have supported me in every possible way throughout this long trip.. thank you all from the bottom of my heart!

Many thanks to Dr. Charilaos Tsihouridis for his support and assistance when conducting the statistical analyses of my study.

I want to thank my fiancé, Vagelis, for his endless patience and encouragement. Finally, I am grateful to my parents, Maria and Giorgos, and my grandparents for their continuous and unconditional support.

## **Abstract**

The purpose of this research study is trifold, the first aim is, to describe and interpret teachers' opinions and experiences towards the general notion of inclusion of students with special educational needs and disabilities (SEND) in mainstream classrooms and their perceptions of self-efficacy for implementing inclusion. The second aim is to examine mainstream teachers' opinions and attitudes towards peer tutoring between pupils with and without SEND in mainstream schools. The third aim is, after exploring mainstream teachers' opinions and experiences towards peer tutoring, to plan, implement and monitor a peer tutoring programme in mainstream classrooms, in order to examine how participating teachers and students perceived its efficacy as an inclusive approach in mainstream classrooms.

The research followed a sequential mixed method research design since both quantitative and qualitative data collected by means of questionnaire distributed to teachers, interviews with teachers and students, observations and diary. First a survey was conducted and then an action research project followed.

Contrary to most attitudinal studies which are solely focusing on examining the impact of a host of factors in the formation of teacher attitudes, the present study sought to link reported attitudes towards inclusion and teachers' self-efficacy for inclusive practices with an actual inclusive instructional approach, that of peer tutoring. Participants were 225 Greek mainstream teachers and 69 special education counterparts who responded to a questionnaire consisting of the Core Perspectives Scale from the MTAI scale, the TEIP scale, and other scales measuring their attitudes towards peer tutoring. Results indicated that mainstream teachers held neutral attitudes towards inclusion while their special education counterparts held significantly more positive ones. Mainstream teachers were found to be less positive in their self-efficacy for inclusive practices than the special education counterparts

with the exception of the managing behaviour dimension. Mainstream teachers emphasised mainly the social gains achieved by students participating in a peer tutoring programme. Moreover, mainstream teachers considered peer tutoring as an effective means for including students with diverse needs in their classrooms. Importantly, this study found that teachers' attitudes towards inclusion and their self-efficacy for inclusive practices largely predict their willingness to implement a peer tutoring programme in their classrooms.

An action research project was implemented in seven mainstream classrooms of two primary education schools. Seven teachers and 22 students were involved in a peer tutoring education programme. Eleven students with SEND were paired with eleven peers without SEND in reciprocal and fixed-role peer tutoring arrangements. Peer tutoring was implemented in most of the classes in literacy, while only one class implemented the programme in mathematics. Data were collected both from teachers and students. Both teachers and students enjoyed their involvement in the peer tutoring programme. Specifically, most of the participating teachers regarded peer tutoring as an instructional approach which can foster the inclusion of students with SEND in mainstream classrooms. They further considered peer tutoring easy in its implementation. Students without SEND claimed that they liked their collaboration with their peers with SEND and they had an opportunity to get to know each other. Similarly, students with SEND claimed that they become better friends with their peers and that learning was found easier to them.

The study concludes with highlighting the need to offer teachers professional development courses that positively influence their attitudes and enhance their sense of self-efficacy in implementing peer-tutoring. Further research is needed to identify the needs of mainstream teachers in their effort to meet inclusion's demands and to assess the factors that affect teachers' attitudes towards inclusion and inclusive practices.



**Keywords:** teachers' attitudes, teachers' self-efficacy, inclusive practices, peer tutoring, children with special educational needs and disabilities, mixed methods research, inclusion, action research, literacy, mathematics

## **Publications**

Parts of the results of this thesis are described in the following publications.

### **Article published in journal**

Avramidis, E., Toulia, A., Tsihouridis, C., & Strogilos, V. (Accepted/In press).

Teachers' attitudes towards inclusion and their self-efficacy for inclusive practices as predictors of willingness to implement peer tutoring. *Journal of Research in Special Educational Needs*.

### **Chapter published in book**

Avramidis, E. & Toulia, A. (2020). Attitudes and inclusion of students with Special Educational Needs in regular schools. In U. Sharma (Ed) "*Oxford Encyclopedia of Inclusive and Special Education*". New York: Oxford University Press. doi:10.1093/acrefore/9780190264093.013.ORE\_EDU-01237.R1.

### **Conference presentations**

Avramidis, E., Toulia, A., & Strogilos, V. (2019, September). *Teachers' attitudes towards inclusion and their self-efficacy for inclusive practices as predictors of willingness to implement peer tutoring*. Paper. Presented at the European Conference on Educational Research (ECER), Hamburg, Germany.

Toulia, A., & Avramidis, E. (2018, July). *Peer tutoring interventions for students with special educational needs: A research synthesis*. Paper. Presented at the International Conference on Inclusion, Wuppertal, Germany.

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## **Chapter 1: Introduction**

### 1.1 Inclusive policy in Greece

Inclusion of children with special educational needs and disabilities (SEND) in mainstream classrooms has evolved during the last three decades as an educational trend in various countries worldwide. Inclusion has developed as a shift to the general concept of education aiming at a societal impact, and more specifically, at the inclusion of people with SEND in society (Winzer & Mazurek, 2000). Although, inclusion was promoted as a panacea for all the dysfunctions of special educational provision of children with SEND since the 1990s, the provision of children with SEND cannot be simply based on ideology and moral conviction (Ainscow, Booth, & Dyson, 2006). Inclusion needs to be carefully planned and implemented to be effective and successful in meeting the diverse needs of children with SEND in mainstream schools.

The Index for Inclusion (CSIE, 2002) stated clearly the basic points that consist inclusion in education. The idea of equity is pervasive. Children of different backgrounds and with different educational needs should have their needs met in their local schools and with their full participation in the school activities. For this to be effective, both the principles and the practices of schools should be altered to respond to the needs of every child individually. All children, not only those with SEND, should participate as active and equal members of the school community. Another interesting point made in Index for Inclusion (CSIE, 2002) is that difference is conceptualized as a way to support the educational procedures taking place in a school, rather than an obstacle to their effective performance. Last but not least, inclusion in education is one aspect of inclusion in society. In other words, the dream of a fully inclusive society should be based in an inclusive education system, to be fulfilled. In conclusion, the idea of inclusion crosses the threshold of the simple placement of all the children in mainstream settings and paves the way for a fair, equitable and respectful

educational system (Thomas & Loxley, 2007). Basic concern is not to label the children's needs but what these needs call for (Thomas & Loxley, 2007).

Among the first countries that legislated and tried to put inclusion into force were the United Kingdom, the United States of America and Australia. Many European countries, including Greece, followed the principle of the above-mentioned countries in including children with SEND in mainstream classrooms. The official Greek policy (1985 Education Act, the Law 2817/2000 and the Law 3699/2008) as expressed in legislative documents by the Ministry of Education, Research and Religious Affairs is in support of the integration initially, and subsequently the inclusion of children with SEND in mainstream schools. However, the integrative and actual inclusive practice in Greek schools, as it has been depicted in several research studies, differs from what is described in the country's inclusive policy (Avramidis & Kalyva, 2007; Koutroumba, Vamvakari, & Theodoropoulos, 2008; Vlachou-Balafouti & Zoniou-Sideris, 2000; Zoniou-Sideri, Deropoulou-Derou, Karagianni, & Spandagou, 2006).

Inclusive education in Greece didn't emerge in the same time as in other European industrialised countries, such as, for example, in the United Kingdom. However, the policies that evolved were significantly influenced by the educational policies of other countries, such as the United Kingdom, the United States of America and Russia (Emanuelson, Haug, & Persson, 2005; Vlachou-Balafouti & Zoniou-Sideris, 2000). Greece moved from the special education policy to the integrative one over a period of four years. The last special education policy promoting segregated provision for children with SEND was published in 1981 (Zoniou-Sideri et al., 2006). Only after four years, in 1985, the Greek parliament voted a new Educational Law concerning the integration of children with SEND in mainstream schools (Vlachou-Balafouti & Zoniou-Sideris, 2000). After almost a hundred years of segregated provision through the establishment of special schools, Greek Parliament passed the 1985

Educational Law (Vlachou, 1997). According to Bouzakis and Berdousi (2008), the 1985 Education Law introduced several innovative steps to integration, strongly influenced by the British Warnock Report (1978). New terms appeared such as, 'special education', 'special educational needs', 'special professional training', 'occupational settlement', 'social provision' and 'social protection'. It is interesting that in the same Act both special education and integration were mentioned (Polychronopoulou, 2008). Furthermore, this Law introduced the operation of 'special classes' in selected mainstream schools. It further integrated the education of students with SEND in the general legislative frame of primary education, which was considered a novelty in reducing the marginalization of people with SEND. The introduction of both special, segregated provision and integration in the same law caused confusion, contradiction and puzzlement among teachers, parents and students (Vlachou-Balafouti & Zoniou-Sideri, 2000; Zoniou-Sideri & Vlachou, 2006).

The above Education Act further suggested the development of special classes, similar to resource rooms in the USA, in mainstream schools for the integration of children with SEND and the forthcoming abolishment of special schools. These classes would typically accommodate children with mild or moderate learning difficulties. Children with severe learning difficulties would be educated in special schools (Avramidis & Kalyva, 2007). The inconsistencies of the above Law gave to teachers the opportunity to interpret it in different ways. For example, if they were committed to the idea of retaining special schools, they would choose not to integrate in their mainstream classes children with SEND. This means that besides the policy, the willingness of teachers to implement and work for it is crucial (Vlachou, 1997).

The Law 2817/2000 automatically renamed the 'special classes' mentioned in the previous Law to 'inclusive classes'. Another significant step towards the inclusion of students with SEND was the development and organisation of structures which would be responsible

for the diagnosis, evaluation and support of students having SEND. Although the Law 2817/2000 acknowledged the right of children with SEND to access the mainstream school and curriculum, it did not suggest any reforms that would support in practice this children's right. The focus on individual deficits and the remedial approach to the education of children with SEND perpetuated the segregation and stigmatization of them (Avramidis & Kalyva, 2007; Zoniou-Sideri & Vlachou, 2006). According to Armstrong, Armstrong and Spandagou (2010), the renaming of 'special classes' to 'inclusive classes' was the state's effort to move towards inclusion. The 2000 Law showed that the medical model is dominant in the education of children with SEND in Greece.

The most recent Educational Law and the one that is still in effect is the 3699/2008 Law. It is titled "Special Education and Education of People with Disability or Special Educational Needs" and made a further attempt to define the term 'special needs'. It also mentioned the types of SEND that call for extra support (European Agency, 2003). Although, it was the first educational law that was incorporated in the general educational policy for education, it reinforced the dominance of the deficit model (Armstrong, Armstrong, & Spandagou, 2010; European Agency, 2003). It was influenced by the European principles for inclusion and it embraced the characteristics of "A School for All" (European Agency, 2003). However, while it tried to make inclusion educational reality, there was no political and collective will to adopt inclusive practices in schools (O'Hanlon, 2003). It seems that inclusive policy in Greece follows international policies. However, in many school settings, the practice differs a lot from what policy calls for. As one can easily assume, practice is a really important variable to examine before claiming that a country is an actual supporter of inclusive education or not.



## 1.2 Inclusive practice in Greece

In order for an educational system to convert from segregated to integrative and next to inclusive, certain modifications are needed in planning, organization and administration. The willingness to respond to children's different needs with effective ways in mainstream classes is considered essential for an inclusive education system (Vlachou, 2004). However, inadequacies in policy have resulted in scepticism among Greek teachers and generally, Greek society concerning inclusive practices (Koutroumba, Vamvakari, & Theodoropoulos, 2008). It is crucial to mention that in Greece, inclusion can be also achieved by attending special schools or special classes in ordinary schools. This means that children with SEND can be educated in special schools or special classes, with the belief that this placement will help them to be included later in mainstream classes (Vlachou-Balafouti & Zoniou-Sideris, 2000).

The structure of the Greek educational system and the established national curriculum ensured, at least historically, the equal access of all students to the same textbooks and generally, the same knowledge. However, the practice does not seem to agree with what policy describes. In an effort to promote a more flexible teaching and learning style, the Greek Pedagogical Institute developed the "Cross-Curricular Integrated Framework of Programmes of Study", but it was never implemented (Zoniou-Sideri et al., 2006). As a conclusion, the issue for inclusive education is yet to match policy's demands with practice (Ferguson, 2008).

Despite supportive legislation, inclusion in Greece still faces significant obstacles, such as the development of new organizational structures, the curriculum and the reforming of the educational environment (Avramidis & Kalyva, 2007; Barbas, Birbili, Stagiopoulos, & Tzivinikou, 2006). The long history of segregated provision in Greek settings made the evolution to inclusive provision difficult to put in practice. This can be attributed to the fact

that inclusion was presented in the Law of 2000, without being developed as an internal need of the stakeholders involved in education. More specifically, while in other European countries the evolution of integration and later inclusion has been a result of the active participation of disabled people, parents and teachers; in Greece the situation is different. Inclusion is the outcome of external influences and imitation of foreign templates. So, the inclusive practices in Greek settings do not originate primarily from practitioners' and disabled people's initiatives, but from external commands (Zoniou-Sideri & Vlachou, 2006).

Inclusive classes in Greek settings proved to function as separate classes, where children spend most of their school time away from the mainstream class. According to Armstrong, Armstrong, and Spandagou (2010), the above model of inclusion retains the segregation and the idea that mainstream education should be protected from the needs of children with SEND. On the other hand, children with SEND are locational included in mainstream classes, but are left without support and an education plan appropriate for their needs. The fact that more and more children attend mainstream classes does not provide a rationale to the political declarations for inclusion. Locational inclusion does not mean successful and sufficient inclusion (Emanuelsson, Haug, & Persson, 2005).

The peculiarity of the physical geography of Greece with its extensive coastline, the hundreds of islands in the Aegean and Ionian seas and the high mountains should be considered when examining policy's implementation. As a result, in rural areas, it is difficult both to monitor and provide effective support to children with SEND. Therefore, children with SEND in rural areas face more difficulties having an education plan and targeted support in mainstream classes than children with SEND in urban areas (O'Hanlon, 2003).

All the above-mentioned examples of practice in various settings around Greece give the impression that there is a gap between the declarations of inclusive policy and the practice. According to Vlachou (2004), this gap is attributed to the abstract principles of

equal opportunities that are described in the policy. The evolution to inclusive policy was sudden and without the appropriate support and training to the practitioners for the new demands. She further argued that the problem in the implementation of the policy is its close association with the deficit model.

Various special education policies and Education Acts led to a radical increase in the number of specialized professionals, such as psychologists, special teachers and speech and language therapists. The medical model was dominant in organizing and implementing special education provision, but this pattern is not followed only in Greece. Special education in Europe was mostly dependent and influenced by the medical model (Zoniou-Sideri et al., 2006). Discriminatory attitudes and feelings of guilt affected special education practice in Greece. Lastly, in practice the quality of the offered provision to children with SEND has been solely dependent on teachers' commitment and willingness to work and support them (Vlachou-Balafouti & Zoniou-Sideris, 2000).

Vlachou (1997) argued that many have considered inclusion as a cheap alternative to special education. However, the 2000 Law, concerning the inclusion of students with SEND in mainstream schools, contributed to changes in attitudes and perceptions towards children with SEND in Greek society. Although this sounds quite simplistic, it acknowledges the complexities and the traditional way of thinking that was dominant in the Greek society (Zoniou-Sideri et al., 2006). The 2008 Law suggested the full inclusion of children with SEND in mainstream classes, in order not to improve only academically but also socially. This was considered as a significant step towards inclusive educational reality (European Agency, 2003).

A critical examination of the Greek educational system and its organization reveals that for a policy to be implemented in exactly the same way as it is described is quite difficult. First of all, the function of ordinary schools is exclusive not only for children with

SEND, but also for children from different cultural, social and economic backgrounds (Zoniou-Sideri & Vlachou, 2006). The national curriculum, the same instructional guidelines, the same syllabus, the same timetable and the same textbooks don't allow any flexibility. Although policy-makers consider the above as indicatives of equality and justice, the practice shows that they tend to be more exclusive rather than inclusive factors (Zoniou-Sideri & Vlachou, 2006). Especially nowadays in Greece, the financial crisis paused any reforms in different aspects of state organization, such as in education. Changes in legislation, curriculum, school organisation, school environment and teachers' training are essential for successful students' full inclusion, both in the academic and social domain (O'Hanlon, 2003).

### 1.3 My approach to inclusion

In this study inclusion is defined as an endless process of “developing the school for all” (Ainscow, Booth, & Dyson, 2006, p.15). Based on this, inclusion calls for a school reform in order students with SEND irrespective of the type or severity of their disabilities to be educated in the mainstream school of their neighborhood. However, as Allan and Brown (2001) suggested, placement is not the aim of education. Effective provision is the ultimate target of education enabling all children to meet their needs and to enjoy the learning procedure in mainstream educational settings (Blamires & Moore, 2004). As a result, the inclusive school, according to Winzer and Mazurek (2000), should be prepared to welcome children with various educational needs and, also, to support and provide an environment, where these needs can be effectively supported and met. The recognition that differences exist between children which are not preventative of attending a mutual learning environment, is one of the basic premises of inclusion, which is adopted in the present study. Differences can enrich both the class environment and the teaching strategies used resulting in a stimulating learning environment for both teachers and students (CSIE, 2002). Children,

who were cotaught with classmates, that are different in their way each, have the potential to become young people that accept and appreciate difference and finally, become members of a democratic and equitable society in practice (Thomas & Loxley, 2007). Inclusive education is a right of all children to succeed and progress in mainstream settings. On the other hand, criticism has been directed towards the largely unmodified learning environment, which doesn't change in order to welcome the differences of every child, thus making difficult for children with SEND to feel members of the educational society (Slee, 2013). Attention should be paid to ascertain that alterations in different aspects of school life and environment would not cause the discrimination and the stigmatization of children with SEND, otherwise the idea of inclusion will finally turn to be exclusionary (Runswick-Cole, 2011). Children should feel that their participation in the educational process is acknowledged and that there are tasks that they can succeed on. Positive motivation can induce an improvement of both the academic and social skills of all children.

#### 1.4 Peer tutoring as an inclusive practice

There is a recent educational trend taking place internationally shifting from transmitting knowledge to constructing knowledge targeting to students' self-regulated learning through collaboration (De Backer, Van Keer & Valcke, 2012; Fougner, 2013; Van Keer & Verhaeghe, 2005). The demands that the legislation of inclusion brought to mainstream classrooms, changed the role teachers are called to play and the instructional strategies they utilize to meet the students' diverse needs in their classrooms. The inclusion of students with SEND calls for far more than simply placing the child in a mainstream classroom. Teachers should provide the necessary and targeted support based on child's individual needs for an adequate and complete educational experience (Burks, 2004; Cervantes, Lieberman, Magnasio, & Wood, 2013; Fuchs & Fuchs, 2005; Mackiewicz, Wood,

Cooke, & Mazzotti, 2011). Various approaches have evolved recently holding the potential of aiding teachers to meet the diverse needs of their students in inclusive classrooms, such as cooperative learning instructional strategies, like peer tutoring. Peer tutoring is considered an instructional strategy which fosters the development of an inclusive ethos in schools (Hughes & Fredrick, 2006; Jones, 2007).

According to Topping (1996, p. 322), a broad definition of peer tutoring is when “people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by teaching”. Generally, the term ‘peer’ in peer tutoring encloses various forms of relationships among students both in the academic and social aspects of school life (Falchikov, 2001). There are different types of peer tutoring mentioned in the literature, such as fixed role, reciprocal, cross-age and class-wide peer tutoring, which are further described in the following sections. According to each type, students take either the role of tutor or tutee and in some cases, such as the class-wide peer tutoring; students can take both the role of tutor and tutee.

Research in mainstream settings around the world on peer tutoring demonstrated social and academic benefits for both children with and without SEND (Asaro-Saddler & Bak, 2014; Evans & Moore, 2013; Fougner, 2013; Josephs & Jolivette, 2016). However, it should be mentioned that there is a body of research, which confronts peer tutoring as an inclusive education approach with some criticism (Cheng, Luk, & Pang, 2009; Mastropieri, Scruggs, & Berkeley, 2007). This is because peer tutoring has only recently been adopted by teachers, mainly in the USA and, therefore, its application in other educational systems is yet to be evaluated. Notwithstanding the value peer tutoring might have as an inclusive instructional arrangement, its effective application is undoubtedly based on educators being positive about inclusion and confident in their teaching skills. It is therefore imperative that the attitudes Greek teachers hold toward inclusion and their self-perceptions of teaching

efficacy are also examined. It is towards discussing these key variables in more detail that I turn next.

### 1.5 Teachers' attitudes towards inclusion

The inclusion of students with SEND in mainstream classrooms has evolved during the last three decades as an educational trend in various countries worldwide. The substantial reform of mainstream schooling that followed opened new lines of research including the exploration of the organisational changes occurring in schools fostering inclusion and the systematic evaluation of the academic and social outcomes of the process. Another key research development in the field of inclusive education over this period has been the emphasis placed on examining the attitudes various school constituents hold towards inclusion. Indeed, there has been a proliferation of studies covering teachers' attitudes towards the inclusion of students with SEN in mainstream education settings.

Although various definitions can be traced in social psychology describing the concept of 'attitude' in various ways, it is widely accepted that "... *the term attitude should be used to refer to a general, enduring positive or negative feeling about some person, object or issue*" (Petty & Cacioppo, 1981, p.7). Moreover, attitude is considered as a multidimensional construct consisting of three conceptually distinguishable reactions to a certain object: cognitive, affective and behavioural (Eagly & Chaiken, 1993). The cognitive component concerns beliefs, opinions and ideas about the attitude object, the affective component concerns emotions such as 'like' or 'dislike', and the behavioural component concerns behavioural intentions or action tendencies. Although the relationship between attitudes and behaviour is complex, there is consensus in the literature that a person's behaviour is influenced by their attitudes. Accordingly, certain theoretical models have been developed to explain the relationship between people's attitudes and overt behaviours like the

“Theory of Planned Behavior” by Ajzen (1991) whereby attitudes, subjective norms, and perceived behavioural control are combined as predictors of behaviour intentions (Sharma et al., 2018).

On the assumption that negative attitudes towards inclusion can affect not only the professionals’ commitment to implementing it but also teaching and wider pedagogical practices, most researchers in the field have directed their attention on the study of teachers’ attitudes towards inclusion. Recent attempts to synthesize the available studies on teachers’ attitudes towards inclusion have revealed mixed results (Avramidis & Norwich, 2002; De Boer, Pijl, & Minnaert, 2011; Schwab, 2018). Early studies have shown teachers being largely positive towards the notion of inclusion and willing to implement it in their classrooms (Avramidis, Bayliss, & Burden, 2000; Clough & Lindsay, 1991; Villa, Thousand, Meyers, & Nevin, 1996). These findings are especially relevant in western countries with a long history of ‘integration/mainstreaming’ and subsequently ‘inclusion’ such as the USA. For example, in the study of Ross-Hill (2009), teachers of all grades (ranging from pre-school to secondary) supported the practice of inclusion in mainstream school settings and felt confident to teach students with SEN in their classrooms.

However, more recent studies in countries at various stages of inclusive development have revealed conflicting results; that is, teachers hold positive views about the general philosophy of inclusion but, at the same time, are hesitant about implementing inclusion in their classes (Avramidis & Kalyva, 2007; Pearson, Eva, Ernest, & Donna, 2003). Teachers surveyed in various countries believe that inclusion is beneficial for most of the children with SEN, but at the same time, they support the presence of special schools where the needs of children with complex SEN can be better supported (Symeonidou & Phtiaka, 2009; Zoniou-Sideri & Vlachou, 2006). Neutral teacher attitudes towards inclusive education were also found in the study of Galovic, Brojan, and Glumbic (2014) in Serbia, despite the articulation



of positive expectations for the outcomes of inclusive practices. This can be explained by Serbia's long tradition of special schools, which are widely regarded as appropriate places for meeting children's complex needs and by the teachers' perceived lack of knowledge and skills in order to educate children with SEN. Similar findings have been reported in the study of Symeonidou and Phtiaka (2009) in Cyprus, in which teachers' scepticism was attributed to their limited knowledge concerning children's SEN. Likewise, in the study of Koutroumba, Vamvakari, and Theodoropoulos (2008) in Greece, teachers stated that they felt ill-prepared and not confident to meet all children's diverse educational needs resulting in negative feelings, beliefs, and attitudes towards the inclusion of these children in mainstream classes.

More recently, teachers have been reported as more sceptical than earlier and even negative towards inclusion. Worryingly, such findings have been reported in comparative studies of countries with different educational systems (Nel et al., 2011). Moreover, in countries where inclusion is a new educational trend and teachers are not yet prepared to implement it, such as in Jordan, teachers hold negative attitudes towards inclusion (Amr, Al-Natour, Al-Abdallat, & Alkhamra, 2016). Similarly, in the study of Rakap and Kaczmarek (2010) in Turkey, teachers expressed clearly, slightly negative attitudes towards the inclusion of children with SEN in their mainstream classrooms. Along the same lines, Chinese primary teachers demonstrated more positive attitudes towards segregated special school education rather than inclusion (Meng, 2008).

The type of children's disability seems to strongly influence teachers' attitudes. The severity of disabling condition is crucial for teachers who educate children with SEN. Children with motor, sensory and mild cognitive disability are viewed more positively by teachers than children with behavioural difficulties (Avramidis & Kalyva, 2007; Cagran & Schmidt, 2011; Lubke, Pinquart, & Schwinger, 2018). Furthermore, in a study conducted in the United Arab Emirates, Bradshaw (2009) found that children with behavioural problems

and physical disabilities were seen as the most difficult students to include by both primary and secondary teachers. Additionally, South African teachers in the study of Donohue and Bornman (2015) were significantly more confident in including children with Down syndrome in their mainstream classes when compared to children with other disabilities.

Teacher-related variables, such as teaching experience, gender, prior experience in inclusive education, and training tend to affect teachers' attitudes. For example, a study of Zoniou-Sideri and Vlachou (2006) showed that prior teaching experience had made Greek teachers more positive about educating children with SEN in their classroom. Norwich (1994), on the other hand, argued that teachers with little experience might not be aware of inclusion's demands and consequently express a more positive view compared with teachers that have worked in inclusive settings.

Gender differences have also been examined in attitudinal research. For example, Alghazo and Naggar Gaad (2004) and Kumar (2016) found that there was a considerable difference between female and male teachers' attitudes, with males expressing less positive attitudes towards inclusion. However, Rakap and Kaczmarek (2010) in their study in Turkey, showed that male teachers were somewhat more positive towards the inclusion of students with SEN than their female counterparts. Along the same lines, there is the study of Ahmmed, Sharma, and Deppeler (2012) who found Bangladeshi male teachers more supportive of inclusion than female.

Prior experience in teaching children with SEN has been found to affect teachers' attitudes in various studies (Avramidis & Kalyva, 2007; Donohue & Bornman, 2015; Moberg, 2003). More specifically, in the study of Donohue and Bornman (2015), teachers who had previous teaching experience with children with SEN had significantly more positive expectations for their academic achievement. Similarly, Rakap and Kaczmarek (2010) found that teachers who had prior experience of implementing inclusion and had,

therefore, accommodated students with SEN in their classrooms were more positive towards inclusion than teachers with little or no such experience.

Another factor that influences teachers' attitudes is the training that they have received in order to respond to students' diverse learning needs. A study conducted by Male (2011) in the UK showed that opportunities for professional development in the area of inclusive education can make teachers more positive towards inclusion. However, it is important to mention that the participants of the above study were already enrolled in a Master's course in inclusive education. Furthermore, studies like the ones conducted by Avramidis and Kalyva (2007), by Batsiou, Bebetos, Panteli, and Antoniou (2008), by McFarlane and Woolfson (2013) and by Sokal and Sharma (2014) indicated that teachers who had received training were more positive towards the inclusion of children with SEN in their classrooms. On the other hand, Wilkins and Nietfeld (2004) argued that training had not affected teachers' attitudes, as there was no difference in their study between the experimental and control group.

School variables also seem to play an important role in promoting positive attitudes among teachers. Such factors include the availability of support at the classroom and school levels in the form of learning support teachers and assistants; the availability of resources such as differentiated teaching materials; the availability of non-contact time set aside for collaborative planning coupled with opportunities for regular in-service training; the application of individualized learning programs followed by alternative assessment methods; and the adoption of a whole-school approach towards inclusion by all stakeholders involved leading to the creation of an inclusive 'ethos'. All these environment-related factors have been associated with positive attitudes towards inclusion and high perceptions of self-efficacy, competence and teaching satisfaction (Avramidis & Norwich, 2002). More recently,

the levels of teachers' generic confidence operationalized as 'self-efficacy', have attracted substantial research attention in both western and eastern countries.

#### 1.6 Teachers' self-efficacy perceptions of inclusion

The concept of self-efficacy was first coined by Bandura (1977) forty years ago and referred to "...the conviction that one can successfully execute the behavior required to produce the [intended] outcomes" (p.193). He later developed it to denote the belief that people can produce specific effects in specific situations and this belief affects their cognitive, motivational, affective and decisional procedures (Bandura, 1997). According to Bandura (1997), self-efficacy perceptions consist of the successful prior experiences of a person in certain tasks, the experiences of observing people capable of performing the task, the social belief of others that the person can effectively complete the task, and, finally, the emotional state of the person at the time the self-efficacy perceptions were shaped.

Another attempt to define the term self-efficacy was made by Guskey and Passaro (1994), who defined the term as "teachers' belief or conviction that they can influence how well students learn, even those who may be considered difficult or unmotivated" (p.628). Tschannen-Moran, Woolfolk Hoy, and Hoy (1998) defined teachers' self-efficacy as "... teachers' belief in her and his ability to organize and execute the courses of action required to successfully accomplish a specific teaching task in a particular context" (p. 233). As one can easily assume, the above definition is characterised by a task-specific orientation.

Yada and Savolainen (2017) claimed in their study that the term is usually comprehended as teachers' belief that they can affect their students' learning. According to Malinen, Savolainen, and Xu (2012), teachers' self-efficacy perceptions are considered as multidimensional constructs in different countries and cultures. They stated that the numbers of self-efficacy dimensions found in the literature examining teachers' perceptions range

from three to six, based on the focus and the instruments used in each study. The notion of self-efficacy has its grounds in the social cognitive theory, which states that people can control up to a certain point their self-development and life instances, while many things relate partially to chance (Malinen, Savolainen, & Xu, 2012).

The significance of the notion of teachers' self-efficacy is based on its cyclical nature, according to Malinen, Savolainen, and Xu (2012). They claimed in their paper that the higher the level of teachers' self-efficacy, the higher their efforts to perform better, which in turn leads to higher self-efficacy perceptions. During the last decades, many scales were developed to measure teachers' self-efficacy perceptions, and many demographic and contextual factors have been examined to affect these perceptions (Malinen, Savolainen, & Xu, 2012).

Early studies, like the one conducted by Meijer and Foster (1988) suggested a positive relationship between teachers' self-efficacy perceptions and their attitudes towards teaching students with SEN. Specifically, they found that Dutch teachers who received higher self-efficacy scores were more likely to place a student with SEND in mainstream classrooms. The legislation of inclusion affected significantly and immediately the research on teachers' self-efficacy perceptions with an increased number of studies. However, even decades after the Salamanca Statement, studies concerning teachers' self-efficacy for adopting inclusive practices still remain limited (Malinen, Savolainen, & Xu, 2012; Sharma, Loreman, & Forlin, 2012).

The association between teachers' attitudes towards inclusion and their self-efficacy perceptions has been consistently reported in more recent studies where the teachers' self-efficacy is positively associated with their reported attitudes towards teaching in inclusive classrooms and, more importantly, the adoption of inclusive practices in their classrooms (Savolainen, Engelbrecht, Nel, & Malinen, 2012; Sharma, Loreman, & Forlin, 2012; Yada &

Savolainen, 2017). Specifically, Weisel and Dror (2006) found in their study that Israeli teachers with high levels of self-efficacy skills were more positive towards the inclusion of students with SEND in their classrooms than their colleagues with low self-efficacy perceptions.

Similarly, Malinen, Savolainen, and Xu (2012) concluded in their study that teachers' self-efficacy perceptions and specifically, how they are able to affect students' learning in inclusive settings affects their attitudes towards inclusion. However, the study conducted by Yada and Savolainen (2017) found a moderate correlation between teachers' self-efficacy perception of inclusion and their attitudes towards the inclusion of students with SEND in mainstream classrooms. Lastly, the more teachers are confident with their skills in implementing inclusive practices, the more positive their attitudes are (Savolainen, Engelbrecht, Nel, and Malinen, 2012).

As a conclusion, it is crucial to mention that teachers' self-efficacy perceptions are context-specific and oriented, which means that teachers may feel able to teach effectively certain content areas to specific student populations and in particular educational settings, while they can perceive themselves less efficacious when the circumstances are altered (Malinen, Savolainen, & Xu, 2012).

### 1.7 Theoretical framework of the study

All the above led to the shaping of the present thesis. The thesis begins with defining peer tutoring, describing its use as an inclusion means, its formats, the roles that both teachers and students are called to take during its implementation, their training to perform their roles efficiently, the procedures that consist of a peer tutoring programme, teachers' and students' benefits accrued by their involvement in the peer tutoring, and their views towards it. Further a summary of studies conducted internationally under the topic of this thesis is provided.

Next, the methodology chapter offers insight into the aims and the research questions that led the present study, the paradigm chosen, the research methods, the sample, the data gathering tools and the data gathering and analysis procedures followed. Then the results from the survey will be first presented followed by the results from the interviews, observations and diaries taken during the organization, implementation and evaluation of the action research project. At the last section of the present thesis, results will be discussed along with the limitations of this study. Lastly, implications for further research and practice will be recommended.

## **Chapter 2: Peer tutoring**

### 2.1 Peer tutoring an inclusive means

Inclusion of children with SEND in mainstream classrooms has proved to be a challenging task. During the last four decades worldwide, the number of students with SEND attending mainstream classrooms has increased. The simple placement of these students in the mainstream schools, without any provision for necessary accommodations and alterations in the school environment, is a rather simplistic approach, which is far from the needs and the potential of the effective inclusion of students with SEND. Both the academic and social needs of students with SEND should be met by their teachers in mainstream classrooms (Cervantes, Lieberman, Magnesi, & Wood, 2013). In order to accomplish the aims of inclusion, various educational methods have been used through these years. One evidence-based intervention for providing supplemental instruction to students at risk or with SEND in mainstream classrooms is peer tutoring (Scruggs, Mastropieri, & Marshak, 2012; Wang, Bettini, & Cheyney, 2013; Wood, Mustian, & Lo, 2013).

Klavina and Block (2013) suggested that peer tutoring can be used in mainstream classrooms to help students with SEND develop both their academic and social skills, along with the essential daily skills needed in their school routine. Along the same lines, Jones (2007) recommended the implementation of approaches such as peer tutoring in order for schools to develop and foster their inclusive ethos. The sense of community and belonging among children in mainstream classrooms, regardless of their academic and social background, encourages students to work together and form equal and supportive relationships. However, effective inclusive practices need to underpin regular changes and alterations to foster successfully the unique needs of all students in the mainstream classrooms (Klavina & Block, 2008).



Peer tutoring arrangements have been put in action for many years in various learning environments, such as special schools, resource rooms and mainstream classrooms. Children from different age groups, ethnicities, socio-economic backgrounds and with various educational needs have experienced peer tutoring arrangements. The results suggest that, especially in mainstream classrooms, peer tutoring has proved to offer academic gains to students (Lingo, 2014; Wright & Cleary, 2006). During peer tutoring procedures, students work collaboratively in communities of learning. The diverse academic background and needs of students are not seen as an obstacle to their collaboration. Diversity in this type of learning communities is prized along with a feeling of shared responsibility (Villa, Thousand, & Nevin, 2010).

Peer tutoring is considered as an inclusive instructional approach by Scruggs, Mastropieri, and Marshak (2012) because students with various educational needs receive individualized and immediate feedback at the time they need it. Especially if peer tutoring takes place in a class-wide format, any potential of discrimination or stigmatization of children with SEND is omitted. At that point, it is crucial to mention that teachers who think to implement inclusive practices should take into account and secure that these approaches do not lead to children's stigmatization. If this condition cannot be secured, the implementation of any inclusive practice should be reconsidered (Villa, Thousand, & Nevin, 2010).

According to Carter et al. (2015) the presence of professionals, who support in individual base the needs of children with SEND tend to decrease the interactions between students, which prevents the enhancement of students' social relationships. Inclusion of children with SEND in mainstream classrooms is closely connected to the social aspect of schooling. Thus, peer tutoring offers an alternative to the help delivered by professionals, while at the same time giving space to social interactions to occur among students. In their study, Dufrene, Noell, Gilbertson, and Duhon (2005) found that the cooperation between

students without SEND and students with behavioural disorders can lead to increased positive social interactions among students.

The accommodation of diverse learning needs in mainstream classrooms, as inclusion commands, has strengthened the need for innovative, effective and easy in their implementations approaches towards this goal. Spencer (2006), in her review of the literature, concluded that peer tutoring can offer numerous academic and social benefits to students with emotional or behavioural disorders, such as increased reading rates and boosted self-confidence, making their inclusion in mainstream classrooms successful. The disruptive behaviour usually experienced by children with SEND is often considered by their teachers as a preventative factor in their full inclusion. Sutherland and Snyder (2007), when examining the effects of peer tutoring on students with emotional or behavioural disorders in one classroom, found that their disruptive behaviour decreased, while, at the same time, their active responding increased.

The linguistic, cultural and academic diversity of students included in public, mainstream schools has led teachers to adopt instructional methods in which children have a critical role to play in their own learning. All the types of cooperative learning, and especially peer tutoring, can help teachers to accommodate and foster in their classrooms the diversity (Fuchs, Fuchs, Mathes, & Simmons, 1997). Moreover, according to the study of Luca and Clarkson (2002), peer tutoring, according to teachers, proved an effective method of supplemental instruction, suitable to meet the diverse students' academic needs in the course.

An important element in the inclusion of children with SEND is for these children to feel welcomed and appreciated in the peer groups. Various peer tutoring configurations have proved to work towards meeting this goal. Specifically, Clemenz (2002) in his study examined how peer tutoring affected the attitudes of high school students without SEND towards their peers with SEND. He suggested that peer tutoring has impacted positively on

the peers' attitudes and a climate of understanding to each other's' different needs was promoted. Similarly, students with Attention Deficit Hyperactivity Disorder (ADHD) participating in the study of Plumer and Stoner (2005) experienced positive and increased social behaviours with their peers in the academic setting.

As a conclusion, all the above-mentioned moderators of peer tutoring showed that peer tutoring can be used in mainstream educational settings as an instructional strategy which promotes and foster the inclusion of students with SEND leading to their academic and social development.

## 2.2 Definitions of peer tutoring

Peer tutoring has evolved as a method of instruction the last four decades in which students offer instruction to other students (Bowman-Perrott et al., 2013). The above phrase is a quite simplistic approach in understanding peer tutoring as an educational instructional method. Topping (1996), in an attempt to describe peer tutoring in a few words stated that, it is an educational procedure in which people who are not professionals help one another to learn by taking the roles of both learners and teachers. Similarly, Berghmans, Michiels, Salmon, Dochy, and Struyven (2014) noted that peer tutoring involves people behaving as teachers; controlling the tutoring process without being professionals. However, before elucidating the different proposed definitions of peer tutoring, it is crucial to explore the origins of this educational approach.

Peer tutoring is based on the general principles of cognitive construction. In general, constructivism gives credits to the social aspect of schooling, emphasizing on the significance of peer relationships in children's cognitive development (De Backer, Van Keer, & Valke, 2012; Gisbert & Font, 2008; Iserby, Elen, & Behets, 2010; Luca & Clarkson, 2002; Tsuei, 2012). More specifically, Piaget (1989) argued that the collaboration between peers

encourages the real discussion based on genuine peers' thoughts. He further stated that this process is of great significance in the development of critical thinking and objectivity, and, also, fosters the discursive contemplation. Along the same lines, Vygotsky (1978) believed that through peer cooperation many social skills are developed that cannot be obtained when an adult is present and guides the procedure.

Theories, such as Vygotsky's zone of proximal development and Lave and Wenger's situated learning, give peer interactions an optimal role in children's social development (Evans & Moore, 2013; Luca & Clarkson, 2002; Villa, Thousand, & Nevin, 2010). In Vygotsky's zone of proximal development, the help of peers is mentioned as equal to adult guidance in problem solving learning situations. Although Vygotsky argued that when two individuals interact in an instructional situation, one is more expert than the other, researchers forward Vygotsky claimed that this is not de facto. For example, King (1997) stated that peers could interact equally in an educational, instructional situation.

Many researchers and authors have tried to describe in a few words what constitutes peer tutoring. Utley, Mortweet, and Greenwood (1997, p. 9) suggested that peer tutoring is "a class of strategies and practices that employ peers as one-on-one teachers to provide individualized instruction, practice, repetition, and clarification of concepts". From another perspective, Bowman-Perrott et al. (2013, p. 39) proposed a definition that is more centred on the academic benefits of peer tutoring on students. They argued that "peer tutoring is an instructional strategy that involves students helping each other learn content through repetition of key concepts".

Iserbyt, Elen, and Behets (2010, p. 40) proposed that "peer tutoring, also known as peer teaching, is the system of instruction in which students work in pairs to support each other's learning". Another definition that makes reference on the pairing of students is the one proposed by Dufrene et al. (2010, p. 242), which declares that "peer tutoring is a cost-

effective student-mediated instructional procedure in which student dyads or small learning groups work together on instructional tasks”. Based on the absence of professional teachers is the definition introduced by Klavina and Block (2013, p. 26), in which peer tutoring is described “as a type of collaborative learning strategy in which students support each other rather than relying only on assistant teachers or paraprofessionals”.

Franca, Ker, Reitz, and Lambert (1990, p. 109-10) defined peer tutoring as “a procedure in which children teach academic tasks to other children”. Worth mentioning in this definition is the fact that the authors referred to “children” and not to “peers” and they focused mainly on content teaching, ignoring the social outcomes of such a method of instruction. From another perspective, Hott, Alresheed, and Henry (2014, p. 110) made an attempt to define peer tutoring as “an intervention that consists of student partnerships, linking high achieving students with lower achieving students or those of similar level in structured academic sessions”. As in the previous mentioned definitions, and in this last one, the transmission of academic knowledge between students is described as one of the basic, in some cases even the only, feature of peer tutoring.

On the other hand, Gisbert and Font (2008, p. 482) tried to give another dimension of peer tutoring in their attempt to define it. More specifically, they described it as “a method of cooperative learning based on the creation of pairs of students with an asymmetrical relationship and a single common goal, which is known and shared and must be achieved through a relationship framework planned by the teacher”. It is crucial to mention that this definition is one among the very limited number of definitions of peer tutoring that refers to the teacher and his/her role in peer tutoring configurations. Usually, the definitions of peer tutoring are centred to peers and the type of relationship that is fostered between them.

A critical comment about peer tutoring, and especially for the people that take part in it, is made by Falchikov (2001) in his book “Learning together: Peer tutoring in higher

education”. He argued that the term ‘peer’ has changed its meaning over the years, and, finally, it includes various relationships among people in the general educational context of learning and teaching. Moreover, Villa, Thousand, and Nevin (2010) in their book expressed concerns regarding the term ‘collaboration with students’ used in various definitions. They argued that the term ‘collaboration with students’ is complex and cannot describe sufficiently the type of relationships which develop between students when taking part in peer tutoring. Last but not least, in many of the offered definitions peer tutoring is vaguely described as a peer-mediated intervention without providing further characteristics of the method that can help people shape a concrete picture of what consists peer tutoring (Hott, Alresheed, & Henry, 2014).

As far as the origins of peer tutoring are concerned, various authors proposed different places and time. For example, Falchikov (2001) stated that peer tutoring was firstly introduced in the German institution, Free University of Berlin in 1951. On the other hand, Scruggs, Mastropieri, and Marshak (2012) argued that peer tutoring has not evolved earlier in education than in the 18<sup>th</sup> century, and, specifically, in the education of children with SEND. More specifically, he encouraged his students first, to discuss among them the responses to the questions and, then, express them to the whole class. He believed that, following this procedure, the students would demonstrate better understanding of what had been previously taught. And this, because, in order for students to express the answer in front of the whole class, they have, first, to understand the context and discuss it with their peers. Through this discussion, Eric Mazur believed that students learn more effectively the information that had been previously taught.

As a conclusion, all the above-mentioned definitions tried to simplify the peer tutoring procedure, in order to be simply expressed in a few words. It is easily noticed that various authors perceived differently the basic components that should be included in peer

tutoring's definition. This resulted from the different perception they hold about peer tutoring as an instructive strategy. However, the basic element in all of them is the different role that peers are called to play in peer tutoring procedure, and that through their involvement in peer tutoring the importance of peer interactions in the social and cognitive development of children is boosted.

### 2.3 Types of peer tutoring

Peer tutoring has gained increasing research interest over the last years as an inclusive instructional approach, which develops academic and social skills in students of all ages and of all academic backgrounds. Moreover, peer tutoring's theoretical origins are closely associated with the general idea of equity and democracy in society (Gisbert & Font, 2008). In the extensive literature, peer tutoring arrangements differ according to the age of students involved (same-age or cross-age), the structure of students' role (fixed role or reciprocal), the instructional emphasis placed (acquisition of new knowledge or practicing already taught knowledge), and the procedural elements that consist of a peer tutoring programme (e.g., duration and number of sessions, the adoption of rewarding system) (DuPaul, Ervin, Hook, & McGoey, 1998).

One first attempt to distinct between the various types of peer tutoring is to separate them by the age of participating children. Specifically, if they are on the same class or age, peer tutoring is called same-age. If they are on different age or class, peer tutoring is called cross-age. Same-age peer tutoring occurs between pairs of students attending the same grade level. It is much easier for teachers to organize and implement it because students share the same timetable and peer tutoring can be arranged effortlessly (Topping, 1996). When both students have the same age and know each other prior to the implementation of peer tutoring, the familiarity between them can promote a more relaxed and effective communication

leading to their academic achievement (Galbraith & Winterbottom, 2011). Although same-age tutoring offers convenience to both students and teachers, it is the same convenience that can affect negatively both the procedure and the expected outcomes of peer tutoring (Scruggs & Osguthorpe, 1986).

Cross-age peer tutoring involves children from different grades and ages. The older child usually takes the role of the tutor, and the younger one the role of the tutee. Normally, older children are recruited by older classrooms, widening the pool of available and willing to participate students (Wright & Cleary, 2006). Nevertheless, irrespectively of which child performs the role of tutor and tutee, the tutor is perceived as more proficient and knowledgeable than the tutee in the specific content area, that peer tutoring takes place (Shamir & Tzuriel, 2004). One of the most significant benefits that cross-age peer tutoring offers is the elimination of competition among participating students, which can hinder, if in extensive grade, the learning process (Cohen, 1986). However, the linking of different timetables and moving of students from classroom to classroom, may prevent teachers to implement such a peer tutoring configuration, due to the anxiety that will be caused in the school building (Burns, 2006).

In both same-age and cross-age configurations of peer tutoring, students can either perform the same role during the whole procedure or alternate roles with their partner. The first is called fixed-role peer tutoring and the second reciprocal peer tutoring. In fixed-role or non-reciprocal peer tutoring, children do not switch their roles. It would be easily assumed that this type of peer tutoring excludes children with SEND of taking at the role of tutor. However, the existing literature, according to the findings of a systematic review conducted by Talbott, Trzaska, and Zurheide (2017), showed that students with SEND have acted as tutors of younger children with and without SEND, along with children with SEND of same age.



In reciprocal formats of peer tutoring, students change the roles of tutor and tutee during each session. As one can easily assume, a highly structured procedure is needed to guide students in alternating their roles during each session, in order to follow the guidelines and let students understand how to proceed (Maheady & Gard, 2010). The fact that students have the opportunity to act in the role of both tutor and tutee is closely linked to cognitive and academic development, according to cognitive psychology. Specifically, when children engage in both teaching and learning situations, can understand and learn the new content more effectively than in traditional learning situations (Talbot, Trzaska, & Zurheide, 2017).

In the literature there are also other terms referring and describing peer tutoring formats. Firstly, cooperative learning is considered rather an umbrella term used to incorporate all the different peer tutoring types. According to Kamps, Barbetta, Leonard, and Delquadri (1994), cooperative learning is “the instructional use of small groups so that students work together to maximize their own and each other’s learning” (p. 49-50). However, while cooperative learning seems to benefit both academically and socially, Lee, Dineen, McKendree, and Mayes (1999) argued that direct instruction was more beneficial for students’ mathematic achievement and reduced disruptive behaviours.

Secondly, class-wide peer tutoring (CWPT) is a peer mediated instructional approach in which children take the roles of tutor and tutee in a class-wide basis. One characteristic element of this approach is that children alternate the roles of tutor and tutee when working in pairs (Kunsch, Jitendra, & Sood, 2007). CWPT was developed in late 1970s and has proved effective in mainstream, inclusive classrooms, given the opportunity to each child to work collaboratively with children from various cognitive, social and skill levels. In addition, it increases the engaged time students spent on a task along with the targeted and immediate feedback they receive on their academic performance (Bond & Castagnera, 2006).

Thirdly, PALS (Peer Assisted Learning Strategies) is another format of peer tutoring. It was first developed by Fuchs and colleagues in 1999. Originally PALS's main purpose was to help teachers foster and meet effectively the diverse reading needs of the children in their broad classrooms in the USA (Fuchs & Fuchs, 2005). It is an extension of CWPT by consisting partner reading, paragraph shrinking and prediction (Okilwa & Shelby, 2010). It is worth mentioning that in PALS students alternate the roles of tutor and tutee. It has been found to be effective in improving students with SEND reading fluency and comprehension (Bond & Castagnera, 2006). However, as with any intervention, certain limitations occur. According to Fuchs, Fuchs, and Kazdan (1999), in high school context PALS failed to produce as increased fluency scores to students with serious reading problems as in elementary setting.

There are also other variables that seem to distinct peer tutoring approaches, such as the instructional emphasis of the programme. Peer tutoring can be used to promote either the acquisition of new knowledge or the practice of already taught content. Furthermore, the duration and the number of sessions in which peer tutoring is implemented consists another widely mentioned variable in studies that can critically affect the programme's effectiveness. Lastly, the adoption of a rewarding system is a critical choice to be made by the implementors of peer tutoring which can act as a motive for students' participation and its presence or absence can make a difference in peer tutoring's implementation.

#### 2.4 Teachers' role

According to Lewis and Norwich (2005), teaching in an inclusive educational environment is an interaction of three factors: teachers' knowledge, pedagogic strategies and curriculum. Children's educational needs and educational goals should be considered carefully by teachers when planning the structure and the process of their lesson

(Wearmouth, 2001). However, advocates of inclusion suggest that only minor adaptations are needed when children with SEND are included in mainstream settings (Winzer & Mazurek, 2000). The need for certain physical and curricular adaptations in order children with SEND to be successfully included is strongly suggested in the study conducted by Kochnar, West, and Taymans (2000). They further argued that teachers should develop a classroom environment of acceptance and collaboration among children. Furthermore, Thomas and Loxley (2007) argued that teachers fail to acknowledge the importance of the community in the learning procedure and to strengthen the bond between children and community. Teachers have the power to change both policies and practices and work for the benefit of all children.

The significance of teachers' role is evident in every moment of their interaction with children. Children need to be appraised by their teachers and usually they value highly their teachers' opinion. Positive feedback and the feeling of acceptance boost children's self-esteem (Wade & Moore, 1993). Loreman, Deppeler, and Harvey (2010) argued that the relationship between teachers and children is crucial for students' academic success. When teachers form a learning context that all the different academic, social and cultural backgrounds are working together and each child has a role to play in the learning procedure, children feel part of the school community and display less disruptive behaviours. As a conclusion, inclusion will not be able to succeed, if teachers are not committed and willing to work and support in practice the notion of inclusion in education (Rose & Coles, 2002).

Along the same lines, Vlachou-Balafouti and Zoniou-Sideris (2000) noted that teachers' commitment and willingness to adopt inclusive practices in their teaching styles are crucial in fostering inclusion in education. Furthermore, teachers should develop the appropriate learning environment for all the children to meet their educational needs. In the learning environment are included physical, curricular and emotional dimensions. They all play a significant role in the learning of all children. Besides the successful academic

outcomes for all children, inclusion also aims to children's emotional and psychological fulfilment. Peer tutoring is considered as an instructional arrangement fostering the current educational aim that of the inclusion of children with SEND in mainstream settings.

The traditional role of teacher is reformed in inclusive settings and especially when instructional approaches, such as peer tutoring are implemented. Specifically, in peer tutoring, teachers are called to play a significant and fundamental role in organizing, implementing and evaluating the whole programme. First of all, prior to the implementation of peer tutoring in their classrooms, it is of great significance for teachers to attend a training in the basic principles and procedures of the new instructional approach. According to Mastropieri, Scruggs, and Marshak (2008), a well-structured and targeted training of teachers can lead to an effective peer tutoring programme for both the teachers themselves and their students. During this specialized training, teachers are informed for the underlying principles and structure of peer tutoring. Then, usually the teachers review and practice the information given during training in their classrooms and continue studying scripts concerning the particular peer tutoring format, they will put in action (Fuchs, Fuchs, Yazdian, & Powell, 2002).

The first decision that teachers are called to make, considers the students who will be involved in peer tutoring. The second step to follow is the pairing of students, which constitutes a critical element in the even and efficient implementation of peer tutoring. Selecting and matching efficiently peers is one of the most challenging tasks for teachers, which needs careful consideration and planning. When matching does not prove to be successful during the first sessions of peer tutoring and students can not cooperate efficiently, teachers should consider to change pairs and create new ones (Mastropieri et al., 2001).

According to Tsuei (2012), matching of students constitutes the main variable that affects the efficacy of peer tutoring process. He further argued in his paper that combing

children of mixed abilities has not been ascertained that leads to effective collaboration. Specifically, low-achieving students may not feel confident to propose a solution to a problem for fear of failure, which may have as result negative comments and judgements from the high-achieving students. On the other hand, Gros (2001) contended that heterogeneous-ability matching of students fosters the development of reasoning strategies which cannot be obtained in homogeneous mixing of students.

When teachers have mastered the skills needed for putting in action in their classrooms peer tutoring arrangements and have selected and matched the students, they take the role of trainers, by training their students in their new roles, these of tutor and tutee. According to Oddo, Barnett, Hawkins, and Musti-Rao (2010), the preparation of the students for the peer tutoring programmes includes the teacher to model the entire procedure and, especially in the first session, the tutee's role, while in the second session, to model the tutor's role. In the third session, the teacher models how to independently follow all the steps of the programme and calls the students to start implementing peer tutoring, while he/she moves around the classroom and offers corrective feedback. The above recommendation for students' training is only one of the numerous suggestions offered in the literature. However, it is worth mentioning that there are certain elements in students' training that are similar in most of the different proposals, such as modelling the procedures, students' practice of the procedures and giving feedback (McMaster, Fuchs, & Fuchs, 2006).

During peer tutoring, teachers circulate around the classroom checking that each pair of students follow the rules, offer assistance if needed, and reward verbally the students for tracking the steps correctly and exhibit the appropriate tutoring behaviours (Oddo et al., 2010). Teachers can also make notes in a daily log or checklist for each tutoring dyad regarding the successful implementation of the tutoring steps (Mastropieri et al., 2001).

Providing corrective feedback to all the dyads is an essential part of the accurate implementation of peer tutoring programmes (McMaster, Fuchs, & Fuchs, 2006).

Teachers have also to handle with difficulties and obstacles before, during and after the implementation of peer tutoring in their classrooms. For example, teachers will probably have to deal with pressuring teaching timetables, the students' unwillingness to participate in the programme or to be pairs with specific students (Kamps, Locke, Delquadri, & Hall, 1989). Another difficulty that teachers may face is the effective adoption of their own role in the new learning environment, where peer tutoring configurations take place. Specifically, the traditional role of teachers as transmitters of knowledge is altered to a new role of managers, monitors and assistants of the students (Stowitschek, Hecimovic, Stowitschek, & Shores, 1982).

Teachers should also be aware that peer tutoring programmes may not benefit academically and socially all their students. As a result, it is of great significance for them to monitor and evaluate all the steps of this instructional approach. If a student does not make the expected progress, the teacher should reconsider the activities practiced by the students, the pairing and even to modify or even quit this instructional strategy. To meet the individual academic and social needs of all students is the main goal of inclusive education and teachers should only adopt approaches that lead them towards that aim (McMaster, Fuchs, & Fuchs, 2006). On the other hand, teachers should not avoid instructional approaches which promote the academic achievement of lower ability children, due to the excessive content demands to cover (Wexler et al., 2015).

## 2.5 Teachers' training

As with any new educational approach, before being implemented in the educational settings, there is a need for some guidance to the people who will organize and finally put it

in practice. In this case, these people are the teachers of mainstream schools. Many researchers (McDuffie, Mastropieri, & Scruggs, 2009; Van Keer & Vanderlinde, 2013; Villa, Thousand, & Nevin, 2010) have pinpointed the need for teachers' training prior to the implementation of peer tutoring in their classes. Due to the fact that teachers during the implementation of peer tutoring take a role quite different from what they have been used to perform in their classrooms, their training is of great significance for the effective implementation of a peer tutoring programme. More specifically, designing and implementing peer tutoring seems to be a demanding job, especially when is performed for the first time. As a result, teachers who are keen on putting in practice peer tutoring must be provided with the essential skills and materials to implement peer tutoring efficiently in their classrooms. This is the reason why researchers, such as Klavina and Block (2008), Topping, Miller, Thurston, McGavock, and Conlin (2011) and Villa, Thousand, and Nevin (2010), have argued that teachers' training is essential before implementing peer tutoring instruction.

The theme of teachers' training does not take a wide space in the literature of peer tutoring. However, authors, such as McDuffie, Mastropieri, and Scruggs (2009); Topping et al. (2011); Van Keer and Vanderlinde (2013), considered teachers' training critical for the efficacy of peer tutoring programmes. Specifically, teachers, prior to the adoption of peer tutoring arrangements in their classrooms, should be engaged to the guidelines that foster the implementation, monitoring and evaluation of the programme. Due to the modification of their traditional roles, teachers should get informed to the theoretical framework of the approach they will decide to apply in their classrooms (Cheng, Luk, & Pang, 2009). The duration of teachers' training can range from one hour, as in the studies of Fuchs, Fuchs, and Kazdan (1999) and Calhoon (2005) to a full day workshop, as in the studies of Kohler and Greenwood (1990) and McDonnell, Mathot-Buckner, Thorson, and Fister (2001). As a conclusion, according to Mastropieri, Scruggs, and Marshak (2008), teacher training is of

great significance because it is closely associated with the overall effectiveness of peer tutoring intervention.

Gardner, Nobel, Hessler, Yawn, and Heron (2007) in their study provided clear and easy to follow steps for the training of teachers based on presenting the skill, modelling it, role play it with the group, role play it with pairs, and finally practicing it as a group. The feedback offered to teachers in any phase of their training is crucial in order to prevent any misconceptions and difficulties in the later implementation of peer tutoring. The significance of providing feedback to teachers during their training was argued in the study of Mortweet and colleagues (1999). They concluded that feedback resulted in accurate implementation of the procedures learned throughout a whole year.

Along the same lines Topping et al. (2011) claimed that teachers' training should involve practice of the tasks and targeted feedback. Firstly, teachers should become accustomed to the theoretical underpins of peer tutoring and then, to the ways of arranging and making it work in their classrooms with their students. The enrolment of students, the constitution of pairs and the time and place where peer tutoring will take place, are of the first themes to be brought in teachers' training (Wright & Cleary, 2006). Secondly, materials should be provided to the teachers, offering them the guidelines needed and in which teachers can refer to for assistance at any time of the peer tutoring procedure (Plumer & Stoner, 2005; Van Keer & Verhaeghe, 2005). Specifically, the materials offered consist of functioning definitions, description of the intervention, lesson scenarios, research conducted under the topic of peer tutoring in real classrooms, practical materials to be given to students for practice and general organizational information for teachers (Marshak, Mastropieri, & Scruggs, 2011; Mastropieri et al., 2008). At the end, presentations from other teachers who had implemented peer tutoring configurations in their classrooms is of great significance for



teachers to accumulate all the knowledge they received and become reinforced to put in action what they have learnt (McMaster, Fuchs, & Fuchs, 2006).

According to Hughes and Fredrick (2006), another important aspect of teachers' training is the role-playing component. In other words, teachers should perform themselves the roles that their students are called to play during peer tutoring, these ones of tutor and tutee. During the role-playing, teachers practice the same activities, in which students will be engaged (Kourea, Cartledge, & Musti-Rao, 2007; Saenz, Fuchs, & Fuchs, 2005). It is crucial to mention that for the effective planning and implementation of peer tutoring in real classroom environments, teachers should be offered ongoing support and feedback from experts in the peer tutoring (Bowman-Perrott, Greenwood, & Tapia, 2007; Oddo et al., 2010). As a result, teachers' training is just the first contact with proficient people on the idea of peer tutoring, who will be present and offer their guidance and help, whenever teachers feel they need it (McMaster et al., 2006; Sutherland & Snyder, 2007). Along the same lines, Van Keer and Vanderlinde (2013), argued that short training workshops are not sufficient enough for teachers to understand the aim, procedures and results of peer tutoring configurations. This is the reason for offering continuous supervision, consultation and corrective feedback to teachers through discussions, which aim to overcome any difficulties or barriers occurred (Calhoun, 2005; Mastropieri et al., 2001). Especially in the cases, where peer tutoring is adopted as a means for including students with SEND in mainstream classrooms, teachers need constant support to facilitate both the academic and social needs of all their students (Kunsch, Jitendra, & Sood, 2007; McDonnell et al., 2001; Rohrbeck, Ginsburg-Block, Fantuzzo, & Miller, 2003).

Teachers should be also well trained in order to offer effective, targeted and well-structured training to their students (Stenhoff & Lignugaris/Kraft, 2007). During teachers' training written guidelines should be provided to teachers, which will assist them in

familiarizing their students with the principles and procedures of peer tutoring (Kourea, Cartledge, & Musti-Rao, 2007; Wright & Cleary, 2006). However, students' training should not merely consist of transmitting knowledge, but of offering the opportunity for sharing ideas and learning (Carter et al., 2015).

Concluding, teachers' training, according to Ainscow (2010), consists of a social procedure, which is characterized by faith along with personal and interpersonal relationships, in order to promote teachers' willingness to adopt innovative educational approaches. Effective inclusive approaches do not appear suddenly and effortlessly in classrooms. So, before new approaches are adopted, teachers should be introduced and familiarized with successful and prior implemented interventions, such as peer tutoring (King-Sears & Cummings, 1996). Furthermore, as has been suggested in the study of Flavell (2014), teachers can act as obstacles in students' learning because of the picture they have shaped for their role in inclusive settings. As a result, training and support, as mentioned earlier, can avert this problem by encouraging the teachers to feel as being the most responsible people in fostering the inclusive education for all. Lastly, from the time the first teacher' training on peer tutoring was held until nowadays, training has evolved from an informal transmission of knowledge through manuals and scripts to an operational and robust methodology using synchronous media and visual examples (Gardner et al., 2007). Hence, teachers' training can take any format that meets the needs and demands of each teacher and each mainstream classroom individually, in order for peer tutoring to act as an effective inclusive instructional strategy in its maximum.

## 2.6 Students' roles

Students in peer tutoring configurations can take different roles based on the type of peer tutoring arrangement they participate in. For example, when reciprocal tutoring is

implemented, students take both the role of tutor and tutee and they change roles with each other (Cheng & Ku, 2009; Tsuei, 2012). On the other hand, in fixed-role peer tutoring configurations, students perform a specific role, either that of tutor or tutee, for the whole process of peer tutoring and they do not change them with their peer (Cervantes et al., 2013; Evans & Moore, 2013). In this chapter, the different roles that students are called to play are discussed, along with the skills that they need to acquire before their involvement in peer tutoring in their classrooms.

Children who will take the role of tutor in peer tutoring will see their responsibilities change compared with the ones they already had as only students of the classroom. Specifically, tutors are at the borderline between student and teacher, because they do not lose their identity as students, but at the same time they are considered as teachers by their peers, who they tutor (Fougner, 2013). According to Cervantes et al. (2013), tutors along with teachers are considered critical components of an effective peer tutoring implementation. Tutors need to facilitate the learning process and have the leading role during the whole procedure in order to foster the construction of knowledge for their peers and themselves (De Backer, Van Keer, & Valcke, 2014). Moreover, they should constantly pay rigorous attention to both the academic and social constituents of the process, notice any change and manage it (Cervantes et al., 2013; Villa, Thousand, & Nevin, 2010).

Students who take predominantly the role of tutor instruct, evaluate peer's progress, give examples and model the procedures for their peers to be actively involved in all the components of the peer tutoring programme (Villa, Thousand, & Nevin, 2010). According to Van Keer and Verhaeghe (2005), tutors face the challenge of participating in the learning process from a different perspective, that of the leader for the very first time. They should demonstrate good tutoring behaviours, such as speaking clearly (Wood, Mustian, & Lo, 2013), monitoring peer's understanding and offering corrective feedback, which presupposes

that they already exhibit self-monitoring skills (Van Keer & Verhaeghe, 2005). It is crucial to mention that in order for the tutor to exhibit all the above-mentioned behaviours, he/she should be above or at the same academic level of their tutee's. Moreover, he/she should show commitment to the new role and be able to follow the rules of the procedure without needing constant adult support (Wright & Cleary, 2006).

Especially in the case where students without SEND act as tutors of students with SEND in mainstream settings, their support constitutes in both aiding their peers with SEND in simple tasks; such as helping them in daily procedures like finding the right classroom, taking notes, as well as in more complex tasks, such as giving directions and clarifications on assignments, elucidate the academic demands on specific tasks, and giving answer to the questions raised by their peers with SEND. Generally, peer tutors are regarded as valuable sources of individualized instruction and feedback to students with SEND in order to succeed academically in mainstream settings (Bond & Castagnera, 2006).

Students with SEND can successfully perform the role of tutor, gaining increased self-esteem (Topping, 2003; Villa, Thousand, & Nevin, 2010). A study by Hughes and Fredrick (2006) proved that three students with learning disabilities (LD) could act as tutors with high mastery rates (80-100%). Moreover, Scruggs and Osguthorpe (1986) gave to students with SEND the role of tutors of other students with SEND in their study. The results indicated increased reading rates of both tutors and tutees. As a result, children with SEND proved that they can implement effectively the role of tutors of children reading at a lower grade or younger than them. As a conclusion, children with SEND in the role of tutor has been found to improve not only their reading rates, but also their self-worth (Bar-Eli, Bar-Eli, Tenenbaum, & Forlin, 1998), by taking the role of helper, when they usually are the ones helped (King-Sears & Cummings, 1996).

The enactment of tutoring role from students with SEND, in the study of Garcia-Vazquez and Ehly (1992), led to attitudinal change towards children with SEND, with peers becoming more positive towards children with Emotional and Behavioural Disorders (EBD). However, this change did not extend to other classes apart from the one the peer tutoring programme took place. On the other hand, Kamps et al. (1994) found in their study that the improved social interactions between autistic children and their peers lead to an increase in the duration of social interactions during children's free time. The opportunity to make decisions is one of the most significant benefit that children with SEND can experience when performing the role of tutor. It is a skill which they demonstrate rarely in the mainstream school environment (Shanahan, Topping, & Bamford, 1994).

The self-management skills that children with SEND elaborate when in the tutor role seems to improve their behaviours in the general school environment, for example, when working independently, to increase the time and the behaviour when they are on a task, and to decrease disruptive behaviours (King-Sears & Cummings, 1996). Furthermore, when students with SEND are given the opportunity to act as tutors, in a position that they rarely find themselves leading to feelings of academic inadequacy, their self-esteem increases and they gain the feeling of being useful in the learning process (Bond & Castagnera, 2006). As a conclusion, students with SEND in the role of tutors have demonstrated greater gains in both the social and academic domain (Brewer, Reid, & Rhine, 2003).

Generally, students participating in peer tutoring programmes will find their roles and their learning routines changing. Both students with and without SEND will experience a learning situation quite different from the one they are use to. Different roles should be performed by students and they should become familiar with an instructional method which differs a lot from the traditional teacher-centred or other student-centred approaches. Children should accumulate themselves of teaching their peers and be taught by their peers.

As one can easily assume, in order for students to adopt successfully their new roles and the demands these roles have, training is more than essential.

## 2.7 Students' training

Participating students in peer tutoring arrangements will see their roles and responsibilities change while taking part in peer tutoring procedures. Children should become familiar with tasks that have not performed in the past, such as giving feedback to their classmates and controlling the instructive process. Hence, the training of students to become tutors is described in the literature as an essential and important step of the peer tutoring procedure (Talbot, Trzaska, & Zurheide, 2017; Van Keer & Vanderlinde, 2013). Tutors' training can take different formats and can be performed by various people, such as teachers, researchers or other educational personnel, based on the aims of each project.

Students' training consists one of the most demanding tasks and one key determinant for the success of the peer tutoring programme (Horneffer, Fassnacht, Oechsner, Huber-Lang, Boeckers, & Boeckers, 2016; Shenderovich, Thurston, & Miller, 2016; Shiozawa, Hirt, & Lammerding-Koeppel, 2016). Specifically, De Backer, Van Keer, and Valcke (2012), Horneffer et al. (2016) and Shiozawa, Hirt, and Lammerding-Koeppel (2016) found in their studies that tutors who had received training prior to the implementation of peer tutoring yielded better academic and social outcomes and facilitated more effectively the construction of knowledge for their peers. Moreover, tutors who had received training, while implementing peer tutoring, they used strategies that fostered the construction of knowledge rather than the transmission of it (Galbraith & Winterbottom, 2011; Shenderovich, Thurston, & Miller, 2016; Temple & Lynnes, 2008). As in any case, students' training has been found to take different formats in the literature. Most of these variations share common features, but there are certain variations that should be mentioned.

According to Wright and Cleary (2006) teachers are called to conduct students' training by explaining both the procedures and the desired behaviours, modelling the tasks and the expected behaviours, and letting students practice them with the offer of continuous and targeted feedback. At the beginning of the students' training, the teacher usually explains the rules of the new 'game', demonstrates the tutoring procedure by acting in the role of tutor, selects two children to perform in front of the class the procedure and gives them feedback in time. It is crucial to mention that during training no academic content is delivered by the teacher (Ayvazo & Aljadeff-Abergel, 2014).

On the other hand, some authors, like Ayvazo and Aljadeff-Abergel (2014) and Gisbert and Font (2008) suggested that the first part of students' training is the matching of students. In their study, they chose same-ability or homogeneous matching, while in other studies, like the one conducted by Tsuei (2012), researcher opted for mixed-ability or heterogeneous matching. The second part of training consists of the demonstration by the teacher of the appropriate and inappropriate tutoring behaviours, in order to secure students' understanding of what exactly is expected from them. In this study, the practice of the tutoring procedure was not limited to just two students, but to the whole class. During that time, the teacher moved around and offered corrective feedback to all students. The demonstration of the correct use of the materials that students will take was also demonstrated by the teacher.

Another critical point for effective students' training is, according to Van Keer and Vanderlinde (2013), to learn to tutors to observe the tasks and skills of the tutee and provide feedback. Moreover, when describing in their study, the procedures followed on students' training, they made a combination of both approaches mentioned above by Ayvazo and Aljadeff-Abergel (2014). Specifically, after the demonstration of the procedures by the teacher, two students modelled the programme, and then the whole class practiced it with the

teacher moving around and correcting any errors. Along the same lines, Miller (2005) opted for a whole group training of the tutors in class-wide peer tutoring procedures, and argued that students' training should involve specific procedures for tutors to follow and practice them as many times as possible before the beginning of the peer tutoring programme in their classrooms. The constant and intense practice of the tutoring procedures during training consists a pivotal part in the effective implementation of peer tutoring, not only for Miller (2005), but also for Wright and Cleary (2006) and Villa, Thousand, and Nevin (2010). Moreover, during their training students should learn how to serve most accurately on their new roles, for example, instead of simply giving the answers to their tutees to ask them questions that will lead the tutee to find himself/herself the answer. Furthermore, students who will be the tutors in the process should also learn how to check and secure that their tutees have understood both the task and its content, and, also offer to them targeted and appropriate feedback.

Components of effective tutors' training are, according to Klavina and Block (2013) and Temple and Lynnes (2008), disability awareness, communicative strategies, instructional strategies depending on the type of children's SEND, offer of corrective feedback and appropriate use of the materials and manuals. Disability awareness is fostered at the beginning of training by discussing examples of differences on people and giving students the opportunity to ask any question they have regarding the topic of disability. The main aim of this discussion is for tutors to experience the feelings of sympathy and empathy towards children with SEND and for a respectful and understanding learning environment to be formed (Klavina & Block, 2013).

The type of children's SEND should be also considered when designing and conducting tutors' training. Special guidelines should be offered to students concerning the specific type of SEND that the child with whom they will be paired has. For example, basic



knowledge on sign language should be provided during training, when one or more of the children have visual difficulties. Accordingly, disability specific information, like managing disruptive behaviour or provide physical assistance, should be offered to tutors during training (Bond & Castagnera, 2006; Lieberman, Dunn, Van der Mars, & McCubbin, 2000; Temple & Lynnes, 2008). As a conclusion, all authors argued that students should be able to follow and complete successfully all the procedures, before peer tutoring starts in their classrooms (Dufrene et al., 2010; Mackiewicz et al., 2011; Wang, Bettini, & Cheyney, 2013).

Usually in the literature the ones responsible for students' training are the teachers (De Backer, Van Keer, & Valcke, 2014; Maheady & Gard, 2010; Mastropieri, Scruggs, & Berkeley, 2007; Wang, Bettini, & Cheyney, 2013). However, there are cases, such as in the studies of Dufrene et al. (2010), Lingo (2014), Mackiewicz et al. (2011), McDuffie, Mastropieri, and Scruggs (2009), and Wood, Mustian, and Lo (2013) in which students' training was conducted by one of the researchers, and not the teacher. As far as the amount of students' training is concerned, studies, in which an extensive tutor training was provided, produced better results compared with the ones that a short training was offered (Shenderovich, Thurston, & Miller, 2016; Stenhoff & Lignugaris/Kraft, 2007). Despite all the above-mentioned critical aspects and characteristics of tutors' training, it is of great significance to give to students the opportunity to share, especially during the first stages of training, their ideas and concerns. Above all, the main aim of tutoring is to promote the shared learning and communication among students. Students should support their tutees as classmates and not as 'little-teachers' (Carter et al., 2015).

A concluding point to be made is that, as Clemenz (2002) argued, training should ease the concerns and fears that tutors may have and, at the same time, offer them the knowledge background to interact both socially and academically with their tutees. However, there are

cases, as in the study of Burns (2006), in which tutors were still worried about the procedures they had follow, even after completing their training.

## 2.8 Peer tutoring procedures

Peer tutoring procedures followed in each case differ according to the type of peer tutoring chosen to be implemented. The general procedures of peer tutoring, which are similar to most of the types, will be described. According to many researchers (Bowman-Perrott, 2009; Carter et al., 2015; Hughes & Fredrick, 2006; Villa, Thousand, & Nevin, 2010; Wright & Cleary, 2006), when teachers wish to implement peer tutoring in their classes should follow certain steps, although variations among studies exist. First of all, they should define the tutoring context. In other words, they should consider if the existing relationships among students will permit the implementation of this kind of instructional strategy, and then to decide the rules, the reinforcement, the support they will need in order to organize, implement and evaluate peer tutoring, and, lastly, to inform all the stakeholders. Secondly, they should set the goals and the expectations they wish to achieve regarding the academic and social development of both their students with and without SEND. Thirdly, they should choose the content and the time when peer tutoring will be implemented. The next step includes the selection and matching of students by shaping the most suitable, according to teachers' perceptions, pairs. Teachers should also consider carefully the needs and strengths of each student individually in their classrooms, and decide who will work more effectively with whom. Then, they should decide which form of peer tutoring will be most appropriate for their classroom and its duration and frequency. The materials that will be used is another aspect of the procedure followed, and the teacher should decide if he/she will use already existing material or if he/she will create material specific for the purposes of the peer tutoring programme. As mentioned above, the training of students is one of the most critical steps in

the effective implementation of peer tutoring and most of the times is carried out by the teachers themselves. Another part of the peer tutoring procedure is the monitoring of the whole process, along with evaluation of it and the provision of feedback, which is the step that usually completes a peer tutoring programme.

According to Delquadri, Greenwood, Whorton, Carta, and Hall (1986), in reciprocal formats of peer tutoring, the time that the child receives peer tutoring should be at least ten minutes, and, accordingly for another ten minutes he/she should be the tutor. Students at the beginning of each session are reminded of their pairs by the teacher. Then, they sit together and the first ten-minute period begins, in which one of the children is the tutor and the other the tutee. When the ten-minute period passes, children change roles. Teachers are always present in the procedure monitoring and offering corrective feedback. As far as the number of weeks that peer tutoring should be implemented studies make variable suggestions. For example, in the study of Wright and Cleary (2006) the average number of instructional weeks was 19.2 (range= 8.6-21.2), which is much longer than the nine-week instructional period in the study of Scruggs, Mastropieri, and Marshak (2012). In the study of Spencer (2006), peer tutoring was implemented four times a week for 23 minutes, and the average number of weeks was eight. As a conclusion, it should be mentioned that because there is not a consistent period of time regarding its duration and frequency, in which peer tutoring offers its maximum effectiveness mentioned in literature, teachers should take into consideration the needs, the strengths and the aims that they have set for their classrooms and decide peer tutoring's components in order to meet them effectively.

A critical element in the effective implementation of peer tutoring is the rewarding system for students, according to Ayvazo and Aljadeff-Abergel (2014), Bowman-Perrott (2009) and Burks (2004). In their studies, they used the public posting board, in which children when finished each session of peer tutoring, they posted their earned points. They

could gain points by practicing effectively the task. Teachers can also award points in pairs for exhibiting positive tutoring behaviours. Even before peer tutoring starts, the concept of co-operation should be demonstrated and connected to the public posting system of awards. The public posting board is placed in a classroom's wall and next to each students' name are noted their daily and summative points. This type of reward was found to significantly motivate students to work cooperatively. However, because every class is different, teachers can utilize different motivators that they are sure they will work for their students and promote co-operation among them.

The procedures followed in the study of Cheng, Luk, and Pang (2009) for enhancing students' literacy development is quite representative of peer tutoring. First, the teacher delivered the new content knowledge, which in this case consisted of reading words. Then, the students worked in pairs, which included one high and one low-ability student, with the high-ability student reading the word and the other pointing it on paper. Then the roles between the students were switched. A quite similar, while more structured, procedure was followed in the study of Dufrene et al. (2010), in which reading was again the content targeted. Fixed-role peer tutoring was utilized with the tutee reading the passage and the tutor correcting any errors made. The tutors in this case recorded the words read correctly and the errors made by the tutee per minute. If the tutee could not retrieve a word, the tutor provided that word to the tutee. At the end of the session, the tutor shared with the tutee the record sheet and gave him/her a reward. Tutors were also rewarded for their active participation. As one can easily assume, the role of the tutor in this study was more complex than usually. As a result, training was intense and the age of children performed the specific role was between 11 and 12 years old.

As a conclusion, while there are specific procedures that should be followed for implementing peer tutoring, variations to those procedures are mentioned in different studies.

These variations are a product of careful thought and planning of both teachers and researchers in order to implement a programme which will be the most suitable and effective for the participating students. As a result, it is important to be familiar with the rules and the general steps of peer tutoring, but at the same time is equally important to make specific adaptations and modifications in these rules and steps for all the students to gain both academically and socially.

### 2.9 Teachers' benefits from their participation in a peer tutoring programme

As has been recognized by several researchers (Hughes & Fredrick, 2006; Temple & Lynnes, 2008, Villa, Thousand, & Nevin, 2010), teachers often feel ill-prepared in providing individualized instruction and reflective assessment to students with SEND. Peer tutoring comprises an alternative approach aiming to satisfy teachers' demands for offering individualized instruction in mainstream classrooms (Brigham, Scruggs, & Mastropieri, 2011; Mackiewicz et al., 2011; Van Keer & Vanderlinde, 2013). Although peer tutoring will not replace the traditional role of teachers and the traditional form of instruction, it will offer teachers the opportunity to provide differentiated instruction and individual feedback to students with SEND with modest demands on them (Cheng, Luk, & Pang, 2009; Dufrene et al., 2010; Lingo, 2014; Stenhoff & Lignugaris/Kraft, 2007). Moreover, peer tutoring helps teachers in developing a classroom environment of trust and social acceptance, in which every member is accepted and valued (Carter et al., 2015; Cervantes et al., 2013; Clemenz, 2002; Miller, 2005).

Another point that teachers usually refer to when asked about inclusive education is their concerns for the education of children without SEND and how inclusion of students with SEND affect the education of children without SEND in mainstream classrooms. According to Cervantes et al. (2013), and Dufrene et al. (2005), peer tutoring is a viable and

effective instructional strategy that covers not only the needs of students with SEND, but also helps in preserving a quality learning experience for students without SEND. A well organized and implemented peer tutoring programme can offer teachers the opportunity to reduce the learning gap among students of differing abilities in their inclusive classrooms. Moreover, using peer tutoring programmes, teachers can adopt more facilitative approaches and save time and space for contemplating on their own pedagogic and scientific strategies (Fougner, 2013; Wright & Cleary, 2006). As Bowman-Perrott (2009) and Wood, Mustian, and Lo (2013) argued, peer tutoring does not consume substantial teaching time for its organization, implementation and evaluation and can easily become part of teachers' daily instructional routine.

The type of peer tutoring seems to affect the demands placed on teachers for its implementation. For example, according to Topping et al. (2011) and Van Keer and Verhaeghe (2005), cross-age tutoring proved to have long-term effects compared to same-age one. However, cross-age tutoring is much more demanding, because it requires collaboration between two teachers of different classrooms. In inclusive settings, the social relationships among students are considered of great significance in the academic and social development of all students. Moreover, Klavina and Block (2008) contended that the constant adult support offered to students with SEND may have a negative effect on the social relationships formed between students with and without SEND, leading to the social isolation of students with SEND. Further, in their study concluded that the introduction of peer tutoring resulted in an immediate increase in positive interactions between students with and without SEND.

Peer tutoring can increase students' engaged time on academic practice and, also can provide a tool for managing students in independent practice time, which is often considered by teachers as one of the most difficult times in their timetables, according to Stenhoff and Lignugaris/Kraft (2007) and Wright and Cleary (2006). They further argued that peer tutoring

configurations can help teachers supporting students with SEND to gain access to the mainstream curriculum. Another benefit accumulated using peer tutoring programmes is the improvement of student-teacher ratios (Miller, 2005). Villa, Thousand, and Nevin (2010) contended that when teachers make use of peer tutoring configurations in their classrooms, they collaborate fully with all their students. This results in shifting teachers' attention from students' needs and deficits to students' strengths and potential.

Involving students in peer tutoring arrangements offers teachers the help they need in handling difficult behaviours or even misbehaviours in their inclusive classrooms (Burks, 2004; Clemenz, 2002; Sutherland & Snyder, 2007; Wright & Cleary, 2006). Moreover, when students of different academic levels collaborate in a learning situation, increased students' time on task, enhancing instructional time for all students and immediate feedback, are just some of the numerous potential benefits for all the participating students (Luca & Clarkson, 2002; Spencer, 2006; Van Keer & Vanderlinde, 2013). Last but not least, when teachers utilize peer tutoring, they can reduce their own workload (Bowman-Perrott, 2009; Maheady, Harper, & Mallette, 2001).

However, simply putting into action peer tutoring arrangements in mainstream classrooms is not adequate to secure students with SEND learning (Stenhoff & Lignugaris/Kraft (2007). Teachers have to overcome certain obstacles, when they decide to implement peer tutoring in their inclusive classrooms and before celebrate any of the abovementioned benefits, according to Villa, Thousand, and Nevin (2010) certain aspects of schooling should be altered, such as the traditions and norms of the schooling itself. Teachers can surpass these by giving to their students the opportunity to manage their own learning and in some cases, be the leaders of the learning procedure, as in peer tutoring. Although there is an increasing research support for collaborative instructional strategies, teachers rarely implement specialized, inclusive teaching approaches in their inclusive classrooms.

They more usually tend to employ and rely on teacher-centred instructional strategies for the inclusion of students with SEND in their mainstream classrooms (Scruggs, Mastropieri, & Marshak, 2012).

## 2.10 Students' benefits from their participation in a peer tutoring programme

Peer tutoring has gained substantial research interest over the last years in both western and eastern countries (Delquadri et al., 1986; Topping, 1996). Most of the research studies focused on examining the effect of peer tutoring programmes on the academic and social development of the participating students. Based on the fact that peer tutoring is mainly used in inclusive settings, one can easily assume that most of the studies would focus on the academic and social effect of peer tutoring on students with SEND. A statement which is not completely incorrect, but there are also studies examining the benefits of students without SEND participating in peer tutoring arrangements. Both the academic and social development of students are critically examined in order for peer tutoring's efficacy to be appraised. Furthermore, as Bowman-Perrott, Burke, Zhang, and Zaini (2014) argued, the social development of students is closely linked to their academic development. In other words, it was revealed that decrease of disruptive behaviours was linked with increase in academic performance rates. For the purposes of the present thesis students' with and without SEND academic benefits will be first described and, later, the benefits of peer tutoring on students' with and without SEND social development will be discussed.

### 2.10.1 *Students' academic benefits*

Peer tutoring implemented as a means towards the inclusion of students with SEND in mainstream classrooms targets among other skills to their academic development. In other



words, the academic gains accumulated for students with SEND are one of the most researched subjects in this research area. Academic gains for students with SEND were claimed in various content areas and grade levels. For example, Brigham, Scruggs, and Mastropieri (2011) found that students with LD who participated in a peer tutoring programme exhibited academic gains in science education and even more than their peers without SEND. Reading is another field that has gained the research interest when examining the efficacy of peer tutoring for children with SEND. Increased self-correction rates and improved reading skills were proved in the study of Burns (2006). Moreover, reading fluency and reading comprehension rates were increased for the three students with autism in the study of Kamps et al. (1994), as a result of their participation in class-wide peer tutoring. Along the same lines, Cheng, Luk and Pang (2009) found in their study that peer support can be utilized for reducing reading failure in beginning readers. However, while they also tested this approach to adolescents facing reading difficulties, the results were not as positive as the ones reported for the beginning readers. As a conclusion, peer tutoring was proved effective in various content areas, such as reading (fluency and comprehension), social studies, mathematics, spelling and science (Bowman-Perrott et al., 2014).

In their meta-analytic review of single-case research studies examining the academic effects of peer tutoring, Bowman-Perrott et al. (2013) found moderate to large academic benefits resulting from peer tutoring. Specifically, they concluded that peer tutoring proved effective regardless of the type of students' SEND, although students with EBD was found to be benefitted the most from other students with SEND. They further found that students with or at risk for SEND benefitted academically in a greater extent than their peers without SEND who participated in the peer tutoring arrangements. Similarly, the study of Wood, Mustian and Lo (2013) highlighted the increased academic gains in reading fluency for three out of the four kindergarten students with or at risk for reading difficulties, who participated.

Another review synthesis of 20 research studies conducted by Stenhoff and Lignugaris/Kraft (2007) concluded that peer tutoring proved beneficial for the academic development of secondary students with mild disabilities and they classified it as an effective instructional strategy for the academic support of students with SEND. Similarly, improved academic performance and specifically improved reading fluency and increased response rates were reported in the study of Lingo (2014) for students with disabilities who were tutored by older students. Along the same lines, struggling and delayed readers in the study of Wright and Cleary (2006) increased substantially their reading fluency matching the reading rate of typical readers in their grade level, due to their involvement in a school-based peer tutoring intervention programme.

Positive results on the academic development of students with SEND were reached also in the experimental study of Scruggs, Mastropieri, and Marshak (2012), who found that students with mild disabilities who participated in a peer tutoring programme outperformed their peers with SEND who only received traditional instruction. Even with students with more complex SEND, like deaf or hard hearing students, peer tutoring has proved effective in enhancing their academic engagement in various content areas (Herring-Harrison, Gardner, & Lovelace, 2007). Along the same lines, Carter et al. (2015) argued that students with severe learning disabilities (SLD) could only be benefitted by their participation in peer tutoring programmes, especially in increasing their academic engagement and lessen the time they spend being close to their support personnel and paraprofessionals.

Tutees are not the only ones benefitted by their involvement in peer tutoring. There have been reported academic benefits for tutors, as they practice themselves the academic skills in order to teach their peers (Wang, Betini, & Cheyney, 2013). As Utley, Mortweet, and Greenwood (1997) contended students who can instruct other students on a specific content, learn better the content themselves. Tutors' constant exposure and practice with the content

materials will lead to the development of both cognitive and organizational skills, along with long-term retention of the content. All the above result to a more complex and higher understanding of the content (Cohen, 1986). A review of 20 research studies conducted by Stenhoff and Lignugaris/Kraft (2007) pointed at the same direction by concluding that peer tutoring proved beneficial for the academic development of students acting as tutors. Specifically, tutors were found to have reduced their absence rates and improved further their academic performance.

Learning through teaching is a common learning approach which gives credits to tutor's benefits from peer tutoring. Increased content knowledge, advanced communicating and metacognitive skills, and amplified motivation are some of the tutors' benefits found in literature (Bar-Eli et al., 1998). Along the same lines, the study of Wright and Cleary (2006) revealed that tutors increased their reading rates and speed as a result of their participation in peer tutoring. However, tutors' gains were not as great as the ones experienced by tutees. This can be because tutors practiced a text that they already have mastered before starting tutoring. Generally, it is important for the tutor, in order to successfully implement the peer tutoring schedule, to adopt to the academic and cognitive level of the tutee (Shamir & Tzuriel, 2004).

On the other hand, despite the wide success of peer tutoring on children with SEND, it is not surprising that this approach is not always effective. Children with SEND may not benefit from the arrangement when their peers complete all the tasks without them being involved or when they do not feel even at least responsible for their own learning (Mastropieri, Scruggs, & Berkeley, 2007). In the same vein, Nelson, Johnson, and Marchand-Martella (1996) argued that on-to-one instruction was more effective in improving on-task behaviour to children with EBD than cooperative learning. Changing solely the instructional

approach and develop peer tutoring arrangements are not enough to prevent a shallow approach and encourage a deep approach to active and effective learning (Herrmann, 2013).

As a conclusion, the students' participation in peer tutoring arrangements can lead to the development of their academic skills in various content areas, grade levels, and educational settings. For example, peer tutoring has been found effective in improving the reading, spelling, mathematic, and science skills of students with SEND of different grade levels. It can be also concluded that peer tutoring is effective in promoting the academic skills of students with SEND regardless of the type of students' SEND. Students without SEND, acting mainly as tutors, have been also benefitted academically as documented by their increased increased academic engagement and improved academic performance. However, they have consistently been found to be benefitted academically to a lesser extent than their classmates with SEND.

### *2.10.2 Students' social benefits*

Students with SEND are often identified as having deficits in their social skills, which usually lead them to misbehave and, generally, perform anti-social or even problematical behaviours inside their school environment (Villa, Thousand, & Nevin, 2010). As a result, the development of students' with SEND social skills has proved a demanding and challenging task, which certainly should be incorporated in the mainstream curriculum (Ayvazo & Aljadeff-Abergel, 2014). Various researchers worldwide have examined the impact of peer tutoring arrangements on the social and behavioural skills of students with SEND, as can be found in the meta-analytic review of Bowman-Perrott et al. (2014).

This review found a small to moderate effect on the behavioural and social outcomes of the 128 participating students aged from prekindergarten to grade 12. It is worth mentioning that the direct effect of peer tutoring was moderately large, while the collateral

effect was small. However, as the authors claimed, peer tutoring had its greatest effect on developing the social skills and interactions and, at the same time, to reduce students' misbehaviours and off-task behaviours. In agreement with this result, Carter et al. (2015) contended that even in cases of students with severe disabilities peer tutoring can assist them in improving their social skills and creating more friendships.

As far as the different types of students' SEND are concerned, the literature suggests that peer tutoring has found to be beneficial for a wide range and diversity of SEND, like EBD, speech and language difficulties, LD, ADHD, Intellectual Disability (ID), Autism Spectrum Disorders (ASD) and physical impairments. While there is a great diversity in the students' SEND incorporated in the sample of research studies, the meta-analysis of Bowman-Perrott et al. (2014) concluded that peer tutoring was found more beneficial for some types of SEND than in others. For example, they claimed that the effect sizes reported in studies with students with LD were higher compared to the studies with students with EBD. However, certain variables should be taken into consideration prior to any concrete conclusion to be drawn, such as the type of peer tutoring used in each study, the presence or absence of a rewarding system and if the study examined direct or collateral effects.

For students with SEND, having a peer helping them during the learning process develops the sense of a respectful learning environment and narrows the learning gap between them and their peers (Dufrene et al., 2010). Studies, like the one of Shanahan, Topping, and Bamford (1994), revealed that during peer tutoring children with SEND display different facets of their personality. They move from passivity to active engagement and from boredom to interest. A socially withdrawn child become responsive to his/her peers. It is crucial to mention that in the specific study the social gains of children with SEND were generalized in time and in various settings. As a conclusion, promoting social interactions

among children in inclusive settings has been found that can be fostered by peer tutoring arrangements (Burns, 2006; Topping, 2003).

The benefits accumulated for students with SEND when performing the tutor role are highlighted in an experimental study mentioned in the book of Villa, Thousand and Nevin (2010), in which twelve students with LD were taught by a special education teacher in performing specific social skills. After the completion of this instruction, a random sample of five of them acted as tutors of other students with LD. The results indicated that both groups of students with SEND improved their social skills, letting authors to conclude that peer tutoring can be as effective as teacher instruction in the instruction of social skills to students with mild disabilities. Lastly, the increased students' self-esteem should be also taken into consideration as another positive influence of peer tutoring on students with SEND, who performed the role of tutor.

Furthermore, when students with SEND take the role of tutor, which is not often the case due to teachers' concerns of the capability of students with SEND to take all the responsibilities that the role of tutor calls for, they have been found to gain significantly in the social domain. Specifically, the study conducted by Wang, Bettini and Cheyney (2013) found that students with EBD performed effectively the role of tutor in their peer tutoring programme with evident beneficial effects on their self-confidence, self-efficacy and on altering their disruptive behaviour patterns. The development of students' with SEND social skills and the reduction of their rates of misbehaving was found to be the result of their involvement in class-wide peer tutoring in the study of Ayvazo and Aljadeff-Abergel (2014).

Although, in general, peer tutoring is arranged in assisting tutees to benefit socially, tutors will also benefit from their participation in peer tutoring programmes (Cohen, 1986). The enactment of the tutoring role will boost tutors' self-esteem and confidence. It has been also argued that being a tutor can decrease maladaptive or antisocial behaviour patterns, and

permit the tutor to adopt a positive social role. Along the same lines, the review synthesis of Stenhoff and Lignugaris/Kraft (2007) concluded that students who performed the role of tutor increased their positive social interactions and their performance of appropriate behaviour in their classrooms. Similarly, boosted self-confidence, higher self-efficacy, understanding and accepting diversity were some of the benefits accumulated for students acting as tutors in peer tutoring arrangements with younger students with autism and other associated LD in the study of Jones (2007).

Students without SEND who help their peers gain a robust understanding of the others' needs, which can lead them to become socially responsible (Mastropieri, Scruggs, & Berkeley, 2007). Additionally, the feeling of participating actively in the learning process consists a form of socialization for students, based on the notion that knowledge is socially constructed (Burgess, Dornan, Clarke, Menezes, & Mellis, 2016). Reduced stress levels for academic achievement was found in students when participating in peer tutoring programmes by Braine and Parnell (2011). They further argued that peer tutoring can lead to students' development of communication and personal skills and, by extension, to the shaping of a social and academic network among students. Last but not least, the involvement of students without SEND in peer tutoring arrangements can foster the deep understanding of themselves firstly, and then the understanding of their peers with SEND, leading to accepting the diversity, improve their attitudes towards their peers with SEND and finally making new friendships.

To sum up, peer tutoring can be considered effective in developing the social skills and interactions of students with SEND, and, at the same time, to reduce the instances of them misbehaving or showing off-task behaviours. As mentioned earlier, it has been shown effective in a wide range and diversity of SEND promoting the social interactions among students in inclusive educational settings. When students with SEND have performed the role

of tutor in the peer tutoring configurations, they have shown increased self-esteem, self-confidence and reduced rates of misbehaving. Lastly, students without SEND who participated in peer tutoring programmes can improve their self-esteem and confidence, accept and understand the diversity and become socially responsible.

### 2.11 Teachers' views towards peer tutoring

The key people in the organization, implementation and evaluation of peer tutoring are teachers. Their traditional role, when using teacher-centred instructional arrangements is shifted to a role of the monitor, guide and evaluator in student-centred arrangements, such as peer tutoring, letting the children themselves have the leading role in their learning process. Due to the important role teachers are called to play during a peer tutoring programme, their attitudes, beliefs, perceptions and views are of great significance for the effective implementation of such an intervention programme. As a result, a great portion of the research studies in the field has tried to outline teachers' views towards peer tutoring arrangements as a means to the inclusion of students with SEND in mainstream classrooms.

Teachers, in most of the research studies, are found to hold positive attitudes regarding peer tutoring programmes and high treatment acceptability (Spencer, 2006; Sutherland & Snyder, 2007). Specifically, in the study of Sutherland and Snyder (2007) teachers reported high scores on their willingness to implement peer tutoring in their classrooms and expected it to be effective for their students. Similarly, Hughes and Fredrick (2006) found teachers to be satisfied after the completion of the peer tutoring programme, claiming vocabulary benefits for both their students with LD and their students without SEND and asserting that all the peer tutoring procedures were easy in their implementation.

Along the same lines, teachers were found to be satisfied by the outcomes produced by peer tutoring to the reading achievement and to the social development of students with



LD in the study of Fuchs et al. (1997). They further argued that the benefits for students with SEND were greater compared to the ones of the average achieving students in their classrooms. Teachers were also found satisfied by the peer tutoring programmes in studies conducted in various countries worldwide, like in the study of Bowman-Perrott (2009) in the United States of America, in the study of Luca and Clarkson (2002) in Australia and in the study of Plumer and Stoner (2005) in western Massachusetts.

Teachers noted that there are not benefits only for the students or the classes involved in the peer tutoring programmes, but also to the whole school. In other words, the positive outcomes resulting from the involvement in peer tutoring of a specific part of the school population can easily be transferred to the whole school by improved relationships among all students (Jones, 2007; Ryan, Reid, & Epstein, 2004). A common statement made by teachers when asked about peer tutoring's implementation in their classrooms is that peer tutoring is easy in its implementation without needing excessive time and effort in its organization (Bowman-Perrott, Greenwood, & Tapia, 2007; Hughes & Fredrick, 2006; Kourea, Cartledge, & Musti-Rao, 2007; Maheady & Gard, 2010).

When teachers are asked to appraise the effectiveness of peer tutoring for their students, both with SEND and without, one of the first comments they make concern their students' enthusiasm and active participation (Falk & Wehby, 2001; Marshak, Mastropieri, & Scruggs, 2011; Saenz, Fuchs, & Fuchs, 2005). Another widely mentioned benefit by the teachers is peer tutoring's effectiveness in handling students' disruptive behaviours (Mastropieri et al., 2001). Furthermore, the development of students' self-management skills due to their participation in peer tutoring arrangements was highlighted by teachers in various studies (Oddo et al., 2010; Spencer, Scruggs, & Mastropieri, 2003), which led to a well-structured learning environment, where the students are responsible for their own learning.

A critical element in keeping both teachers and students involved in the peer tutoring process, according to teachers in the studies of Delquadri et al. (1986) and Mastropieri et al. (2001), is its immediate beneficial effect and the instant reinforcement offered to students, which can be seen and appraised immediately. Teachers have regarded peer tutoring as an instructional approach appropriate for including and meeting the diverse academic and social needs of students with SEND in their classrooms, as was found in the study of DuPaul et al. (1998), where students with EBD participated in a class-wide peer tutoring programme. They further contended that they were willing to continue implementing class-wide peer tutoring in their classrooms, which was confirmed six months after the completion of the intervention programme.

However, this is not always the case when teachers claim that they are willing to continue the implementation of a peer tutoring programme, after the completion of the research project. Indicative of this is the study of Sutherland and Snyder (2007) in which the general positive perceptions the teachers reported in a survey at the end of the intervention were not validated in the three follow-up observations carried out by the researchers, where they found that no teacher continued the use of peer tutoring in their classrooms.

The traditional way of thinking was found to be pervasive among teachers in the study of Ainscow (2010), which inhibits them from working inclusively and further hinders the development of an inclusive ethos in classrooms, and in schools, in general. The paper concluded by stating that changes in policy and practice are difficult, but more difficult it is to change the beliefs and the attitudes of the people involved, such as teachers. The traditional instruction was also opted by teachers compared with peer tutoring in the studies of Elbaum, Vaughn, Hughes, and Moody (1999) and McDuffie, Mastropieri, and Scruggs (2009), while they admitted that the peer tutoring programme had benefits for their students.

They also claimed that the implementation of peer tutoring made their classrooms noisy and without structure and it was challenging for them to keep their students engaged on tasks.

When a 2<sup>nd</sup> grade teacher was asked in a qualitative study by Van Keer and Vanderlinde (2013) about the changes in her role in order to organize, implement and evaluate the peer tutoring programme in her classroom, she had several concerns regarding her new role. Specifically, she did not know if just sitting next to the students participating in peer tutoring was enough or if she had to intervene, and how she would know that her intervention was the desirable one and not affecting the process. She further continued describing the first sessions of the peer tutoring programme and the awkward position she was in. However, after the completion of the programme, she claimed that peer tutoring was a worth-trying instructional procedure, which fostered social interactions and relationships among her students and, at the same time, offered a great motive to student to practice their reading.

In general, mainstream teachers while admitting a change in their traditional role of transmitters of knowledge, they express positive attitudes towards peer tutoring arrangements, high treatment acceptability, willingness to implement them, and satisfaction after the completion of the programmes. They further claim academic and social benefits for the participating students, such as improved relationships among them. In most of the studies mentioned above, teachers have regarded peer tutoring as effective in handling students' disruptive behaviours and as appropriate for including and supporting students with SEND in their mainstream classrooms. On the other hand, there were instance where teachers found that peer tutoring made their classes noisy and without structure. As a result, keeping students engaged on tasks was claimed to be a challenging task for them.

## 2.12 Students' views towards peer tutoring

Recently research studies in the field are seeking students' feedback concerning their involvement in peer tutoring programmes. Students with SEND along with their peers without SEND have evolved as a popular sample in studies examining the effectiveness of the peer tutoring. Surveys and interviews are used to depict the views, perceptions and feelings of students towards peer tutoring programmes. As can be easily suggested it is of great significance to examine the attitudes of the people for whom peer tutoring is primarily designed and implemented, those of students.

Participating students in general are found holding positive feelings towards peer tutoring programmes and being highly satisfied from their involvement in them (Ayvazo & Aljadeff-Abergel, 2014; Borisov & Reid, 2010; Hawkins, Musti-Rao, Hughes, Berry, & McGuire, 2009; Huber & Huber, 2007; Staubitz, Cartledge, Yurick, & Lo, 2005). It is also a quite common finding in research studies examining students' attitudes to find that students tend to prefer peer tutoring compared to traditional teacher-centred instructional approaches (Hughes & Fredrick, 2006; McDuffie, Mastropieri, & Scruggs, 2009; Spencer, Scruggs, & Mastropieri, 2003; Villa, Thousand, & Nevin, 2010). Especially, students with SEND have been consistently found in studies expressing positive feelings towards peer tutoring, and in some cases, they are found more positive than their peers without SEND (Sideridis et al., 1997).

Students performing only the role of tutor in the various peer tutoring configurations, usually report feelings of accomplishment because of their contribution to the development of the academic skills of their peers with SEND (Hughes & Fredrick, 2006; Jones, 2007; Vogel, Fresco, & Wertheim, 2007). Tutors also express their belief, in the studies of Evans and Moore (2013) and Jones (2007), that teaching other students and assure that they have fully comprehended the content tutored contributes to their own better understanding of the

content. The different way of working, for students involved in peer tutoring programmes leads them to express positive feelings and describe favourably their experience of collaborating with their peers (Bowman-Perrott et al., 2014; Clemenz, 2002; Jones, 2007).

Students participated in peer tutoring programmes when interviewed after the completion of the programme, have claimed in different studies (Brewer, Reid, & Rhine, 2003; Hughes & Fredrick, 2006; Klavina & Block, 2008; Sutherland & Snyder, 2007; Villa, Thousand, & Nevin, 2010) that they are willing to continue working collaboratively with their peers and working with the same way in other subjects, too. When students without SEND acting as tutors of students with SEND are interviewed prior to the implementation of a peer tutoring programme, they are usually reported as feeling anxious, nervous or even afraid. When the same students are interviewed after the completion of the programme, their anxiety feelings have transformed to the positive feelings of enthusiasm, joy and accomplishment (Clemenz, 2002).

While prior to the introduction of peer tutoring programmes to their classrooms, students with SEND expressed hesitant feelings of working collaboratively with their peers, after its implementation their feeling have changed to more positive ones (Jones, 2007; Klavina, 2008). In most cases, students with SEND recognize that their involvement in peer tutoring led to the development of their academic skills and to the content understanding (Ayvazo & Aljadeff-Abergel, 2014; Hawkins et al., 2009; Mackiewicz et al., 2011; Spencer, Scruggs, & Mastropieri, 2003; Staubitz et al., 2005). They also agree that participating in peer tutoring programmes is an easy way to learning (Plumer & Stoner, 2005; Spencer, Scruggs, & Mastropieri, 2003).

When students with SEND act as tutors they perceive the whole peer tutoring programme differently as when they are only serving as tutees. For example, Borisov and Reid (2010) found in their interpretative phenomenological analysis that students with SEND

acting as tutors expressed positive feelings with respect to offering help, self-accomplishment and higher self-esteem. The differences between the attitudes expressed by tutors and tutees are evident in the study of Vogel, Fresco, and Wertheim (2007), where tutors claimed that tutees had difficulties in expressing their needs. Tutors declared important difficulties in shaping the tutoring relationship, while tutees did not mention it. Lastly, tutees were reported more satisfied from the programme compared to the tutors.

Although students without SEND, who usually perform the role of tutor, are reported to enjoy the peer tutoring programme, they express their dissatisfaction when their peers with SEND are not focused on the procedure (Jones, 2007). Another concern usually expressed by peers without SEND is missing their classwork and learning time (Herrmann, 2013; Luca & Clarkson, 2002). However, they claim that peer tutoring gave them the opportunity to understand their peers' with SEND needs, appraise the good features of their personality and develop better social relationships with them (Ayvazo & Aljadeff-Abergel, 2014; Borisov & Reid, 2010; Carter et al., 2015; Jones, 2007; Klavina, Jerlinder, Kristen, Hammar, & Soulie, 2014).

However, there are cases that students with SEND express their concerns regarding specific aspects of peer tutoring procedure. For example, in the study of Spencer, Scruggs, and Mastropieri (2003) students with SEND were concerned about their active involvement in the learning process, because until prior to the implementation of peer tutoring programme, they were just sitting and listening to their teacher. Similarly, students expressed anxiety feelings in the study of Huber and Huber (2007) because of the complexity of the peer tutoring approach, especially during the first sessions, and they suggested to return to the traditional instructional approach. Choosing their own peer tutoring partner has been consistently reported by students as an aspect of peer tutoring that students should express

their opinion on (Scruggs, Mastropieri, & Marshak, 2012; Spencer, Scruggs, & Mastropieri, 2003).

Overall the literature on students' views towards peer tutoring reports them as being positive and highly satisfied from their involvement in peer tutoring arrangements, preferring peer tutoring over traditional, teacher-centred instructional approaches. Participating students with SEND have found to claim that peer tutoring consists an easy way to learning and has led to their academic development. Especially when they have performed the role of tutor they reported higher self-esteem and accomplishment. On the other hand, they have expressed anxiety feelings due to the complexity of the peer tutoring procedures, especially during the first sessions of the programmes. Generally, tutees have been shown to be more satisfied from the peer tutoring procedures than tutees. Participating students without SEND claimed to have understand their peers' with SEND needs better through their involvement in peer tutoring programmes and to have developed healthier social relationships with them. On the contrary, there were cases where they expressed concerns regarding their peers' with SEND difficulty to stay focused on the peer tutoring procedures.

## **Chapter 3: Systematic review of empirical studies on the effectiveness of peer tutoring**

### 3.1 Aim of the systematic review

This section describes the procedures followed and the results of a systematic review conducted to examine the effectiveness of peer tutoring arrangement on the academic developments of the participating students. The main aim of this systematic review was to identify (a) the content areas that peer tutoring is most commonly applied (b) the age groups of the participating students and (c) the types of peer tutoring employed. My initial screening of the available literature revealed that peer tutoring has mainly been applied in the content areas of literacy and numeracy thus directing my subsequent systematic searching on these two areas only. This exercise was undertaken with a view to organising and implementing a peer tutoring programme in Greek mainstream classrooms.

### 3.2 Review methods

Systematic review methodology follows a structured procedure in gathering, assessing and synthesizing literature related to specific questions. First, I searched the literature for relevant articles. Each article was screened by title and abstract to determine whether the study was eligible. The next step included the retrieval of full texts. The methods sections of promising articles were scrutinized to determine if the inclusion criteria were met. Following this filtering, the full texts were read.

### 3.3 Literature Search Procedures

A literature search was conducted in an attempt to identify every study related to peer tutoring and its effect on academic achievement, using the JSTOR, PsychINFO, and the Education Resource Information Center (ERIC) electronic databases. These databases were



searched for research studies on peer tutoring five years after the signing of the Salamanca Statement and Framework for Action on Special Needs Education (i.e. 1999) (UNESCO, 1994) till 2018.

Search terms included ‘peer tutoring’, ‘reciprocal peer tutoring’, ‘class wide peer tutoring’, ‘peers as tutors’, ‘peer instruction’, ‘peer mediated instruction’, ‘peer teaching’, ‘peer mentoring’, ‘peer involvement’, ‘peer collaboration’, ‘peer mediation’, ‘peer assisted learning’ and ‘peer assisted learning strategies’ to identify as many articles as possible. These were combined each time with ‘special educational needs’, ‘learning disabilities’, ‘numeracy’, ‘reading’, ‘writing’, ‘spelling’, ‘mathematics’, ‘literacy’, ‘inclusion’, ‘integration’, ‘disability’, ‘special education’ and ‘mainstreaming’. An ancestral search was also conducted for studies in the reference lists of each relevant article in order to locate studies that were not found in the initial database search. An additional ancestral search was performed for studies included in published peer tutoring literature reviews (e.g. Bowman-Perrott et al., 2013; Elbaum et al., 1999; Ezzamel & Bond, 2016).

### 3.4 Inclusion Criteria

To select relevant studies for this review, a study had to conform to the following criteria:

1. Published in English in peer reviewed international scientific journals between 1999 and 2018
2. Examined the effects of peer-mediated interventions on academic outcomes on literacy (writing, spelling, reading) and numeracy for students with SEND
3. Included students with LD, ID, EBD or emotional disturbance, ADHD, and ASD or students identified as at risk for literacy and numeracy disabilities

4. Included students in mainstream kindergarten, primary and secondary schools involving same or cross-age peers as tutors on a face to face arrangement

5. Adopted experimental, quasi-experimental or single case research designs

6. Included at least one academic measure assessing students' literacy or/and numeracy learning

I therefore excluded:

1. Duplicate studies (i.e., studies that appeared in more than one database search)

2. Studies conducted on subject areas different from literacy and numeracy

3. Studies in which college students, parents or other adults served as tutors

4. Literature reviews or qualitative evaluations of peer tutoring programmes

5. Studies with participants younger than 5 years or older than 18 years

6. Studies conducted in clinics, homes, or other settings except schools

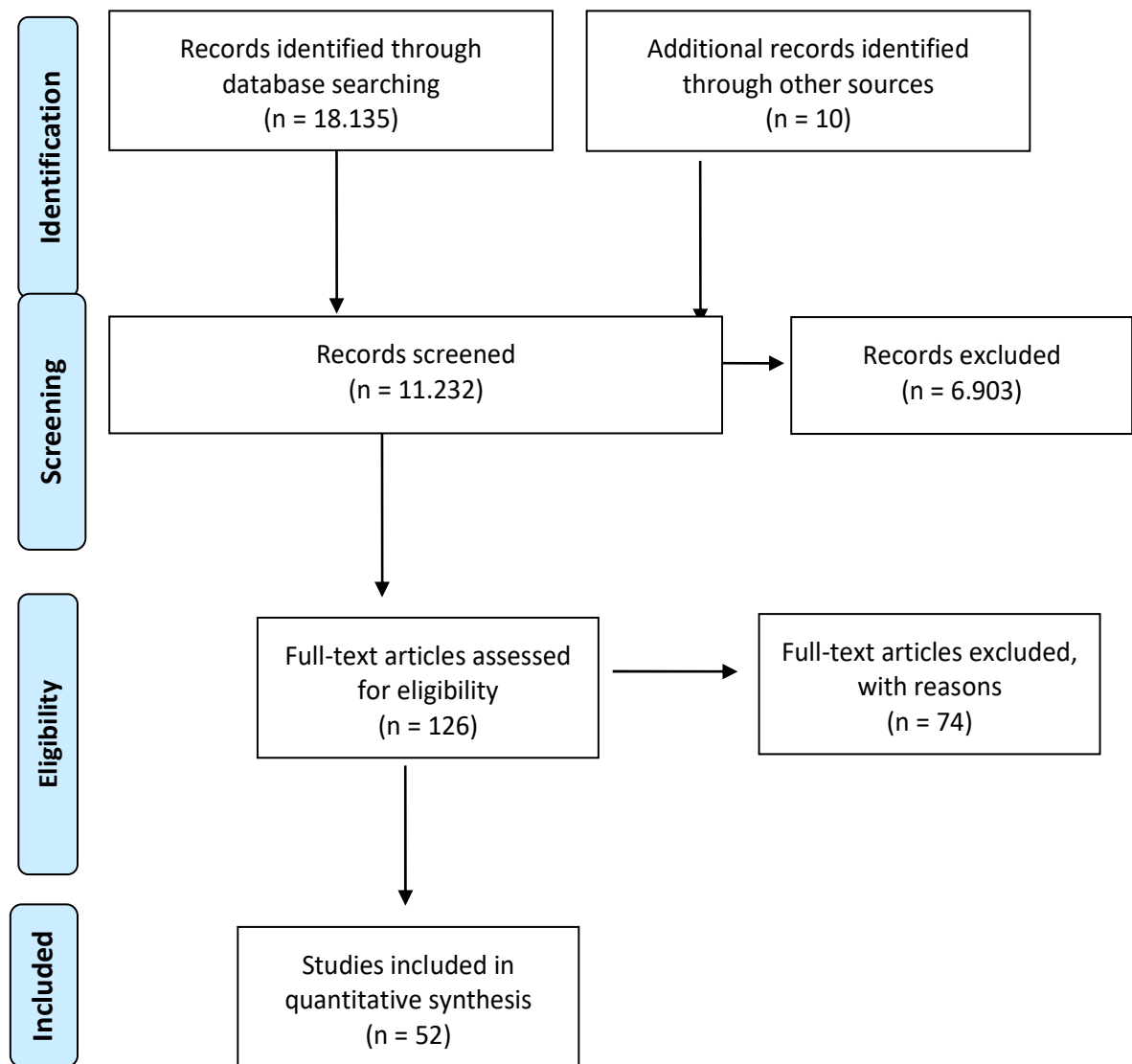
7. Studies in which the performance data of students with SEND could not be separated from the entire sample

8. Studies with online formats of peer tutoring

The initial screening yielded a huge number of abstracts (18.135). Specifically, 13.279 articles from ERIC, 638 articles from JSTOR, and 4.218 from PSYCINFO, and 10 articles from other sources. After applying the inclusion criteria and excluding the irrelevant articles, 126 articles remained. After screening, 51 studies fulfilled all the inclusion criteria. The various stages of the process are detailed below in Figure 1.

**Figure 1**

*Flowchart of the search for and inclusion of studies adapted from PRISMA Statement (Moher, Liberati, Tetzlaff, & Altman, 2009)*



### 3.5 Coding study features

Studies that met the inclusion criteria were coded utilizing an extensive coding sheet developed to fulfill the aims of the current synthesis. Eight study variables were coded, including a) authors and year of publication, b) country of data collection, c) research design,

d) participants' characteristics (sample size, grade level, disability or at-risk status), e) subject areas, f) type of peer tutoring and g) results. These variables were selected because either they have been examined in previous syntheses (i.e. students' grade level) or they have not been commonly examined in previous syntheses (i.e. types of students' SEND and type of peer tutoring).

Research design consisted of single and group designs. Participants' characteristics included study's sample size, students' grade level and disability or at-risk status. Disability status referred to the type of special educational needs that students were diagnosed with; the terminology used in the identified studies was maintained. 'At-risk' students were described as those who had not been formally diagnosed but performed below grade level according to their teachers. Subject areas included literacy (reading, spelling and writing) and numeracy.

Two members of the research team read independently the identified studies and classified their results as 'positive', 'negative', 'neutral' or 'ambivalent'. The label 'positive' indicates that the academic performance of students with SEND was positively influenced by the peer tutoring interventions performed as reported by the authors themselves (e.g. Barton-Arwood, Wehby, & Falk, 2005). Studies in which positive results were reported for the majority of the dependent measures with the remaining ones reported stable, were also classified as positive. For example, the Al Otaiba, Schatschneide, and Silverman (2005) study was classified as positive since reading fluency, reading accuracy and phoneme blending skills improved while reading comprehension remained stable. The label 'negative' was assigned to studies where the academic performance of students with SEND deteriorated in all or the majority of the dependent measures examined. For example, in the study of McMaster, Fuchs, Fuchs, and Compton (2005) students' phonemic decoding efficiency, reading accuracy, fluency and comprehension deteriorated as a result of the implementation of peer tutoring intervention, while rapid letter naming and phoneme segmentation skills

remained stable. The term ‘neutral’ was assigned to studies where the academic performance of students with SEND remained the same. For example, Neddenriep, Skinner, Wallace, and McCallum (2009) found no change in the measurements of students’ reading fluency and comprehension after the implementation of a peer tutoring intervention. Finally, the term ‘ambivalent’ was assigned to studies in which ‘mixed’ or ‘contradictory’ effects were reported. For example, in the Vaughn et al. (2000) study, which examined the effectiveness of a fixed role pair reading scheme for students with reading disabilities, the rate of reading and correct words read per minute were significantly improved over time; however, the students’ reading accuracy improved without reaching statistical significance and their reading comprehension deteriorated.

A high level of agreement was recorded between the two researchers who reviewed independently the identified research outputs. The reviewers' classification was similar in 46 out of a total of 51 outputs, which corresponds to a satisfactory 90.2% agreement; the remaining five outputs were independently classified by the third member of the research team.

### 3.6 Findings

The vast majority of the 51 studies included in this research synthesis were conducted in educational contexts in the USA (n= 48). Two were conducted in Germany and one in Canada. Furthermore, most of the tutoring interventions (n= 37) took place in elementary school settings, five in kindergarten, eight in high school contexts, and finally, one included participants from both elementary and high schools (Calhoon, 2005). Most of the studies (n=44) investigated the effect of peer tutoring on the literacy skills of students with SEND, while only seven studies examined peer tutoring’s effectiveness on their mathematical performance. The specified age of the pupils ranged from 5 to 17 years old. Single-case

emerged as the most common research design in this synthesis as it was adopted in 30 out of the 51 studies, followed by group (n=16) and single group (n=5) experimental designs. Lastly, most of the studies implemented reciprocal forms of peer tutoring (n=20), 17 studies used PALS, and 13 used fixed-role formations. In one study (Menesses & Gresham, 2009) both reciprocal and fixed-role peer tutoring configurations were implemented.

### 3.6.1 Peer tutoring's efficacy on literacy

As already mentioned, forty-four studies examined the efficacy of peer tutoring on literacy (i.e. 34 on reading, 5 on writing and 5 on spelling). Additionally, one study by McMaster et al. (2005) examined the effectiveness of peer tutoring on both reading and spelling students' achievement, hence it was included in both reading and spelling tables.

With regard to reading (see Table 1), peer tutoring proved effective in 29 out of 35 analysed studies. Specifically, peer tutoring was reported to increase students' reading fluency, reading comprehension, vocabulary acquisition, and letter and word identification. Negative results indicated in only one study (McMaster et al., 2005). Ambivalent effects were mentioned in three studies (Falk & Wehby, 2001; Fuchs, Fuchs, & Kazdan, 1999; Vaughn et al, 2000). Finally, two studies were classified as neutral (Neddenriep et al., 2009; Wehby, Falk, Barton-Arwood, Lane, & Cooley, 2003).

Table 1.

#### *Reading*

Author(s)	Type of peer tutoring	Research design	Participants	Results
Al Otaiba et	PALS	Group	73 students at risk	Positive

al. (2005)			for reading difficulties (24 control, 25 2 days per week peer tutoring, 24 4 days per week peer tutoring); kindergarten	+ reading fluency + reading accuracy + phoneme blending +/- reading comprehension 4 days peer tutoring showed the greatest benefits
Algozzine, Marr, Kavel, and Dugan (2009)	Fixed role	Group	100 (50 treatment; 50 control) students at risk for reading difficulties; 2 <sup>nd</sup> grade; elementary	Positive + reading fluency + reading comprehension
Allor, Fuchs, and Mathes (2001)	PALS	Group	24 students low lexical retrievers (12 treatment; 12 control); 1 <sup>st</sup> grade; elementary	Positive + reading accuracy + phonemic awareness + reading fluency +/- reading comprehension
Barton-Arwood, Wehby, and Falk (2005)	PALS	Single case	6 students with EBD; 3 <sup>rd</sup> grade; elementary	Positive + phoneme blending + phoneme segmentation + Phonological Awareness subtest + word attack
Calhoon	PALS	Group	38 (18 treatment; 20	Positive

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(2005)			control) students	+reading accuracy
			with LD; 32 6 <sup>th</sup> - 8 <sup>th</sup>	+ reading comprehension
			grades; elementary	+/- reading fluency
			and high school	
Dufrene et al. (2010)	Fixed role	Single case	4 students scored below the 15 <sup>th</sup> percentile for the DIBELS Oral Reading Fluency subtest; 6 <sup>th</sup> grade; elementary	Positive + reading fluency
Falk and Wehby (2001)	PALS	Single case	6 students with EBD; kindergarten	Ambivalent + letter-sound correspondence + blending probes - phonemic segmentation probes
Fuchs, Fuchs, and Kazdan (1999)	PALS	Group	102 (52 treatment;50 control) students with disabilities (LD,ID, other); 8 <sup>th</sup> -10 <sup>th</sup> grades; high school	Ambivalent + reading comprehension - reading fluency
Hofstadter-Duke and	Fixed role	Single case	1 student referred for reading	Positive + reading fluency

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Daly (2012)			problems; 1 <sup>st</sup> grade; elementary	
Josephs and Jolivette (2016)	Fixed role	Single case	2 students referred as struggling readers; high school	positive + reading fluency
Kourea, Cartledge, and Musti- Rao (2007)	Reciprocal	Single case	6 students; 2 with LD; 4 at risk for LD; 2 <sup>nd</sup> -3 <sup>rd</sup> grades; elementary	Positive + reading fluency + reading comprehension
Lingo (2014)	Fixed role	Single case	4 students with mild disabilities (LD, OHI, ID); 6 <sup>th</sup> grade; elementary	Positive + reading fluency
Mackiewicz et al. (2011)	Reciprocal	Single case	8 students with LD; 4 <sup>th</sup> grade; elementary	Positive + vocabulary acquisition
Marchand- Martella, Martella, Orlob, and Ebey (2000)	Fixed role	Single group	22 students with reading disabilities; 9 <sup>th</sup> grade; high school	Positive + vocabulary acquisition + reading comprehension
Marr, Algozzine, Nicholson, and Keller	Reciprocal	Group	34 (17 treatment; 17 control) struggling readers; 2 <sup>nd</sup> grade; elementary	Positive + reading fluency + reading comprehension

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Dugan (2011)				
Mastropieri, Scruggs, Spencer and Fontana (2003)	Reciprocal	Group	16 students with disabilities (LD, EBD, ID); (8 in treatment and 8 in control); 10 <sup>th</sup> grade; high school	Positive +/- reading fluency + reading comprehension
Mastropieri et al. (2001)	Reciprocal	Group	24 students (12 treatment; 12 control) with disabilities (LD and ID); 7 <sup>th</sup> grade; high school	Positive + reading comprehension
Mathes and Babyak (2001)	PALS	Group	56 (27 treatment; 29 control) students at risk for reading disabilities; 1 <sup>st</sup> grade; elementary	Positive + reading fluency + reading comprehension
Mathes et al. (2003)	PALS	Group	59 students at risk for reading difficulties (31 treatment, 28 control); 1 <sup>st</sup> grade; elementary	Positive + reading accuracy + reading fluency + phonemic decoding efficiency + phoneme segmentation

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				+ reading comprehension
Mattatall (2017)	PALS	Single group	339 at risk for reading disabilities; 1 <sup>st</sup> grade; elementary	Positive + reading fluency
McMaster et al. (2005)	PALS	Group	44 non responders in reading (22 treatment; 22 control); 1 <sup>st</sup> grade; elementary	Negative +/- rapid letter naming - phonemic decoding efficiency +/- phoneme segmentation - reading accuracy - reading fluency - reading comprehension
Neddenriep et al. (2009)	Reciprocal	Single case	2 students with reading deficits; 6 <sup>th</sup> grade; elementary	Neutral +/- reading fluency +/- reading comprehension
Noell et al. (2000)	Fixed role	Single case	5 students who had been referred for consultation services; 7-10 years old; elementary	Positive + reading comprehension
Oddo et al. (2010)	Reciprocal	Single case	4 students with the lowest reading scores; 1 with LD; 9-years old;	Positive + reading fluency + reading comprehension

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			elementary	
Saenz,	PALS	Group	20 students with LD	Positive
Fuchs, and			(10 in treatment and	+ reading comprehension
Fuchs			10 in control), 3 <sup>rd</sup> -	
(2005)			6 <sup>th</sup> grades;	
			elementary	
Staubitz et	Reciprocal	Single	6 students with or at	Positive
al. (2005)		case	risk for EBD; 4 <sup>th</sup> -5 <sup>th</sup>	+ reading fluency
			grade; elementary	+ reading comprehension
Sutherland	Reciprocal	Single	4 students with	Positive
and Snyder		case	EBD; 11-13 years	+ reading fluency
(2007)			old; high school	
Van	Reciprocal	Single	6 students at risk for	Positive
Norman and		case	reading difficulties;	+ reading accuracy
Wood			kindergarten	
(2007)				
Vaughn et	Fixed role	Single	7 students with	Ambivalent
al. (2000)		group	reading disabilities;	+ reading fluency
			3 <sup>rd</sup> grade;	+/- Reading accuracy
			elementary	- reading comprehension
Veerkamp,	Reciprocal	Single	3 students low	Positive
Kamps, and		case	achievers in	+ reading fluency
Cooper			reading; 6 <sup>th</sup> grade;	+ reading comprehension
(2007)			elementary	
Volpe,	PALS	Single	4 non-responders;	Positive

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Young, Piana, and Zaslofsky (2012)		case	kindergarten	+ reading fluency
Wehby et al. (2003)	PALS	Single case	8 students with EBD; 2 <sup>nd</sup> to 4 <sup>th</sup> grades; elementary	Neutral +/- reading fluency +/- phonological awareness +/- phonological memory
Wright and Cleary (2006)	Fixed role	Single group	27 delayed readers; 2 <sup>nd</sup> - 3 <sup>rd</sup> grades; elementary	Positive + reading fluency
Yawn (2012)	Fixed role	Single case	4 struggling readers; 6 <sup>th</sup> grade; elementary	Positive + reading fluency +/- reading accuracy + reading comprehension
Yurick, Robinson, Cartledge, and Evans (2006)	Reciprocal	Single case	8 low-achieving students, (2 of which with LD); 5 <sup>th</sup> grade; elementary	Positive + reading fluency + reading accuracy + reading comprehension

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EBD: Emotional and Behavioural Difficulties; LD: Learning Disabilities; ID: Intellectual Disability; OHI: Other Health Impairments

With regard to writing (see Table 2), peer tutoring was found to be effective in all five identified studies. Specifically, peer tutoring configurations improved the rates of students

with SEND in the number of words written (Asaro-Saddler & Bak, 2014; Grunke, Janning, & Sperling, 2016), in sentence combining (Saddler, Azaro, & Behforooz, 2008; Saddler, Behforooz, & Azaro, 2008) and in producing larger and qualitatively better narratives (Grunke, Wilbert, Tsiriotakis, & Agirregoikoa, 2017).

Table 2.

*Writing*

Author(s)	Type of	Research	Participants	Results
	peer	design		
	tutoring			
Asaro-Saddler and Bak (2014)	Reciprocal	Single case	6 students with ASD; 8-10 years old; elementary	Positive + number of words written in essays
Grunke, Janning, and Sperling (2016)	Fixed role	Single case	3 students with severe learning and speech difficulties; 3 <sup>rd</sup> grade; elementary	Positive + total words written in short stories
Grunke, Wilbert, Tsiriotakis, and Agirregoikoa (2017)	Fixed role	Single case	3 students with LD; 4 <sup>th</sup> grade; elementary	Positive + total words written in various products + composition of larger and qualitatively better narratives
Saddler,	Reciprocal	Single	4 students with LD;	Positive

Asaro and Behforooz (2008)	case		4 <sup>th</sup> elementary	grade; + sentence combining ability + story quality
Saddler, Behforooz and Azaro (2008)	Reciprocal case	Single	6 students (3 with LD and 3 with weak writing skills); 4 <sup>th</sup> grade; elementary	Positive + sentence combining ability + story quality

ASD: Autism Spectrum Disorder; LD: Learning Disability

With regard to spelling (see Table 3), in four out of five analysed studies, peer tutoring resulted in improved students' spelling accuracy rate and number of correctly spelled words. However, in one study (McMaster et al., 2005) no improvement was noticed on the spelling accuracy of students with SEND, so the study was classified as neutral.

Table 3.

*Spelling*

Author(s)	Type of peer tutoring	Research design	Participants	Results
Burks (2004)	Reciprocal	Single case	3 students with LD; 5 <sup>th</sup> elementary	Positive + spelling accuracy
McDonnell et al. (2001)	Reciprocal	Single case	3 students with severe LD; 2 at 4 <sup>th</sup> and 1 at 5 <sup>th</sup> grade;	Positive + spelling accuracy

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			elementary	
McMaster et al. (2005)	PALS	Group	44 non responders in reading (22 treatment; 22 control); 1 <sup>st</sup> grade; elementary	Neutral +/- spelling accuracy
Mortweet et al. (1999)	Reciprocal	Single group	4 students with mild mental retardation; 2 <sup>nd</sup> - 3 <sup>rd</sup> grades; elementary	Positive + spelling accuracy
Taylor and Alber (2003)	Reciprocal	Single case	4 students with LD; 1 <sup>st</sup> grade; elementary	Positive + number of words spelled correctly

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LD: Learning Disability

The syntheses presented in Tables 1-3, taken collectively, suggest that peer tutoring is an effective intervention for improving the literacy skills of students with SEND.

### 3.6.2 Peer tutoring's efficacy on numeracy

In numeracy, all seven identified studies produced positive outcomes such as enhanced mathematical readiness in kindergarten students (Fuchs, Fuchs, & Karns, 2001); enriched mathematical knowledge and associated skills (Fuchs et al., 2002), improved mathematical fluency (Menesses & Gresham, 2009; Rhymer, Dittmer, Skinner, & Jackson, 2000), and boosted mathematical performance as measured by the number of correct digits written per minute (Gilbertson, Witt, Singletary, & VanDerHeyden, 2007) in elementary



aged students; and, finally, enriched math vocabulary (Hott, Evmenova, & Brigham, 2014) and improved computational skills (Calhoon & Fuchs, 2003) in high school students. Strikingly, there were no studies reporting ambivalent, negative or neutral effects on students' academic achievement in this subject.

Table 4.

*Mathematics*

	Type of	Research	Participants	Results
Author(s)	peer tutoring	design		
Calhoon and Fuchs (2003)	PALS	Group	92 students with LD (45 treatment; 47 control);9 <sup>th</sup> – 12 <sup>th</sup> grades; high school	Positive + computational math skills +/- concepts/application math skills
Fuchs, Fuchs, and Karns (2001)	PALS	Group	15 students with LD (8 treatment; 7 control); kindergarten	Positive + mathematical readiness (number identification, number concepts, number relations, mathematical vocabulary and adding and subtracting concepts)
Fuchs et al. (2002)	PALS	Group	18 students with disabilities (SpLD, ADD) (9	Positive +mathematical knowledge and skills

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			treatment; 9 control); 6-8 years old; elementary	
Gilbertson et al. (2007)	Fixed role	Single case	5 students referred for consultation and intervention due to math difficulties; 1 <sup>st</sup> , 4 <sup>th</sup> and 5 <sup>th</sup> grades; elementary	Positive + maths performance (number of correct digits written per minute)
Hott, Evmenova, and Brigham (2014)	PALS	Single case	6 students with EBD; 6 <sup>th</sup> to 8 <sup>th</sup> grade; high school	Positive + math vocabulary
Rhymer et al. (2000)	Reciprocal	Single case	4 students with mathematics skills deficits; 4 <sup>th</sup> grade; elementary	Positive + Mathematical fluency +/- on control set of problems
Menesses and Gresham (2009)	Reciprocal, fixed	Group (reciprocal, fixed, control)	59 students at risk for math difficulties (15 in reciprocal, 28 in fixed, 16 in control); 2-4 <sup>th</sup>	Positive + mathematical fluency for both types of peer tutoring

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SpLD: Specific Language Disability; ADD: Attention Deficit Disorder; EBD: Emotional and Behavioral Disability

### *3.6.3 The effectiveness of various forms of peer tutoring*

Next, I examined possible differences among the outcomes produced by the three types of peer tutoring. Starting with the most widely used approach, the reciprocal configuration, all but one studies reported positive academic benefits to students with SEND in both the areas of literacy and numeracy. The only study that was classified as neutral was the Neddenriep et al. (2009), in which the students' reading fluency and comprehension remained the same. As far as the second most common form of peer tutoring is concerned, that of PALS, the picture that emerged is a rather mixed one. While the majority of the studies analysed (n=13) reported academic gains, two of the studies were classified as neutral (McMaster et al [2005] on spelling; Wehby et al, 2003), two as ambivalent (Falk & Wehby, 2001; Fuchs, Fuchs, & Kazdan, 1999), and one as negative (McMaster et al [2005] on reading). In this respect, it could be suggested that the effectiveness of the PALS' approach is far from clear-cut as approximately one third of the reported studies failed to produce the intended effects. Finally, fixed-role emerged as an exceptionally effective peer tutoring type since, except for the Vaughn et al.'s (2000) study, all other analysed studies (n=12) supported the intervention's effectiveness. In conclusion, it could be suggested that the evidence reported in this review supports the notion that peer tutoring can produce academic benefits for students with SEND regardless of the form implemented.

#### 3.6.4 *The effectiveness of peer tutoring on various types of SEND*

As already mentioned, the terminology used in the identified studies was maintained. Accordingly, the studies included in this synthesis reported participants with SEND as being diagnosed with ‘learning disabilities’, ‘severe learning disabilities’, ‘mild mental retardation’, ‘reading disabilities’, ‘at risk for reading disabilities’, ‘emotional and behavioural disorders’, ‘autism spectrum disorders’, ‘mathematical skills deficits’, and ‘at risk for math difficulties’.

As anticipated, most of the studies (N= 20) focused on students who were ‘at risk for reading disabilities’; these were struggling readers who performed below average on reading tasks and had been referred to the psychological services for assessment. The second most frequent type of SEND reported in the analysed studies (N=17) were ‘learning disabilities’; these were students who had been officially diagnosed at the time of the study. These types formed in some cases the sole type of students involved in a given study, while in other cases formed part of a much broader and heterogeneous sample.

As shown in Tables 1-3, students at risk for reading disabilities were mentioned to benefit from peer tutoring arrangements in 17 out of 20 studies. Similarly, students with learning disabilities were mentioned to benefit from peer tutoring arrangements in 16 out of 17 studies. Students with EBD were mentioned to benefit from peer tutoring arrangements in five out of seven studies, with the remaining two studies reporting neutral and ambivalent results respectively. The two studies involving students with ASD and students with mild mental retardation reported positive results. Finally, the three studies on students with math difficulties, all produced academic gains.

In conclusion, peer tutoring emerged as an effective approach for all types of SEND examined. However, a word of caution is needed here; the small number of participants in some studies does not allow for firm conclusions to be drawn. For example, there were only

six students with ASD taking part in one study (Asaro-Saddler & Bak, 2014) and only four students with mild mental retardation in another (Mortweet et al., 1999).

## **Chapter 4: Methodology**

This chapter offers a detailed methodological account of and rationale for my study. The current chapter discusses the methodological decisions made to address the research questions and aim of my study. The paradigm and the epistemological and ontological orientation of my study along with the research design followed are explored. Furthermore, a detailed description of the research methods, the sample and the data analysis procedures followed is offered. Details on the procedure was followed for collecting data is explained. Lastly, ethical considerations and the steps taken to prevent any ethical issues arising are also described.

### **4.1 Aim of the study**

Social and economic changes have led to the evolution of inclusion as an international trend in education over the last twenty years (Ferguson, 2008). Inclusion calls on mainstream schools to educate all children, even those that previously would have been sent to special schools. This presupposes that certain adaptations and alterations in the school environment are needed to develop inclusive education settings (Kochnar, West, & Taymans, 2000; Lewis & Norwich, 2005). Generally, inclusion suggests that children with SEND should be educated in mainstream classrooms along with their peers without disabilities, even if they have to accomplish different educational goals (Olson, 2003). However, according to Loreman, Deppeler, and Harvey (2010), it is easier to express what inclusion is not rather than to describe what it is.

Mainstream teachers are called to play a significant role in the implementation of inclusion. Many studies (Avramidis & Kalyva, 2007; De Boer, Pijl, & Minnaert, 2011; Farrell, 2004; Loreman, Deppeler, & Harvey, 2010; Rose & Coles, 2002) have acknowledged their importance to effective inclusive practices. Mainstream teachers should organize their

teaching in a way that meets the needs of all the different learners and learning styles. Furthermore, they should adapt the curriculum and evaluate both their and the children's work (Clough, 1998). Although the role that teachers should play in inclusive settings is widely described in the literature, only in recent years has there emerged an interest in mainstream teachers' attitudes, perceptions and opinions towards inclusion and more specifically, towards certain inclusive approaches.

The idea of including children with SEND in mainstream classrooms has always been of interest to me and this was the main reason that I chose to examine the effect of an inclusive instructional approach, such as peer tutoring, in the academic and social skills of students with SEND and their peers without SEND, based on the perceptions of the participating teachers and students. The main purpose of this study is to implement and evaluate a peer tutoring programme along with both the participating teachers and students. I am fully aware that great efforts, especially at the current time, is needed, but believe that, ultimately, through an organized plan, inclusion can become a reality.

Inclusion is a policy priority in many countries worldwide and they have accordingly designed and implemented policies for fostering inclusion (Avramidis & Kalyva, 2007; Ferguson, 2008; Loreman, Deppeler, & Harvey, 2010). However, little research has been conducted regarding the attitudes, the perceptions and the opinions of people that are affected by the inclusive legislation and practice, such as children with and without SEND, towards an inclusive instructional strategy. These voices should be heard when effective inclusive practices are the ultimate goal of the educational system. In particular, mainstream teachers' voices, who are considered the key people in implementing inclusion, should be taken into consideration when promoting it (Olson, 2003; Thomas & Loxley, 2007). Similarly, attention should be given to the voices of both students with SEND and their peers without SEND regarding their participation in inclusive practices, such as peer tutoring.

The aim of this research is twofold, the first aim is, to describe and interpret teachers' opinions and experiences towards the general notion of inclusion of students with SEND in mainstream classrooms and their perceptions of self-efficacy for implementing inclusion. The second aim is, after exploring teachers' opinions and experiences towards peer tutoring and their self-efficacy perceptions, to plan, implement and monitor a peer tutoring programme in mainstream classrooms, in order to examine how participating teachers and students perceived its efficacy as an inclusive approach in mainstream classrooms.

#### 4.2 Research questions

The study differs from its predecessors in one important respect; far from simply measuring generic teachers' attitudes towards the notion of inclusion and their self-efficacy for inclusive practices, this study examined the extent to which teachers' attitudes towards inclusion and their self-efficacy perceptions predict their willingness to implement peer tutoring as an inclusive instructional strategy in Greek classrooms. The study sought answers to the following research questions:

- 1) What are the attitudes towards inclusion and the self-efficacy perceptions towards inclusive practices of mainstream teachers and how these differ from the ones of their special education counterparts?
- 2) What benefits do mainstream teachers perceive as emanating from the implementation of a peer tutoring programme?
- 3) To what extent do mainstream teachers' attitudes towards inclusion and peer tutoring and their self-efficacy for inclusive practices predict their willingness to implement a peer tutoring programme in their classes?
- 4) How teachers' attitudes, beliefs, and feelings towards peer tutoring have been shaped after implementing the peer tutoring programme in their classrooms?



- 5) How the attitudes, beliefs and feelings of students with SEND and of their peers without SEND were shaped after their involvement in the peer tutoring programme?

It is worth noting here that this study focuses solely on the mainstream Greek teachers. For the purposes of the current study mainstream teachers are considered the main agents of implementing inclusion and, more importantly, the only professionals who can apply peer tutoring as an inclusive strategy in mainstream classrooms. The incorporation of a small comparison sample of special Greek educators from the same participating schools reflects our methodological choice to examine whether the differential training received by the two teacher groups might have affected their attitudes and self-efficacy perceptions towards inclusion (the first research question only).

#### 4.3 Paradigmatic assumptions

The conception of social world is closely linked with both the research design and methods that the researcher opted for to fulfil the aims of the research study (Cohen, Manion, & Morrison, 2007). There is a wide range of methodological approaches in the field of inclusive education which either exist in absolute isolation from each other or they sometimes co-exist in multimethod research designs and approaches (Avramidis & Norwich, 2016). According to Kuhn (1962) a research paradigm consists of the common beliefs and agreements shared between scientists about how problems should be understood and addressed. Mertens (2005) defines paradigm as “a way of looking at the world, [which] is composed of certain philosophical assumptions that guide and direct thinking and action” (p. 7). A way forward to the understanding of research paradigms is not to perceive ‘paradigms as philosophical stance’ but rather ‘as shared beliefs among groups of researchers’ (Morgan, 2007). My study lies on the pragmatic paradigm and next I will follow the justification of this choice by describing and delivering a brief critique on the alternative paradigms, and

concluding on the paradigm that was found to be the most appropriate for my study's aims, design and methods.

Special needs research field has traditionally employed, especially during its first stages of evolvement, quantitative research designs with large sample sizes in order to measure in numbers the efficacy of an intervention or generally, the efficacy of special education offered to students with SEND (Avramidis & Norwich, 2016; Mertens & McLaughlin, 2004). Many researchers would classify this approach to research in a positivist or post-positivist paradigm (Avramidis & Norwich, 2016, Cohen, Manion, & Morrison, 2007).

Positivism assumes that the social world and the researcher exist in distinct positions, with the researcher being the observer of the social world and reality (Cohen, Manion, & Morrison, 2007). This will further lead to the production of objective knowledge without researcher's involvement (Hesse-Biber, 2010; Willig, 2008). While this approach to social reality has gained its credibility over the years, it has proved less effective in studying human behaviours and interactions, where the complexity occurring cannot be explained by the regularity and order of natural world (Cohen, Manion, & Morrison, 2007; Denscombe, 2010).

These aspects that proved positivist approaches insufficient in studying the complexities of the human personalities, led to the evolvement of interpretivism or constructivism. Several researchers have contended that the epistemological and ontological background of the interpretivist paradigm was more suitable for the studying of educational issues in inclusive education (Avramidis & Norwich, 2016). Theory follows research and does not precedes (Cohen, Manion, & Morisson, 2007). One of the main differences between positivism and interpretivism is their perception of reality. While positivism argues that there is only one reality, interpretivism claims that there are more than one reality and, furthermore, they are socially constructed, allowing for several interpretations to be made

(Avramidis & Norwich, 2016; Cohen, Manion, & Morisson, 2007; Hesse-Biber, 2010; Robson, 2011; Robson & McCartan, 2016). It is in this context that the attitudinal studies regarding teachers', parents', students', and generally staff's opinions have emerged. However, as with positivism, interpretivism has also received critique over this notion of multiple interpretations. Specifically, if there are multiple interpretations for the phenomenon under study, how would it be possible for a robust research conclusion to be drawn (Avramidis & Norwich, 2016). Furthermore, small-scale studies and context specific are usually conducted in the framework of interpretivism leaving no space for generalizing their conclusions (Avramidis & Norwich, 2016; Cohen, Manion, & Morrison, 2007). Lastly, interpretivist studies have been found unsuitable for testing the effectiveness of instructional interventions, according to Avramidis and Norwich (2016), and this was one of the main reasons for not choosing solely interpretivism for my study.

The paradigm war taking place between positivism and interpretivism for more than four decades in social sciences has now proved sterile (Robson, 2011; Tashakkori & Teddlie, 1998). The pragmatic approach has been chosen as the most suitable for the aims and purposes of my study. According to Denscombe (2010), Robson (2011) and Willig (2008), pragmatism is considered a philosophical stance based on the assumption that 'whatever works' is true. The researchers who adopt pragmatism work towards the truth by making use of both qualitative and quantitative tools, and, in extent, by combining the theories behind these tools. As a result, they are considered advocates of the mixed-method design (Mertens, 2005; Tashakkori & Teddlie, 2003; Willig, 2008).

The ontological stance of pragmatic paradigm is briefly included in the term 'effectiveness', which is used as the criterion for judging a research study. Effectiveness is further clarified as, when the results of a study are found effective for the solution of the problem that the study sought solution for (Mertens, 2005; Robson & McCartan, 2006;

Willig, 2008). As far as epistemology is concerned, the researcher finding himself/herself laying in the pragmatic paradigm has not a specific role as in other paradigms, for example, the role of observer or of the contextual researcher. The researcher in the pragmatic paradigm studies whatever he or she is interested in and uses the produced results to foster positive consequences (Tashakkori & Teddlie, 1998).

However, the pragmatic paradigm, as with any paradigm adopted in the social sciences has received critique regarding researcher's beliefs and values and how they can affect the results of a study (House & Howe, 1999; Mertens, 2005). Whether research approach adopted in inclusive education research is positivist, interpretivist or pragmatistic, the use of robust procedures and the appropriate use of methodology towards the phenomenon studied, are the ones which should be followed irrespectively of the research approach (Avramidis & Norwich, 2016).

#### 4.4 Research design

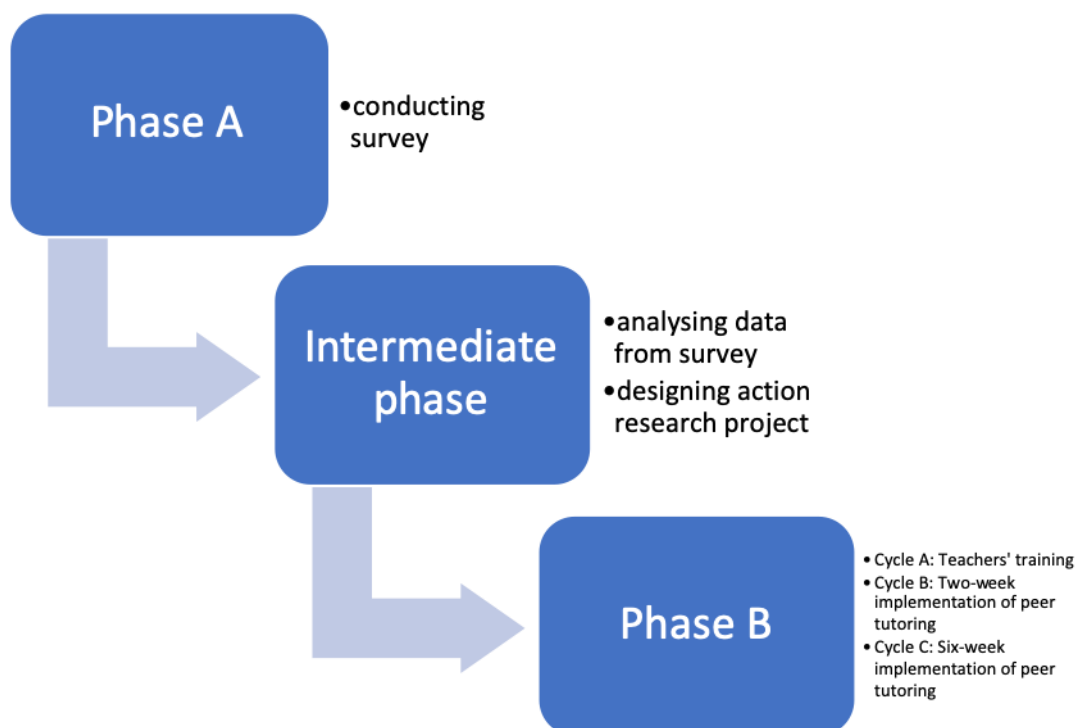
The purposes and aims of the current study called for a mixed-method research design to be followed. Specifically, mixed-method design offers the opportunity to the researcher to collect both qualitative and quantitative data letting for a more comprehensive understanding of the problem under research (Hesse-Biber, 2010; Mertens, 2005; Willig, 2008). One of the aims of the mixed-method research design, which is also one of the main aims of my study is to utilize multiple lenses to achieve a deeper understanding of the subject from different perspectives and angles through the combination of various research designs, data collection and data analysis tools (Hesse-Biber, 2010; Mertens, 2005; Mertens, 2009).

In the mixed-method research design, according to Creswell (2008), Mertens (2009), and Robson and McCartan (2016) the researcher should prioritize the forms of data collected and make critical decisions on which data will be collected first. In my study, specific

attention is given to the qualitative data collected from the action research project implemented. The quantitative data collected from a survey were used to set the scenery and describe the attitudes of the key implementors of inclusion, the teachers in order to plan an action research project that would actually help them in the development of inclusive practices in their mainstream classrooms. As can be concluded, a two-phase sequential model with the survey and the collection of the quantitative data preceding the implementation of the action research project and the collection of the qualitative data, which is visualised in the following Figure 2., and will be further explained in the next sections.

Figure 2.

*Flowchart of the Sequential Model*



In the first phase, teachers' opinions, feelings and experiences were investigated and in the second phase, a peer tutoring intervention was planned, implemented and monitored. After considering the research questions of my study and the available research designs, I

concluded that a survey would help me answer the first three research questions of the current study (What are the attitudes towards inclusion and their self-efficacy for inclusive practices of mainstream teachers and how these differ from the ones of their special counterparts?; What benefits do mainstream teachers perceive as emanating from the implementation of a peer tutoring programme?; and To what extent do mainstream teachers' attitudes towards inclusion and peer-tutoring and their self-efficacy for inclusive practices predict their willingness to implement a peer tutoring programme in their class?). For the next two research questions (What are the attitudes, beliefs and feelings of teachers towards peer tutoring after the completion of the peer tutoring programme in their classrooms?; and What are the attitudes, beliefs and feelings of students with SEND and of their peers without SEND following their involvement in the peer tutoring programme?) I found that implementing an action research project would offer to me the answers I was seeking.

The quality in mixed-methods research is determined with different criteria than the ones used in either quantitative or qualitative approaches. According to Tashakkori and Teddlie (2003) the term 'inference quality' describes the term internal validity in quantitative terms and the term trustworthiness in qualitative terms. Along the same lines, Mertens (2005) suggested that a criterion for the validity of a study using the mixed-methods approach is the use of a mixed-methods design in order to fulfil the multiple purposes and offer answers to the multiple questions. In my study, as mentioned earlier, I conducted both a survey and an action research project.

According to Hesse-Biber (2010) and Robson and McCartan (2016) one of the main reasons for a researcher to opt for a mixed-method research design is 'triangulation', which is defined as the use of more than one method in order to study the same dimension of the problem. By this the researcher seeks to enhance the credibility of the research results. In my

study triangulation was attained by the use of multiple research methods, such as questionnaires, observations, diary and interviews.

#### *4.4.1 Survey*

A survey's basic aim is to investigate the perceptions, attitudes, thoughts and feelings of target populations (Andres, 2012; Denscombe, 2010; Reason & Bradbury, 2006; Robson, 2011). Moreover, a survey collects data at a specific time and its main aim is to describe existing conditions and to compare them (Burton, Brundrett, & Jones, 2008; Punch, 2014; Thomas, 2013). The data collection in a survey research is conducted in the field and not in a laboratory, as in the experiment (Thomas, 2013). One of the most important characteristics of a survey is that it can provide large amounts of information at low cost and in a short period of time (Robson, 2011). Finally, a survey offers to the researcher the opportunity not just to describe the results, but also to examine and explain the patterns that emerge (Robson, 2011).

On the other hand, the possible drawbacks from the use of a survey should also be considered, such as the fact that the answers given in surveys do not necessarily depict the participants' honest opinions. Participants may give answers that are socially acceptable, but vary from their viewpoint (Robson, 2011). Moreover, according to Denscombe (2010), when collecting data in a survey, there is the danger that these data are seen separately from the social context in which they were collected. While surveys have the advantage that they can collect both quantitative and qualitative data, they lack high response rates. Surveys usually get low response rates and this is considered as a challenge for the researcher (Denscombe, 2010).

The main aim of the survey conducted in the current study is to elucidate mainstream teachers' attitudes towards the general notion of inclusion of students with SEND in their mainstream classrooms, their perceptions of their self-efficacy skills to implement inclusion,

their attitudes towards peer tutoring as an inclusive instructional approach and their self-efficacy skills to organize, implement and evaluate peer tutoring in their classrooms.

#### *4.4.1.1 Sample*

The sample of this study comprised of 294 Greek primary teachers, of which 225 were mainstream and 69 were special education teachers. These teachers were drawn from 50 schools located in a central region of Greece. Eligible for participation were mainstream and special teachers fully employed in the participating schools at the time of the administration. Special teachers in Greek mainstream schools are attached to individual students with complex needs and their role mainly involves supporting them in accessing the mainstream curriculum. All the participating special teachers held a first degree in special education awarded by special education university departments. Convenience sampling was followed which involved sending a formal invitation to all schools in the region operating integration units. These schools were deliberately targeted as their staff had substantial experience of teaching children with special educational needs. Most participants were female which is representative of the gender split in Greek primary schools (209 [71.1%] female teachers and 85 [28.9%] male teachers). The participating mainstream teachers had a mean teaching experience of 20.32 years with a standard deviation of 8.87 while their special education counterparts had a mean teaching experience of 9.74 years with a standard deviation of 9.61. Such a notable difference in the mean teaching experience of the two groups was expected given that opportunities to train as a special teacher were only recently made available through the establishment of relevant university departments in Greece. Strikingly, only 17 (7.5%) of the 225 mainstream teachers had completed postgraduate courses on inclusive education.



#### *4.4.1.2 Questionnaire*

Questionnaires are widely used in research studies exploring attitudes and both numerical and descriptive responses can be collected (Reason & Bradbury, 2006; Thomas, 2013). They reflect the individual's perceptions in a brief way and they consist the basis for future discussion (Reason & Bradbury, 2006; Wellington, 2000). The completion of questionnaires is voluntary, so I tried to engage the interest of the participants without designing a tiring questionnaire (Cohen & Manion, 1994). My main consideration was the answers given to be as close as possible to teachers' truthful attitudes. Furthermore, I tried to avoid any questions that might lead the participants to think that there is one right and acceptable answer (Andres, 2012; Cohen & Manion, 1994; Thomas, 2013). As far as questionnaires' validity and reliability are concerned, a total of 750 questionnaires were sent through the post to the identified schools and 294 completed ones were obtained representing a 39.2% return rate, which was deemed satisfactory given the mode of administration. Moreover, a pilot study was carried out involving the administration of the questionnaire to 120 pre-service teachers studying in one Greek university department of education. Through this piloting I tested the psychometric properties of all scales contained in the questionnaire by conducting factor analyses and calculating Cronbach alpha reliability coefficients for the identified factors. Acceptable results were obtained in the pilot study which allowed the researchers to proceed with conducting the main study when satisfactory Cronbach alphas (i.e. ranging from .74 to .86) were also obtained.

Both closed and open-ended questions were included in the questionnaire. Closed questions demand a specific answer, while open-ended ones give to the responder the option to describe in his/her words a situation and in a broader range of ideas (McNiff & Whitehead, 2010; Thomas, 2013; Wellington, 2000). Open-ended questions are sometimes considered a less effective method of collecting information and are also considered time-consuming

(Burton, Brundrett, & Jones, 2008; Cohen & Manion, 1994). On the other hand, closed questions restrict the participant in expressing fully his/her opinion and belief (Bell & Opie, 2002). However, the advantage of using closed questions is that they require less space for answers and the answers are easier to be given (McNiff & Whitehead, 2010). So, I decided to include both formats of questions, in order to give to the participants, the opportunity to express their attitudes through different questions. Closed questions in my questionnaire had the form of both dichotomous questions and a seven-point Likert scale. Dichotomous questions divide responses and are characterized by both simplicity and specificity, which can consider both advantages and disadvantages, because there is the possibility that the two extreme answers do not represent participants' views (Andres, 2012). On the other hand, a Likert scale gives a broad continuum of responses, in order for the participant to choose the one that expresses his/her attitude. In my questionnaire, I included a neutral opinion option.

Specifically, a three-part survey questionnaire was designed to collect data from primary education teachers, both mainstream and special education. The first part of the survey collected demographic information (e.g., gender, age, teaching role, teaching experience, training on inclusive education). The second part of the survey collected information about the teachers' attitudes towards inclusion and their self-efficacy skills for inclusive practices. A shortened version of the 'Core Perspectives Scale' (7 items) drawn from the 'My Thinking about Inclusion' (MTAI) instrument developed by Stoiber, Gettinger, and Goetz (1998) was used. This 5-point Likert-type scale addresses the teachers' attitudes towards the general philosophy of inclusive education. The higher the composite score on the 'Core Perspectives Scale' the more positive teachers' attitudes are implied. The self-efficacy perceptions' measure was the Teacher Efficacy for Inclusive Practices (TEIP) instrument developed by Sharma, Loreman, and Forlin (2012). This is a 6-point Likert-type inventory consisting of three factors namely: 'efficacy for using inclusive instructions'; 'efficacy for

collaboration'; and 'efficacy for managing behaviour'. In this study, a 5-point version of this scale was used in line with all other measurements employed. The higher the score on the TEIP scale the higher the teachers' efficacy to implement inclusive practices is. The third part included a dichotomous question assessing the teachers' willingness to implement peer-tutoring in their class. This variable was designed to serve as a dependent variable in the planned regression analysis and with a view to recruit participants for the subsequent phase of the research project. Additionally, Likert-type scales were also included rating peer tutoring's benefits for students with and without SEND (10 items); peer tutoring's benefits for the teachers themselves (6 items); and teachers' self-efficacy perceptions for implementing peer tutoring in their classrooms (7 items). Based on various studies examining the impact of peer tutoring on students' academic and social skills along with studies examining teachers' attitudes and perceptions of peer tutoring (e.g. Carter et al., 2015; Jones, 2007; Van Keer & Vanderlinde, 2013), I developed the scales on the last part of the questionnaire. In all these scales, the higher score represents the higher degree of agreement with the statements. The full questionnaire is available in the Appendix.

Review of the questionnaire was done in three phases, as in the study of Malinen, Savolainen, and Xu (2012). The first phase was to give the questionnaire draft to ten native Greek speakers with educational sciences background and a good command of the English language. Some of these reviewers had also experience in working as teachers in Greek primary schools. Based on these reviewers' comments, some adaptations were made to the questionnaire. The second phase was to collect data from 120 pre-service teachers from one Greek university department of education. This pilot study was carried out with a view to check the internal consistency of all scales included in the instrument. In this exercise satisfactory Cronbach alpha coefficients were obtained for all scales. The third and last phase of questionnaire's review was to give it to another native Greek professional translator.

#### *4.4.1.3 Procedures*

First of all, it is important to mention that prior to any data collection, permission for conducting the study in Greek primary schools was obtained from the Ministry of Education (reference number: Φ15/83822/95386/Δ1), which is attached in the Appendix.

Four regions of central Greece were searched for schools that have in their student population students with SEND and special education teachers employed in their staff. Survey packages were sent to the headteachers of the identified schools, which contained a letter describing the purpose of the study along with the survey questionnaires. In the letter, it was clearly stated that the teachers' participation was voluntary and their anonymity was guaranteed (see Appendix).

The 'Core Perspectives Scale' and the TEIP scales are originally written in English. During the translation and adaptation processes of these two scales, the Greek versions were cross-checked with the English ones. The translator was fluent in English and had knowledge on inclusive education and teaching experience in Greece. The translated versions of the scales were given to ten native Greek teachers who had a good command of the English language. Based on their comments, some minor adaptations were made to the wording of the scales. The revised versions of the scales were finally given to a native Greek professional translator and were back translated into English resulting in a very close match to the original scales.

#### *4.4.1.4 Data analysis*

The participants' responses to the questionnaires were coded and imported into the Statistical Package for the Social Sciences (SPSS) version 23. Prior to conducting our main analyses we examined the factorial structures of all scales employed through a series of principal component analyses with varimax rotation. With regard to the Core Perspectives

Scale the analysis revealed one factor. With regard to the TEIP scale, the analysis extracted three components as anticipated namely ‘efficacy for inclusive instruction’, ‘efficacy for collaboration’, and ‘efficacy for managing behavior’. The remaining three scales relating to peer tutoring all produced single factorial solutions. Details of the factorial solutions produced and the internal consistency of the extracted components are presented in Table 8.

Table 5.

*Eigen Values, Percentage of Variance Explained and Cronbach Alphas of All Extracted Factors.*

Instruments	Eigenvalues	% of variance	Cronbach alphas
Core Perspectives	3.26	46.64	.79
Efficacy for inclusive instruction	7.45	41.38	.79
Efficacy for collaboration	51.11	1.75	.79
Efficacy for managing behavior	58.78	1.38	.80
Student Benefits	7.24	72.49	.95
Teacher Benefits	3.82	63.80	.88
Efficacy for peer tutoring	5.34	76.30	.94

Following this, Pearson product moment correlations were calculated between the teachers’ attitudes towards the philosophy of inclusion and various dimensions of teaching

efficacy. This analysis revealed that attitudes towards the general notion of inclusion were moderately correlated with efficacy measures used in this study, indicating that such attitudinal measures are conceptually distinct from efficacy measures; the latter were, in turn, more strongly correlated with each other, as anticipated (see Table 9). Next, differences between mainstream and special teachers were examined with respect to their attitudes towards inclusion and their self-efficacy for inclusive practices through a series of independent samples t-test. The remaining analyses concern the mainstream teachers sample only since these are the main agents of implementing inclusion in Greece and, therefore, the only professionals who can apply peer tutoring as an inclusive strategy in mainstream classrooms. Accordingly, comparisons between groups of mainstream teachers determined by various teacher variables were also calculated through one-way ANOVAs. These were accompanied by descriptive presentation of the perceptions mainstream teachers held about the benefits emanating from the implementation of a peer tutoring programme. Finally, binary logistic regression analysis was conducted to examine the extent to which the attitudes mainstream teachers held towards inclusion and their self-efficacy for inclusive practices can predict their willingness to systematically apply peer tutoring in their classes.

Table 6.

*Correlations Between Attitudes Towards Inclusion and Various Dimensions of Teaching*

*Efficacy for Inclusive Practices*

	1	2	3	4	5
1. Attitudes towards inclusion	-				
2. Efficacy for instruction	.45**	-			
3. Efficacy for collaboration	.52**	.81**	-		

4. Efficacy for behaviour	.27**	.69**	.65**	-	
5. Efficacy for peer tutoring	.48**	.65**	.56**	.53**	-

\*\* Correlation is significant at the .01 level.

#### 4.4.2 Action research project

To examine the efficacy of peer tutoring as a method of inclusive instruction between pupils with and without SEND, an action research project will be implemented. According to Cohen, Manion and Morrison (2007), action research is a design frame that tries to understand, change and develop practice. McNiff and Whitehead (2010) in their book, argued that action research consists of two important factors: ‘action’ (what you do) and ‘research’ (how you learn about and explain what you do). In other words, action research is about improving practice and then generate knowledge about practice, with a view in affecting thinking and behaviours. The constant collaboration between the researcher and those who are the focus of the study, and their active participation in the processes of the research study are considered central in the participatory action research (Robson & McCartan, 2016).

One of the main aims of action research is to develop new knowledge that can contribute to the development of new theory. Knowledge in action research is the knowledge of practice. Theory is closely linked to practice (McNiff & Whitehead, 2010). One of the most critical aspects of action research are its cycles. Lewin (1946) developed a theory of action research as a spiral of steps including planning, fact-finding or reconnaissance and execution. Later these steps were conceptualized as an action-reflection cycle of planning, acting, observing and reflecting (McNiff & Whitehead, 2007).

Moreover, it is a small-scale intervention that could provide me with data concerning the efficacy of peer tutoring and, thus, suitable to develop mine and participating teachers’ practice. Therefore, action research is usually undertaken by practitioners to develop practice

deriving from the results of a study (Cohen, Manion, & Morrison, 2007; Denscombe, 2010; McNiff & Whitehead, 2010; Thomas, 2013). Action research includes four steps; planning, acting, observing and reflecting (Cohen, Manion, & Morrison, 2007; McNiff & Whitehead, 2007; Thomas, 2013). Furthermore, this research design offers great variety in data gathering tools. The researcher can make use of questionnaires, documents, diaries, interviews, observation, field notes, case studies and accounts (Cohen, Manion, & Morrison, 2007; Denscombe, 2010).

On the other hand, action research cannot lead to generalizations due to the restriction of the workplace setting that action researches usually take place (Cohen, Manion, & Morrison, 2007; Denscombe, 2010). Another risk that should be taken into consideration is that the design of the research is guided and, sometimes, limited by the guidelines and rules of the working place (Denscombe, 2010). As far as the validity of the accounts produced by the action research project is concerned, it can be secured according to McNiff and Whitehead (2010) by testing them with receiving the critical feedback of critical friends and validation groups, who examine the quality of the data and evidence recorded in the reports (social validation).

In my study, I followed certain steps in order to secure its credibility. Following, Brantlinger, Jimenez, Klingner, Pugach, and Richardson (2005), I utilized various data collection methods to examine the problem under study (methodological triangulation), such as interviewing, observation and diary-keeping. Secondly, data well collected from various data sources. Specifically, I captured the attitudes of both teachers and students who participated in the programme (data triangulation). Thirdly, I decided to look for evidence inconsistent with the themes that emerged from the analysis of the collected data (disconfirming evidence). Finally, the reports from the analysis of interviews, observations and diary were discussed with the participating in the project teachers (member checking)



and were presented to two additional researchers (outsiders), to check the accuracy of my interpretations.

Next, I will offer a brief description of my action research project which is consisting of three cycles as described in McNiff and Whitehead (2010). The first cycle included discussion with the teachers of the demands that inclusion of students with SEND has made them to confront. Then, we talked about various inclusive instructional strategies, and we decided to test the effectiveness of such an inclusive, instructional approach, the peer tutoring. As was anticipated, teachers were not familiar in practice with this method, so they asked for training. I organized and implemented teachers' training, which will be discussed in full details in the "Procedures" section of this thesis. Through a reflective discussion with them at the end of the training, we decided how to organize and implement peer tutoring in their classrooms. It is crucial to mention that besides the discussion with all the participating teachers, I had a meeting with each of them separately in order to plan and organize the peer tutoring programme considering the needs of each of the students in each classroom to find the most effective mode of implementation of the programme for each class.

The second cycle of my action research project included the implementation of the peer tutoring programme for two weeks in each classroom. At the end of this two-week period, I conducted interviews with each of the participating teachers in order to examine how they experienced the implementation of the programme, any difficulties occurred, and everything else that teachers were willing to share about the programme were part of the semi-structured interviews. Along with interviews, I observed each session in the classes that peer tutoring was implemented and I kept a diary to keep any ideas and reflections I had concerning the programme. Based on the interviews and a reflective discussion that followed the interviews, the peer tutoring programme was modified in most of the classrooms, in order to meet more effectively both the teachers' but also the students' academic and social needs.

The third and last cycle of my action research project included the implementation of peer tutoring, after the modifications occurred, for a period of six weeks. As in the second cycle, I conducted observations with me being present at each session in each class. At the same time, I offered support to the teachers who asked me for, in handling various instances during the implementation of the project. I also kept a diary where I described in more detail all the instances that were worth mentioning for the purposes of my study and anything that was interesting to me. At the end of this six-week implementation of the peer tutoring programme, I conducted interviews with both the participating teachers and students to examine their attitudes and perceptions of peer tutoring and to evaluate the effectiveness of the programme as perceived by teachers and students.

#### *4.4.2.1 Participants*

The action research project was implemented in two state, primary education schools in an urban district of the central region of Greece. The two schools are located close to the city centre and they share the same yard. The capacity of the two schools range from 150-250 students. They both have in their personnel special education teachers who either support students inside the mainstream classroom or in the resource room. They also have in their student population students with SEND diagnosed by the official state sector responsible for students' certifications of SEND.

School A accommodates fewer students than School B. It has seven classes and a resource room. Its staff comprises of eight primary teachers, one of which is the headteacher and two special education teachers. School B has twelve primary teachers and two special education teachers. Schools in Greece are state funded. The criteria for the selection of these two schools included being in urban areas, having in their register students with officially

diagnosed SEND, and having in their personnel at least one fully employed special education teacher at the time of study.

Seven primary education teachers agreed to participate in the peer tutoring programme, four from School A and three from School B (See Table 5). They were teaching during the school year that the study was taken place the three upper primary classes. Three of them taught the sixth grade, two the fifth and two the fourth. The classes size ranged from 18 to 25 students. Classes had either one or two students with SEND in their student population. Teachers' age was ranging from 47 to 52 years, while their teaching experience ranged from 22 to 27 years.

Table 7.

*Participating Teachers*

Teachers	Age	Gender	Teaching experience	School	Grade	Class size	No. of students with SEND
Teach1	49	Female	25	A	4 <sup>th</sup>	20	2
Teach2	48	Male	22	B	6 <sup>th</sup>	21	2
Teach3	52	Male	26	A	6 <sup>th</sup>	22	1
Teach4	50	Female	25	A	5 <sup>th</sup>	23	2
Teach5	50	Female	26	A	5 <sup>th</sup>	21	2
Teach6	47	Female	22	B	4 <sup>th</sup>	20	2
Teach7	51	Female	27	B	6 <sup>th</sup>	22	1

Twenty-two students participated in the programme, of which eleven were students with SEND and eleven peers without SEND. However, only 19 students were finally interviewed, eleven students without SEND and eight students with SEND. Three students

with SEND (Adam, Steve and Antonis) were not interviewed because no parental consent was returned to me. Their profiles are given in Table 6 for students without SEND and in Table 7 for students with SEND. Peers without SEND were above average at the academic level in order to secure that they would be able to provide academic help to their peers with SEND. As far as students with SEND are concerned, the sample of the study consisted of one student with ADHD, four students with LD, one student with quadriplegia and one student with ADHD and LD. All students had been officially diagnosed by a public diagnostic centre. At the time of the study, four of them received parallel support with the remaining seven attending the resource room for remedial tuition for specific hours per week.

Table 8.

*Participating Students Without SEND*

Student's name	Grade	Pair with...
Athina	4 <sup>th</sup>	Margarita
Adele	6 <sup>th</sup>	Aris
Jim	5 <sup>th</sup>	Adam
John	4 <sup>th</sup>	Gregor
Ann	4 <sup>th</sup>	Chris
Chara	6 <sup>th</sup>	Bill
George	5 <sup>th</sup>	Stella
Maria	4 <sup>th</sup>	Helen
Eirini	5 <sup>th</sup>	Steve
Nick	5 <sup>th</sup>	Sophie
Lisa	6 <sup>th</sup>	Antonis

Table 9.

*Participating Students with SEND*

Student's name	Grade	Pair with...	Type of SEND
Chris	4 <sup>th</sup>	Ann	ADHD, LD
Helen	4 <sup>th</sup>	Maria	quadriplegia
Sophie	5 <sup>th</sup>	Nick	dyslexia
Bill	6 <sup>th</sup>	Chara	LD
Stella	5 <sup>th</sup>	George	LD
Margarita	4 <sup>th</sup>	Athina	LD
Gregor	4 <sup>th</sup>	John	ADHD
Aris	6 <sup>th</sup>	Adele	LD

Notes: ADHD: Attention Deficit Hyperactivity Disorder; LD: Learning Disability

#### 4.4.2.2 Techniques for data collection

##### 4.4.2.2.1 Semi-structured interviews

The interviews conducted in this study were semi-structured with open-ended questions, some of which arose during the interview. According to Freebody (2003), Thomas (2013) and Wellington (2000), semi-structured interviews provide the researcher with the flexibility to cover both certain topics and to discuss further points during the interview. The questions' aim was to investigate teachers' and students' attitudes towards peer tutoring programme and the factors that influence them, and to evaluate the implementation and the effectiveness of the peer tutoring programme. The actual interview schedules are given in the Appendix. Only teachers' interviews were recorded, after gaining participants' consent. Last but not least, a cover letter, which is also included in the Appendix, was sent to participating teachers in order to explain the purpose of the study and describe their influence, inviting

them to take part in the research. Before interviewing started, I made clear to the interviewee his/her right to withdraw whenever he/she wants and I asked for consent to record the interview. The consent form given to teachers is also included in the Appendix.

The interview schedules used for teachers' and students' interviews were designed prior to interviews and contained mainly open-ended questions. However, different and supplementary questions, that were not included in the schedule, were also asked. Teachers' interviews schedules in Cycles A, B, and C of the action research project were based on specific key themes, such as inclusive issues, peer tutoring issues, students' benefits from peer tutoring, teachers' benefits from peer tutoring, teachers' self-efficacy perceptions, and difficulties expected and experienced. Students' interview schedule was developed with different key themes and include more evaluative questions, as students were only interviewed after the completion of the peer tutoring programme. Specifically, the key themes of students' interview schedule were: understanding of peer tutoring, describing their roles, evaluating their roles and the roles of their classmates, and peer tutoring's efficacy. Furthermore, at the end of each interview I encouraged interviewees to share with me, if they were willing, something that I missed to ask.

The interview schedule designed helped me, as mentioned by Willig (2008), not "to lose sight of the original research question" (p. 24) and to keep control of the discussion by maintaining its continuity and coherence. It is crucial to mention that I asked for feedback and critique for the interview schedules I've designed from several colleagues in my department, in order to secure that they serve the aims of my research and my study's research questions.

Prior to any interview conducted both with teachers and students, I took couple of minutes to make them feel comfortable with asking them general questions, trying to break the ice and developing a friendly atmosphere. According to Thomas (2013) and Willig

(2008), this is a crucial part of the interviews and he defined the whole procedure as “establishing rapport” (p. 195). This process is especially important when interviewing children, who have never had such experience before, as in my case. This is the main reason behind my choice to conduct interviews with children only after the completion of the implementation of the peer tutoring programme. I wanted children to be familiar with me, as I was present in all the peer tutoring sessions, and feel comfortable to discuss with me, without putting them in an awkward position.

As interviews were incorporated in the action research project, it is important to describe the purposes of the interviews in action research. According to McNiff and Whitehead (2010), through interviews the researcher asks people to document their practices in order to judge their own learning and practice, and, further, to be able the researcher to show the educational nature of the influence of the project in their learning. The main aim of conducting interviews is to enhance their insight in their own practices and learning. Consequently, interviews applied in action research projects tend to look more like informal discussions rather than formal interviews, not only with each teacher separately but also with more than one teacher as a group to explain them the aims and the procedures of the study.

#### *4.4.2.2.2 Participant observations*

According to McNiff and Whitehead (2010) and Thomas (2013), observation sets the beginning of all research and is particularly popular in social research studies. It is considered an important element in research because it offers to the researcher the opportunity to systematically record what is happening in the environment, where research is taking place (McNiff & Whithead, 2010; Mertens, 2009). Moreover, as Willig (2008) argued researcher will not be able to conduct any kind of research, if he/she did not get involved in any kind of observation. Along the same lines, Cohen, Manion and Morrison (2007), highlighted the

significance of observations in research by claiming that observation can offer to the researcher “the opportunity to gather ‘live’ data from naturally occurring social situations” (p.396), which is considered valuable in educational settings.

Observation can offer to the researcher unique, raw, first-hand data rather than second-hand accounts, while at the same time solving any problems occurring between the time gap of the event and its recording (Cohen, Manion, & Morrison, 2007; Denscombe, 2010). Observation can be focused on either facts or behaviours. In the present study, observation was used as a tool to gain insight in participating students’ behaviours during their involvement in the peer tutoring programme. Moreover, observations, especially in intervention programmes, according to Cohen, Manion and Morrison (2007) enable the researcher to “understand the context of programmes, to be open-ended and inductive, to see things that might otherwise be unconsciously missed, to discover things that participants might not freely talk about in interview situations, to move beyond perception-based data (e.g. opinions in interviews) and to access personal knowledge” (p.396). All these were considered particularly important to me in order to fulfill the aims of my study, so I decided to conduct observations in every classroom and in every session that peer tutoring was taking place.

For the purposes of this study, I opted for participant observation, which gives you the opportunity to immerse in a social situation, in order to gain insight into the procedures taking place. You are not invisible but rather fully engaged and involved in the procedures you observe (Thomas, 2013). According to Willig (2008), participant observation requires the researcher to participate, document, interview and reflect. It is important to keep a balance between observation and participation, as stated “the researcher needs to be involved enough to understand what is going on, yet remain detached enough to be able to reflect on the phenomenon under investigation” (p. 27).



The observations took place at the natural setting of the classroom, where the peer tutoring programme was taking place. Specifically, I observed whether the participating students were working collaboratively with their peer or opted for working alone, if they were paying attention to their peers, whether the students were interacting with their peers or with the teacher, and if the students offer or receive tutoring, and whether the students were offering or receiving explanations. My identity was not hidden, I was known as the researcher, who will observe the procedures followed by both teachers and students (overt observation). It is crucial to mention that there were certain times that teachers asked for my help to handle specific incidents that they were not capable to manage. On these occasions, the necessary observation was not possible. So, I decided to keep a diary instead. I will further describe the research method of diary in the following section.

#### 4.4.2.2.3 *Diary*

A diary is a record of thoughts, feelings, ideas, actions, conversations, incidents, and responses which all take place during the organization, implementation and evaluation of a research study (Thomas, 2013). The most common format of diary in the research is the interval-contingent diary, which was adopted at the present study. According to Thomas (2013), an interval-contingent diary is a diary in which the researcher or the participants report their experiences at regular intervals. As Thomas (2013) suggested, when diary is a tool in an interpretative study it is important to be written up immediately after the sessions in the field, in this case after each peer tutoring session.

A diary does not only include events or incidents that happened during researcher's work in the field, but it also includes the thoughts, the explanations, the interpretations and researcher's insight into the events, conversations and incidents that took place during the implementation of an intervention programme (Thomas, 2013). This was one of the main

reasons for choosing diary as another data gathering tool in the present study. It offered me the flexibility to track any event and the space to express my interpretations on the events right after the completion of each peer tutoring session. Moreover, it suited perfectly with my intentions when deciding to implement an action research project, to offer explanations on the events and relationships shaped during the programme, to record my ideas and observations about actions.

As McNiff and Whitehead (2010) in their book argued, using diary in your research in the field can proved to be a powerful strategy in explaining actions, and demonstrate the development of dialectical and reflexive critique on the events taking place during a research study. They further highlighted diary's significance by describing them as valuable pieces of data used in the reporting of the outcomes of a research project, by helping researchers to communicate and justify their insights into the research process. As clearly described by Denscombe (2010) diaries include different types of data to be recorded, such as factual data, significant incidents and personal interpretation. I tried to incorporate all of them in my diary records, in order to gain insight into different parts of the peer tutoring programme, and offer explanations to the events that were not always evident, but sometimes hidden.

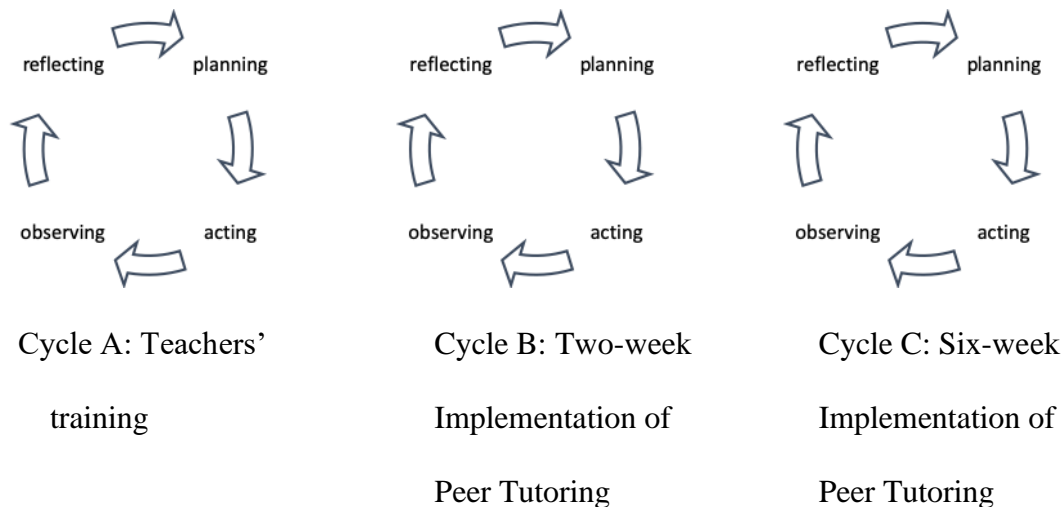
My diary had the form of a notebook which in every page were clearly stated the date of the session, the classroom, the name of the teacher and the participating students and the content which was practiced through peer tutoring. Then there was enough space for me to write my thoughts, actions that were found interesting to be noted, relationships between the students, relationships between students and their teacher, in order to examine their development as the programme continued. I logged every day events that I felt were significant for the project, immediately after the completion of each session and before the starting of another.

#### 4.4.2.3 Procedures

I will first describe the procedures followed in order to secure the participation of the schools, teachers and students. Later, the procedures included in each cycle of the action research project will be described in full details. As McNiff and Whitehead (2010) described in their book, action research takes a cyclical form and it can be seen as a cycle of cycles. Most people in the field agree that each cycle includes the processes of acting, reflection on the action and then acting again differently from the first action, based on your findings, so a cycle of action-reflection is shaped (McNiff & Whitehead, 2010). My action research project consists of three cycles, which will be later described. Figure 2 presents these three cycles.

Figure 3.

#### *Cycles of the Action Research Project*



Firstly, in order to find schools that were willing to participate in the peer tutoring programme, a letter was sent to all the primary schools of the urban district of one of the prefectures of the central region of Greece. This letter described the purposes of the action research project and the teachers' and students' involvement in the project. A week after sending the letters, I personally called the headteachers of the schools in order to discuss their

willingness to get involved to the peer tutoring programme. Four headteachers were positive and we arranged a meeting with the staff of the school, in a time convenient for them. At this meeting, I described to all the teachers attended the aim of my study and what exactly their involvement in the programme would consist of, along with their students' involvement. A letter describing the above were given to them, along with a consent form for their participation. After this meeting, only two schools were willing to implement the programme. The two schools declined their involvement, because teachers could not be engaged in new practices in their strict timetable. After the completion of the first meeting, the action research project begins.

#### *4.4.2.3.1 Cycle A: Teachers' training*

'Planning': From the first discussion which I had with the teachers during our first meeting in each of the participating schools, we concluded that, although they were willing to participate in the peer tutoring programme, they lacked the knowledge to implement it in their classrooms. So, we decided that prior to the implementation of the peer tutoring programme, it would be really useful, to them and for me, to secure their complete understanding, to train them in the basic principles and procedures of peer tutoring. I kept notes in my diary of what teachers would like to learn in their training and when would be convenient for them the training to be held.

'Acting': Training took place on the last day of the week, after the ending of the school day, at their school. All the participating teachers from both schools were gathered at one classroom. Training session lasted approximately 1 hour and a half and I made a PowerPoint presentation which included: definition of peer tutoring and its origins, the principles and the theoretical background of peer tutoring, the types of peer tutoring, peer tutoring procedures, teachers' role for the organization, implementation and evaluation of the

programme, students' social and academic benefits found in the literature and students' roles in the programme.

'Observing': After the completion of the presentation, teachers were encouraged to share their thoughts, concerns and questions with each other and with me, in order to find the most effective and suitable way for implementing peer tutoring in each classroom. A reflective discussion took place with most of the teachers showed great interest in the instructional approach presented to them, and how it will be organized to meet effectively firstly and foremost the needs of their students, both with SEND and without.

Teachers, apart from being engaged in the discussion at the end of the training session, they were also interviewed. They were asked about their attitudes towards the general notion of inclusion students with SEND in mainstream classrooms, about the peer tutoring as an instructional approach and if they had been involved in it before, and lastly, about the difficulties they expect to experience in the organization and implementation of the peer tutoring programme in their classrooms.

'Reflecting': At the end, of the discussion with all the participating teachers, we decided that it would be particularly useful to have a meeting with each of the teachers individually, in order to design and organize the peer tutoring programme according to the needs of each teacher and class. We also decided to implement the peer tutoring programme, first for two weeks, for all of us to see how it works in each classroom, and decide its continuation or not, or the changes to be done, if needed.

#### *4.4.2.3.2 Cycle B: Two-week implementation of peer tutoring*

'Planning': As it was decided during teachers' training, I had a meeting with each of the teachers in order to design and organize the implementation of the peer tutoring

programme in their classrooms. Another purpose for this meeting was also to discuss with them the procedures that they, as teachers, had to follow and secure their full understanding. The first task was to decide the content and the time that peer tutoring would take place. Most of the teachers decided to implement peer tutoring in the content area of literacy, with only a single teacher decided to try the effectiveness of peer tutoring in mathematics. It is crucial to mention that peer tutoring's goals and objectives were determined by trying to be consistent with the individualized education programme of each student with SEND. The second task we had to do was to match their students into pairs, based on their academic and social needs, as well as their personalities. The guideline to follow was to match low-achieving students with high-achieving students. Students were ranked based on their teachers' perception regarding their academic achievement. The third task for them was to offer to their students the necessary training in their new roles. We discussed with all of them how they should do this and what roles exactly the students are called to perform during their involvement in the peer tutoring programme. One of the most important guidelines given to them were to make explicit to their students that when they have the role of tutor, they should not do the exercise for their peers, they should collaborate, they should ask questions to their peers in order to help them find the answer, and they should offer to them constant feedback. I was present during students' training after the request of all participating teachers to feel safe and secure that they have explained explicit to their students their roles and the procedures they had to follow.

After the completion of students' training and having fixed all the necessary tasks prior to the beginning of the programme, we started the implementation of the programme.

'Acting': All the teachers performed the tasks as they were decided in our meeting. Students' training took place on the first day of the week in all the participating classrooms. All of the classes implemented peer tutoring for two hours per week. As was decided, they

implemented peer tutoring for two weeks, first. Prior to the implementation of each session of peer tutoring in each class, I was informed by the teacher for the content of each session, to produce materials for students to work to. Most of the times, we made the working sheets along with teachers during their free time. As far as the type of peer tutoring implemented in each classroom is concerned, most of the teachers opted for a reciprocal format of peer tutoring, giving the opportunity to all students to act as tutors. Specifically, five out of the seven participating teachers decided that a reciprocal format of peer tutoring would suit better in their classrooms, while two of them opted for a fixed-role peer tutoring configuration.

At the beginning of each of the session, students were reminded by the teachers the roles they would perform and their partners. They changed sitting and were waiting for the materials to be distributed to them. When a fixed-role format of peer tutoring was implemented, the tutor was explaining to the tutee the activity and reminded him/her of the relevant grammatic phenomena or gave him/her hints in the case of mathematics. Then, the tutee tried to fill in each gap in the activity. The tutor said to the tutee which one was right and wrong. In the case that the tutee had a wrong answer, the tutor did not give the right answer to the tutee, but he/she rather tried to guide the tutee to the right answer, so to find it himself/herself. When all the pairs, finished their activities, all answers were discussed in the classroom. In the case of reciprocal format of peer tutoring, the procedures were similar to the fixed-role peer tutoring, with the only exception being that students were switching roles in each session. At the end of each session, each dyad was calculating the points they have earned for their correct answers, their collaboration and their behavior, and posted them in the public posting poster. All the names of the participating students were written on it and each student could see each pair's progress as time passed.

Teachers had a critical role to perform in the peer tutoring programme. They were the coordinators letting the process of peer tutoring to flow. They were moving around the

classroom providing feedback to each of the pairs or offering their help when a tutor needed. They were also awarding bonus points to tutors for appropriate tutoring behaviours and to tutees for responding immediately and working cooperatively with their tutors.

My role as a researcher was to observe the process and offer help to teachers, when they asked me to. I was present at each session of peer tutoring in order to offer to teacher ongoing support and brief feedback after the completion of each session. In general, teachers implemented peer tutoring effectively and there were specific cases that they could not handle and asked for my support.

‘Observing’: Teachers implemented the tasks as were decided in our meetings. They made explicit to their students all the procedures that they had to follow and their new roles. There was a general feeling of enthusiasm and interest on the behalf of students for participating in the peer tutoring programme. When preparing the working sheets with teachers, most of them were truly engaged to this task. However, there was a teacher who was not really interested in this task, and was hesitant in finding time to do this together. The teacher claimed to be busy and not having time to get engaged in preparing materials for the programme. His unwillingness to participate in the design of the materials could not attributed to other professional commitments, rather it can be attributed to teachers’ belief that this programme has nothing to offer to the academic development of his students, although he agreed to participate in the programme and test it in practice.

The pairs of the students and the reciprocal format of peer tutoring adopted by most of the teachers was one of the key aspects to examine closely during the implementation of peer tutoring. Teachers were also concerned regarding these two aspects of the peer tutoring programme, which are considered critical for its effective implementation.

The pairs that consisted of a student with SEND and peer without SEND were closely observed by me. Generally, as was observed, most of the students’ pairs worked



collaboratively and without arguing. However, there were three pairs of students who did not get along with each other and could not work collaboratively. They were constantly arguing and could not stay focused on the programme and their activities. Teachers were performing the role of the coordinator and monitor, based on the programme's demands. While at the first session they moved around the classroom reluctantly, in the next session they were more confident in moving around the classroom more and offering corrective feedback and praising each of the pairs of students.

Teachers were interviewed individually at the end of the two-week implementation of the peer tutoring programme. They were asked about students' benefits from their involvement in the peer tutoring programme, their own benefits from the implementation of the programme, and their perception of self-efficacy skills in designing, organizing, implementing and evaluating the programme.

'Reflecting': After the completion of students' training, I had brief chats with both teachers and students. Teachers generally expressed positive feelings. However, they expressed certain concerns regarding organizational arrangements. They all agreed to move on to the two-week implementation of the programme and see in practice how this instructional strategy works.

As far as the preparation of the working sheets is concerned, while most of the teachers enjoyed their involvement in it, one teacher did not. So, I decided that for the specific class, I will prepare the working sheets by myself and I will give them to him to check them a day prior to the implementation of the peer tutoring session. He was more than happy with my decision, because as he told was too busy, and this could save him valuable time.

Teachers as was observed were a bit hesitant at the beginning to move around the classroom, but during the second session they felt a little more confident to move around

more. They experienced a shift in their role from being the leaders of the educational process to reinforce students to take the ownership of their own learning, as they claimed in their interviews.

Based on my observations while peer tutoring was implemented and on teachers' comments after the two-week implementation of peer tutoring, we decided that certain adaptations were necessary before entering the six-week implementation of the programme. The type of peer tutoring changed in several classrooms. From the four classes that originally performed reciprocal peer tutoring, only two kept this format. The other two decided that half of the pairs would work in a reciprocal format and half of them in a fixed-role format. This decision was reached after careful consideration of the academic and social needs of each of the students, individually. It was also found that when peer tutoring was implemented during the first hours at school, students were less tired and more engaged. So, two teachers that implemented peer tutoring the fourth and fifth hour of the school's timetable, decided to change it, and to implement it in the first three hours of the timetable. Lastly, all teachers agreed to their need to receive another one-hour training, were we could all discuss about the difficulties they encountered, the skills that they feel they do not possess to implement further peer tutoring.

As far as the second round of teachers' training is concerned, we reflected on solution and improvements in our practices, and I helped them to develop the skills they felt not possessing, by involving them in role-playing peer tutoring. Furthermore, I showed to them videos from classrooms that they have implemented peer tutoring in order to discuss the role of the teachers.

#### 4.4.2.3.3 *Cycle C: Six-week implementation of peer tutoring*

‘Planning’: Based on the changes discussed and agreed with the teachers, the six-week implementation of the programme began, after the one-hour training. The rest of the peer tutoring procedures followed were similar to the ones described during the two-week implementation of the peer tutoring programme.

‘Acting’: One of the differences from the two-week implementation of the peer tutoring programme was the process followed for the development of the content materials for the students for the one teacher who did not want to be engaged in the process. As I have decided at the end of the two-week period, I met him to inform me about the content he wanted to be practiced during peer tutoring. I developed the working sheets and gave them to him a day prior to the implementation of the programme for his approval. There were cases that he asked me for changes, which I did, according to his suggestions.

The type of peer tutoring performed changed in some cases in order to serve more effectively the academic and social needs of all participating students and teachers’ suggestions. As far as teachers are concerned, they performed the role of coordinator and monitor of the procedure, moving around the classroom and performing the tasks mentioned in the two-week implementation of the programme, which was definitely a change in the role they used to play in their classrooms. My role as a researcher remained the same as in the first period of implementing peer tutoring.

‘Observing’: Teachers implemented the tasks as were decided after our discussion at the end of the two-week implementation of the peer tutoring programme in their classrooms. The general feeling of enthusiasm and interest on the behalf of students for participating in the peer tutoring programme remained unchanged and in the six-week period. When preparing the working sheets with teachers, all of them seemed engaged to this task.

The pairs of the students with the changed format of peer tutoring were closely examined during the implementation of peer tutoring. The pairs that consisted of a student with SEND and a peer without SEND were closely observed by me. Generally, as was observed, most of the students' pairs worked collaboratively and without arguing. Teachers were performing the role of the coordinator and monitor, based on the programme's demands, and as the sessions proceeded they gained more confidence in moving around the classroom more and offering corrective feedback and praising each of the pairs of students.

Teachers were interviewed individually at the end of the six-week implementation of the peer tutoring programme. They were asked about the efficacy of peer tutoring as a means to the inclusion of students with SEND in mainstream classrooms, the academic and social benefits of students, their own benefits, their self-efficacy skills and the difficulties they encountered during the implementation of the programme.

'Reflecting': From brief chats with teachers and students during the six-week implementation of the peer tutoring programme, they all seemed enthusiastic because of their involvement in it. However, as was anticipated, there were both teachers and students who expressed concerns regarding specific issues that occurred. All of these were carefully discussed and resolved at the specific time they arose during Cycle C.

Teachers, as was observed, were a bit hesitant during the first sessions of the programme in moving around the classroom, but as the sessions proceeded they were feeling more and more comfortable to be engaged in their new role of monitor. As was noticed during the two-week implementation of the peer tutoring programme, teachers continued to experience the shift in their role from being the leaders of the educational process to reinforce students to take the ownership of their own learning, as they also claimed in their interviews.

Based on my observations while peer tutoring was implemented and on teachers' comments during the interviews conducted after the six-week implementation of peer

tutoring, we concluded that there were cases that peer tutoring supported the social inclusion of students with SEND in mainstream classrooms. However, there was a case that it did not work, due to various reasons, such as the choice of this teacher to implement it in the content area of mathematics and the occasional unwillingness of this teacher to engage himself and his students fully in the procedures of the programme. As far as students are concerned, all of them stated, in their interviews, that they have enjoyed their involvement in the programme. They described the difficulties they experienced and their perceptions concerning their benefits from their involvement. The most common benefit stated by the participating students was the opportunity that the programme offered them to meet their peers in more depth and recognize the good aspects of the personality of each one.

In this action research project, I developed a living theory of responsibility, movement, engagement, self-care, and self-awareness with a living standard of judgment of responsibility toward others. I believe that this original account of my emerging practice highlights how I have turned my ontological commitment to the inclusion of students with SEND in mainstream classrooms into a living epistemological standard of practice by which my inclusionary and responsive approach may be held accountable. The focus of this programme is on my own learning, first, and then, to the development of my living educational theory as I have engaged others in a creative and critical practice, over a specific period of time. This study shows how I have encouraged people to work creatively and collaboratively to improve their own practices and relationships, and later to develop an inclusive ethos reinforcing both the instructional practices in the school and the relationships among teachers, the relationships among students and the relationships between teachers and students. The development of a school environment suitable not only to accommodate the diverse students' needs but willing to appreciate them and work towards equity and justice in

education. Lastly, I would like to conclude with a famous quote from Ghandi, “Be the change you wish to see in the world”.

#### *4.4.2.4 Data analysis*

In this section, I will present the analysis of the interviews, observations and diary. According to Mertens (2009), the analysis of text-based data is usually done using either word-based or thematic coding analysis strategies. For the purposes of the current study, the thematic coding analysis was found to be more appropriate. Thematic analysis refers to the process of identifying themes in the data which capture meaning that is answering the research questions posed (Schreier, 2014). Coding plays a significant role in thematic analysis. Specifically, according to Robson and McCartan (2016), coding is the defining of the data you are analysing, and according to Boyatzis (1998) the thematic analysis is basically a process of encoding qualitative data. The next step is grouping similar codes into themes related to the research questions of the study. Boyatzis (1998) defined the term ‘theme’ as “a pattern found in the information that at the minimum describes and organizes possible observations or at the maximum interprets aspects of the phenomenon” (p. vii).

Specifically, thematic coding tracks themes that emerge from the data and can also be done using computer program support (Mertens, 2009). Atlas.ti 8.4 was used for the analysis of the qualitative tools used in this study. It is a code-and-retrieve programme, which assists the researcher in dividing text into segments, attaching codes to these segments, finding and displaying all cases of coded segments (Lewis & Silver, 2007; Miles & Huberman, 1994). The use of software in the data analysis increases researcher’s access to the whole set of the data files and offers the needed flexibility to move forward and backward in order to make explanations and draw conclusions (Lewis & Silver, 2007). It is crucial to mention at this

point that Atlas.ti is not a method of analysis, rather it has a facilitative role in the analytic process (Lewis & Silver, 2007).

Data analysis was not a linear process where one step was completed before moving to the next one. There was much movement backwards and forwards. Teachers' interviews were first transcribed from the recordings and then coded, while students' interviews were coded as there was no records to be transcribed. Transcription is an important stage in analysing interviews, because data become more useful for further analysis than the audio record itself. During the transcription, the researcher should consider his/her field notes taken during the interview, in order to transcribe participants' responses as accurately as possible. In common with all methods, transcription has some limitations. First of all, the recorded conversation is not always easy to hear and interpret. Secondly, it needs to be edited in order to take a meaningful format, so it loses its authenticity (Burton, Brundrett, & Jones, 2008; Denscombe, 2010; Wellington, 2000).

I examined all the interviews in a cross-case and within-case dimension (Miles & Huberman, 1994). For the purposes of the present study, only the cross-case analysis will be presented. Specifically, teachers' and students' views on specific topics will be presented in role-ordered matrixes. The thematic categories are both predefined based on the questionnaire used along with the literature, and were emerged during the analysis of the data. In other words, teachers' and students' views will be discussed collectively under each key theme category. In the analysis followed there will be quotes of the interviews conducted. It should be mentioned that pseudonyms are used in order to secure the anonymity of all the participating teachers and students.

Observations record sheets and diary records were analysed following the same procedure as with interviews. They were all incorporated in Atlas.ti and the results presents will include extracts from both of them.

#### 4.5 Ethical considerations

Most of the studies in the social research field is concerned with ethical issues, because they basically involve people (Denscombe, 2010; Punch, 2000; Robson, 2011; Thomas, 2013; Wellington, 2000). According to Creswell (2008), Mertens (2005) and Robson (2011), the researcher should take into account specific ethical considerations when designing, organizing, implementing and evaluating a research study. Researchers should respect all the participants and appreciate that they have voluntarily taken part. Furthermore, the researcher should always keep in mind that ethical issues arise without warning. But, even when an ethical issue occurs, a wide range of possible resolutions is always offered (Cohen & Manion, 1994). In my research, I followed the ethical guidelines for educational research by the University of Thessaly, the Greek Ministry of Education and the APA guidelines. Consent, confidentiality, security of data and anonymity are only some of the main ethical considerations that the researcher should bear in mind and take certain steps to secure them (Bell & Opie, 2002; Burton, Brundrett, & Jones, 2008; Denscombe, 2010; Punch, 2014).

Informed consent is essential in social research, especially when people express their personal thoughts, beliefs and attitudes. Consent shows that the researcher respects participants' freedom and right to refuse participation or withdraw any time. Moreover, in order for the participants to consent to take part, they should be first fully informed about the purpose, the context and the procedures of the research (BERA, 2011; Burton, Brundrett, & Jones, 2008; Robson, 2011; Thomas, 2013). Especially when the sample includes vulnerable populations, such as students, consent should be given by the parents or guardians of each of the student. In the consent letter sent to them I described simply and briefly the aim, the methods of the research and how their children will be involved in the study, to secure that parents would have understood every aspect of the study prior to giving their consent so that



their children could participate in the research. The consent forms given to the headteacher of each school, to the teachers and to the parents or guardians of the students participating in the programme are given in the Appendix.

Although researchers know which piece of information is connected with whom, this will not be revealed. This was made clear to all the participants at the outset of the current study (BERA, 2011; Burton, Brundrett, & Jones, 2008; Wellington, 2000). In my research I ensured confidentiality by giving code names to all the participants and all the data were secured in a memory stick locked with a password. All data will be destroyed nine months, after their collection. Anonymity means that all the information provided by the participants will not reveal their identity and was secured by giving pseudonyms to students and code names to teachers (Burton, Brundrett, & Jones, 2008; Robson, 2011; Wellington, 2000). The questionnaires distributed to teachers did not ask for any personal details, ensuring the participants' anonymity. Moreover, questions involved both in questionnaires and interviews tried not to put participants in an uncomfortable position (Denscombe, 2010; Thomas, 2013).

However, according to Pring (2000) ethical considerations are not simply following rules and guidelines, but also to consider the character and disposition of the researcher. Just being aware of a set of guidelines is not considered as sufficient to undertake a research study (Grosvenor & Rose, 2001), especially when research involves children. This dimension of ethics is not an easy task and requires the researcher to adopt certain dispositions, such as to pursue the truth, even though the conclusions drawn are not the ones wanted to be reached, to report honestly not only the results of the study but also the procedures followed to reach these results and to be open to new evidence and constructive criticism (Pring, 2000). Moreover, the researcher's attitudes, beliefs and values are constantly affecting the way that the researcher stands on to the procedures, the results and especially, to the participants of the study. I, as a researcher, tried to be positive and dialectical with all the participants, without

losing my professional integrity, but at the same time to encourage a constructive and honest dialectical relationship with all the people involved in the school activities, such as headteachers, teachers, students and parents.

Lastly, another ethical consideration involves the self-exposure of the researcher. During my research study, there were several times that I felt myself being in an awkward and difficult position. Especially, during the implementation of the action research project, the strict timetables of the schools and of the teachers made the implementation a difficult task. Several times I adopted the timetable of the study to be convenient for the schools and the teachers, and I postponed many of the research's tasks and increased my stress levels in order to cause no inconvenience to any participant in my study. Moreover, the headteacher in one of the schools was not widely accepted by his colleague, as a result his voice was rarely heard by them. My position was really sensitive trying to take no side in this 'a-typical war' between them. As a conclusion, some teachers viewed my research and further, my research study with suspicion and as a form of assessment. As can be easily concluded, this affected the nature of our interactions. Overall, as a researcher I was committed to follow three basic ethical rules, to protect the participants of my study in any aspect, second to improve their inclusive practices and their attitudes towards the inclusion of students with SEND and further, to improve my interpretation on the efficacy of inclusive practices and the restraints in their practical implementation, and, lastly, to keep the quality and the integrity of the study at a high level.

## Chapter 5: Results

### 5.1 Results from survey data

#### 5.1.1 Attitudes and self-efficacy perceptions of the participating teachers

Differences in the attitudes to inclusion held by mainstream and special teachers were examined. The mean responses of both groups to the ‘Core Perspectives Scale’ are given in Table 10. Mainstream teachers were found to hold neutral attitudes while their special counterparts more positive attitudes, a difference that reached statistical significance,  $t(292) = -8.24, P < .001$ ). The comparison between the two groups in the three efficacy scales revealed that mainstream teachers held significantly lower self-efficacy perceptions for implementing ‘inclusive instructions’ ( $t[292] = -2.61, P < .01$ ) and in ‘efficacy in collaboration’, ( $t[292] = -2.13, P < .05$ ) than their special colleagues. By contrast, mainstream teachers reported more positive self-efficacy perceptions for ‘managing behaviour’ than special teachers; nevertheless, this difference was not statistically significant. Finally, as anticipated, a statistically significant difference was detected in the comparison concerning the two groups’ perceived efficacy for implementing peer tutoring in their classes. Mainstream teachers held positive self-efficacy attitudes but significantly lower than the ones reported by their special counterparts,  $t(292) = -3.51, P < .001$ .

Table 10.

*Attitudes Towards Inclusion and Self-efficacy for Inclusive Practices of Mainstream and Special Teachers*

Teacher role	
Mainstream	Special
N=225	N=69

	M(SD)	M(SD)	t-test
Attitudes toward inclusion	3.47 (.59)	4.00 (.43)	-8.24***
Efficacy for instruction	3.77 (.46)	3.95 (.60)	-2.61**
Efficacy for collaboration	3.80 (.48)	3.95 (.58)	-2.13*
Efficacy for behaviour	3.85 (.44)	3.74 (.51)	NS
Efficacy for peer tutoring	3.74 (.62)	4.04 (.60)	-3.51***

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Next, comparisons between groups of mainstream teachers determined by various teacher variables were calculated. The analysis by gender showed that female teachers held more positive attitudes of ‘self-efficacy for peer tutoring’ than their male counterparts,  $t(223) = -2.13$ ,  $P < .05$ . No other gender differences were detected in the other variables examined (see top panel of Table 11). The analysis by age yielded a statistically significant difference in relation to ‘attitudes towards inclusion’ between the three age groups,  $F(2,222) = 6.99$ ,  $P < .001$ . Post-hoc analysis (Tukey) revealed that the significant univariate effect detected was due to differences between the young group and their middle-aged colleagues ( $P < .01$ ) as well as between the 50+ group and their middle aged colleagues ( $P < .01$ ). On both accounts the middle-aged teachers held less positive attitudes. Another statistically significant difference detected concerns the self-efficacy perceptions for peer tutoring held by the three age groups,  $F(2,222) = 5.85$ ,  $P < .01$ . On this occasion, the post-hoc analysis indicated that the univariate effect detected was due to young teachers holding more positive perceptions than their middle-aged colleagues ( $P < .01$ ) (see Table 11). The analysis between the groups

of teachers with various years of teaching experience (1-10, 11-20, 21-30, and 31+) failed to detect a statistically significant difference. Finally, it was not possible to compare teachers with postgraduate training on inclusive education with their peers since the former group consisted of only 17 participants.

Table 11.

*Mainstream Teachers' Attitudes and Self-efficacy Perceptions by Gender and Age*

	Gender			t-test
	Male	Female		
	N=74	N=151		
	Mean (SD)	Mean (SD)		
Attitudes toward inclusion	3.39 (.56)	3.50 (.60)		NS
Efficacy for instruction	3.74 (.54)	3.79 (.42)		NS
Efficacy for collaboration	3.78 (.54)	3.81 (.45)		NS
Efficacy for behaviour	3.93 (.49)	3.82 (.41)		NS
Efficacy for peer tutoring	3.61 (.69)	3.81 (.58)		-2.13*

	Age			F
	Up to 39	40-49	50+	
	N=61	N=72	N=92	
	Mean (SD)	Mean (SD)	Mean (SD)	
Attitudes toward inclusion	3.61 (.60)	3.26 (.63)	3.53 (.52)	6.99***

Efficacy for instruction	3.82 (.48)	3.69 (.44)	3.81 (.46)	NS
Efficacy for collaboration	3.84 (.50)	3.74 (.49)	3.82 (.46)	NS
Efficacy for behaviour	3.88 (.38)	3.90 (.43)	3.81 (.48)	NS
Efficacy for peer tutoring	3.95 (.42)	3.59 (.62)	3.73 (.69)	5.85**

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\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

### 5.1.2 Perceived benefits from the implementation of peer tutoring

Next, we explored the perceptions mainstream teachers hold about the benefits emanating from the implementation of peer tutoring in their classes for both their students and themselves. The top panel of Table 12 presents the participants' mean responses on the ten Likert-type items concerning student benefits. Strikingly, mainstream teachers rated very highly the enjoyable nature of peer tutoring and the social benefits emanating from its implementation both for students with SEND and for their peers without SEND (see the respective top five items with mean scores ranging from 3.71 to 3.82). Interestingly, the items concerning academic benefits received lower but still positive ratings with mean scores ranging from 3.53 to 3.65. The evidence suggests that mainstream teachers view peer tutoring as an arrangement that primarily stimulates the students' interest through its enjoyable nature and results in positive social outcomes; and to a lesser extent as an arrangement resulting to positive academic progress.

Regarding teacher outcomes, the bottom panel of Table 12 shows that the participating mainstream teachers rated positively all six potential benefits presented to them with mean ratings ranging from 3.24 to 3.71. The most highly rated teacher benefit concerned the contribution peer tutoring arrangements have to the teachers' efforts to effectively include

students with SEND in the mainstream class. The next highly-rated benefit concerned the reduction of problematic behaviour in the class, followed by the two benefits relevant to meeting the individualized needs of students. Finally meeting all teaching objectives and covering the curriculum material were also, albeit to a lesser extent, rated positively. The evidence suggests that mainstream teachers recognise the benefits that arise for themselves through the implementation of peer tutoring in their class. However, it is important to note here that the items presented to them elicit only perceptions or expectations which tell us very little about their actual practices. The analysis reported next represents an attempt to predict their willingness to implement peer tutoring in their classes.

Table 12.

*Mainstream Teachers' Perceptions about the Student and Teacher Benefits Emanating from the Implementation of Peer Tutoring*

Perceived student benefits	N	Mean	SD
Students with SEND will find peer tutoring enjoyable	225	3.82	.74
Peer tutoring will improve the social skills of students with SEND	225	3.80	.81
Students without SEND will improve their social skills	225	3.77	.81
Students with SEND will benefit socially when undertaking the role of the tutor in peer tutoring	225	3.73	.76
Students without SEND will find peer tutoring enjoyable	225	3.71	.77
Students with SEND will benefit academically when undertaking the role of the tutor in peer tutoring	225	3.67	.77
Students without SEND will benefit socially when undertaking the role of the tutee in peer tutoring	225	3.65	.78

Peer tutoring will improve the academic skills of students with SEND	225	3.64	.73
Peer tutoring will improve the academic skills of students without SEND	225	3.63	.74
Students with SEND will benefit academically when they undertake the role of the tutor in peer tutoring	225	3.53	.77
<hr/>			
Perceived teacher benefits			
<hr/>			
Implementing peer tutoring enables the teacher to effectively include students with SEND in his/her class	225	3.71	.73
Implementing peer tutoring enables the teacher to reduce problematic student behavior	225	3.65	.74
Implementing peer tutoring enables the teacher to individualize his/her teaching	225	3.54	.74
Implementing peer tutoring allows the teacher to individually assess each student's progress	225	3.49	.74
Implementing peer tutoring enables the teacher to meet all his/her teaching objectives	225	3.45	.77
Implementing peer tutoring gives the teacher the opportunity to cover more curriculum material	225	3.24	.79
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### *5.1.3 Attitudes towards inclusion and self-efficacy for inclusive practices as predictors of willingness to implement peer tutoring*

Next the analysis examined whether the attitudes mainstream teachers (N = 225) hold towards inclusion and their self-efficacy for inclusive practices predict their interest in



systematically applying peer tutoring in their classes. Binary logistic regression was conducted with the outcome variable being a categorical dichotomy (i.e. “I am interested in implementing peer tutoring in my class as a means to inclusion”) and predictor variables being ‘attitudes towards inclusion’, ‘efficacy for inclusive instruction’, ‘efficacy for collaboration’, ‘efficacy for managing behaviour’, and ‘efficacy for implementing peer tutoring’. From the 225 participating teachers 138 indicated their interest in applying peer tutoring in their classes. All these 138 teachers indicated their willingness to take part in the subsequent phase of the research which involved evaluating the outcomes of a peer tutoring intervention. This indicates that these teachers were truthful about their intention to implement peer tutoring in their classes and did not provide simply socially acceptable answers.

In the initial model, the method of conducting the regression was the ‘enter’ one in which all five predictors are entered into the regression model as one block. The analysis revealed that with the exception of the ‘efficacy for managing behaviour’ predictor ( $P = 0.91 > 0.05$ ), all other covariates contributed significantly to the model. To improve the fit of the model, we eliminated the predictor ‘efficacy for managing behaviour’ and proceeded with running again the analysis with the 4 statistically significant predictors. The Omnibus Tests of Model coefficients produced a statistically significant result,  $\chi^2(4) = 94.32, P < .001$ , which confirmed that the model was meaningful and we could proceed with examining its predictive value. The -2 x Log-likelihood obtained was 205.92 with both the Cox and Snell and the Nagelkerke  $R^2$  being 0.46, which means that the model’s four predictors accounted for 46.5% of the variability of the dependent variable. The equation of this model was  $\text{Log}(p/(1-p)) = -11.64 + 0.82 * (\text{attitudes towards inclusion}) - 1.72 * (\text{efficacy for inclusive instruction}) + 2.15 * (\text{efficacy for collaboration}) + 2.07 * (\text{efficacy for peer tutoring})$  with the Hosmer and Lemeshow test confirming the model’s goodness of fit ( $P = .49 > .05$ ). Also,

examination of the produced correlation matrix revealed that the independent variables of the model were not highly correlated with each other and, therefore, the problem of multicollinearity did not occur.

In the next step we attempted to improve the model by repeating the analysis having first excluded participants with residuals larger than 2 standard deviations. The exclusion of these ‘outliers’ was deemed necessary in order to improve the fit of the model. Eight such cases were excluded from the analysis resulting in a sample of 217 mainstream teachers, which is considered as satisfactory given the number of predictors ( $N = 4$ ) entered in the analysis. By following the same procedure as in the previous steps, we obtained a new model with better fit with the  $-2 \times \text{Log-likelihood}$  being 163.91 and with the Cox and Snell and the Nagelkerke  $R^2$  being 0.59 which means that the four predictors accounted for the 59% of the variability in the dependent variable of the model. The equation of this new model was  $\text{Log}(p/(1-p)) = -15.82 + 1.39 * (\text{attitudes towards inclusion}) - 2.71 * (\text{efficacy for inclusive instruction}) + 3.30 * (\text{efficacy for collaboration}) + 2.57 * (\text{efficacy for peer tutoring})$  with the Hosmer and Lemeshow test confirming the model’s goodness of fit ( $P = .38 > .05$ ).

Table 13.

*Mainstream Teachers’ Attitudes and Self-efficacy Perceptions as Predictors of Their Willingness to Implement Peer Tutoring*

Covariates included	B	S.E.	95% C.I. for Exp(b)		
			exp(B)	Lower	Upper
Attitudes towards inclusion	1.39	.45***	4.03	1.67	9.76
Efficacy for inclusive instruction	-2.71	.93***	.07	.01	.412
Efficacy for collaboration	3.30	.87***	27.14	4.93	149.25
Efficacy for peer tutoring	2.57	.49***	13.12	4.96	34.68

Constant	-	2.44	.000
		15.823	

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*Note:*  $R_2 = 80.6\%$  (Hoshmer & Lemeshow),  $p\text{-value} = 0.38 > .05$ .

\*\*\*  $p < .001$

From the final model presented above it can be deduced that the predictors ‘attitudes towards inclusion’, ‘efficacy for collaboration’, and ‘efficacy for peer tutoring’ influence positively the teachers’ interest in systematically applying peer tutoring in their class. This means that an increase of half a unit in the mean scores of these predictors (that is 0.5 increase in the five-point scales utilized) will be accompanied with an increase in the probability of the teachers showing an interest (of 2 times, 5.2 times, and 3.6 times respectively). Conversely, an increase of half a unit in the mean score of the predictor ‘efficacy for inclusive instruction’ will be accompanied with an increase of 3.87 times in the probability of teachers not showing an interest in applying peer tutoring.

The total accuracy of the model in predicting the teachers’ interest in systematically applying peer tutoring in their class as a means to inclusion is 80.6%. As it can be seen in Table 14, the percentage of correctly assigning teachers with an interest to apply peer tutoring is 88.2% (that is, 120/136 which represents satisfactory specificity), while the percentage of correctly assigning teachers to the opposite category is 67.9% (that is, 55/81 which represents satisfactory sensitivity). Moreover, the positive predictive value (PPV) of the model is estimated as 82.2% (that is, 120/146) and the negative predictive value (NPV) 77.5% (that is, 55/71).

Table 14.

*Classification Table Depicting the Predictive Accuracy of the Model*

		Predicted		
		I am interested in using peer tutoring as a means to inclusion		
		No	Yes	Percentage correct
Observed	No	55	26	67.9
	Yes	16	120	88.2
Overall percentage				80.6

*Note:* The cut value is .5

## 5.2 How the results from the survey contributed to the action research project

The findings from the analysis of teachers' questionnaires were used in the design of the action research project in the mainstream primary schools. Specifically, mainstream teachers were found to hold neutral attitudes towards the notion of including students with SEND in their mainstream classrooms. This finding led me to modify the content of the training offered to teachers, in order to incorporate some additional practices conducive to promoting inclusion in mainstream settings. Moreover, when teachers were asked about the benefits they perceive for themselves from their involvement in a peer tutoring programme, they claimed that peer tutoring can foster the inclusion of students with SEND in their mainstream classrooms. This finding strengthened my plan to offer to teachers the opportunity to get involved in the design and organization and finally, implement in their classrooms peer tutoring as a means to include students with SEND.

As far as peer tutoring is concerned teachers were found to believe that peer tutoring will be enjoyable for the participating students and will eventually lead to the development of the social skills of all students, but predominantly of students with SEND. Academic benefits emanating from peer tutoring were rated lower but they still received positive ratings. Based on this finding, teachers' training prior to the implementation of peer tutoring in their classrooms was designed to highlight the benefits that students' involvement in peer tutoring arrangements will offer to their academic skills and development. Generally, mainstream teachers recognised the benefits for themselves and for the participating students from their involvement in peer tutoring arrangements, and most of them expressed their willingness to participate in the implementation of the peer tutoring programme.

### 5.3 Results from action research project

In this section, I will describe teachers' and students' views as were expressed during the three cycles of the action research project. Information from observations, field notes and diary are incorporated in the presentation of participants' views in each cycle.

#### *5.3.1 Teachers' views from Cycle A of the action research project*

In this section I will describe teachers' views as were illustrated in the discussion we had after their training and in the private interviews I had with them. The key theme categories emerged from the analysis of the interviews I conducted are: a) inclusion issues and practices, b) prior knowledge and implementation of peer tutoring and c) expected difficulties in the implementation of peer tutoring and suggestions for overcoming them. The category that emerged was: i) appropriate students' age for participating in peer tutoring. The results of each theme category are presented in detail as follows.

### 5.3.1.1 Inclusion issues and practices.

In this section the first key theme emerged will be discussed. It concerns how teachers perceive the general notion of inclusion of students with SEND in their mainstream classrooms. It is indicative that I asked the teachers if they think their job has become more demanding after the fostering of inclusive legislation, and if they have adopted inclusive practices for the inclusion of students with SEND. Table 15 presents the views expressed by the seven interviewed teachers towards inclusion issues and practices.

Table 15.

#### *Teachers' Attitudes on Inclusive Issues from Two-week Implementation of Peer Tutoring*

Teachers	Inclusive issues	
	demanding job	inclusive practices
		differentiated instruction, more time, less
T1	always has been	homework, close collaboration with family
T2	yes	none-no need ever
T3	not actually, because of the parallel support	co-teaching
T4	yes	differentiated instruction, less homework, teamworking, paired work
T5	yes	none
T6	yes	none
T7	yes	differentiated instruction, less homework, paired work

Most of the participating teachers contended that their job had become more demanding since the passing of the inclusive legislation. However, T1 argued that: “..our job has always been demanding, it did not actually change after the legislation of inclusion”. Most teachers agreed that the demands have increased after the legislation of inclusion of students with SEND in their classrooms, T3 stated that “indeed, it is more demanding, but the parallel support offered by another colleague improves a lot things, minimizing the demands from us (mainstream teachers)”. Some teachers, like T6, explained that her job became more demanding after the enforcement of inclusive legislation “in relation to the teaching goals, my teaching routine, and my inclusive practices, especially for their social inclusion, which is the most demanding aspect of including students with SEND in mainstream classrooms”.

As far as the inclusive practices adopted by them are concerned, three teachers claimed that they had not implemented any inclusive practice during their career. T2: “I didn’t face the need to implement specific inclusive practices, I didn’t have children with severe types of SEND..”. It is crucial to mention at that point that all teachers I interviewed had more than 20 years of experience. Among the inclusive practices that teachers have adopted are differentiated instruction (DI), used more than any other practice, extra time, less homework, collaboration with family, and co-teaching. T4 and T7 have used peers to support students with SEND in their classrooms. Specifically, T4 said: “...I always let my students collaborate, I always arrange them on teams..”. Along the same lines, T7 has used a peer to help an autistic girl in maths, and specifically in solving multiplication problems. The teacher argued that although autistic children are not keen on developing close social relationships with peers, she has noticed, especially during break times, that “she (autistic child) loved so much her (peer) and.. was accepting any offer from her, only from her..”. As a conclusion, teachers usually adopt team or peer working between students, who either have academic deficits or perform disruptive behaviour. Indicatively, T5 argued “I pair students who face

difficulties or are usually upset with students who are strong academically and calm during the lesson. I've seen that this can work, or at least has worked in my classrooms”.

While most of the interviewed teachers contended that their job had become more challenging and demanding after the passing of inclusive legislation, three of them argued that they had never implemented any inclusive practice in their classrooms. This controversy can be explained by the fact that mainstream teachers received no official training after the passing of the inclusive legislation, in order to provide support and individualized instruction to students with SEND. They often claim feeling ill-prepared to offer targeted support to meet the academic and social needs of students with SEND. As a result, they try to meet students' with SEND needs with the pedagogic approaches and instructional strategies they already use, without making any additional adaptations. Their lack of specialized training on SEND was drawn as a conclusion during our discussion immediately after the completion of their training. This is one of the main reasons that most of them seem interested in getting involved in the peer tutoring programme.

In conclusion, most of the interviewed teachers claimed that their job's demands have increased since the passing of inclusive legislation in Greece. Three of them have not adopted any inclusive practices, while the rest four stated that they have used DI, co-teaching, less homework, offer of extra time, and collaboration with family as practices towards the inclusion of students with SEND in their classrooms. Lastly, two of the interviewed teachers have used peers to offer support to students with SEND.

#### *5.3.1.2 Prior knowledge and implementation of peer tutoring.*

As far as peer tutoring's procedures are concerned, I asked teachers questions regarding prior knowledge and implementation of peer tutoring, and their willingness to



implement it in the future. If they have implemented it before, I asked them to describe the aims, procedures, and students that had participated in it. Table 16 presents the views expressed by the seven interviewed teachers regarding peer tutoring.

Table 16.

*Teachers' Attitudes on Peer Tutoring from Two-week Implementation of Peer Tutoring*

Teachers	Peer tutoring		
	knowledge	prior implementation	willingness to implement
T1	no	cooperative learning	yes
T2	yes	no	yes
T3	yes	cooperative learning	yes
T4	yes	yes	yes
T5	yes	cooperative learning	yes
T6	no	no	yes
T7	yes	cooperative learning	yes

When I asked them about having implemented peer tutoring in their classrooms, I found that some have tried to involve students with different academic abilities in teamwork or pair activities. Specifically, T1 described the procedure she followed as: “hm..just in.. just in taking each other’s’ (students’) books and correcting, correcting every mistake and helping each other in reading the presentation of each exercise and to collaborate in order to solve them...”. She further explained “..sometimes when I cannot offer help to a student, a peer who had already finished, can help...”. T3, T4, T5 and T7 have used some forms of pair activities. T5 went further in her description “look, usually I am trying to make pairs of students who are facing difficulties or exhibit disruptive behaviour with peers who are

academically strong or calm...this is what I have done..”. Similarly, T7 has also used pair working for supporting students who face difficulties in academic areas, because as she stated “...children think the same way, and different from us, the elder ones, and can give explanations to each other that they can understand easier than mine”. When I asked teachers if they are willing to implement a peer tutoring programme in their classrooms the next academic year, all of them responded positively. Although T6 expressed some concerns regarding programme’s effectiveness, agreed to implement it in her classroom (“I would like to give it a try, but I don’t know how effective it can be..”).

Both from the individual interviews with the teachers and from the discussion we all engaged after the completion of their training, most of them had heard before about peer tutoring. However, this does not predispose their knowledge on the procedures of peer tutoring. Moreover, teachers usually give politically correct answers, and perhaps they did not want to be seen not knowing the peer tutoring. Two of the interviewed teachers admitted not having implemented prior peer tutoring, while the rest of them claimed to have involved their students in teamwork or paired activities. Again, caution is needed because the fact that most teachers claimed the use of collaborative approaches between their students does not necessarily mean that they have implemented peer tutoring in their classrooms. As a conclusion, I was surprised by the great interest shown by teachers to get involved in the implementation of peer tutoring. They were all willing to design, organize, implement and test its effectiveness in meeting the academic and social needs of their students. This can be attributed to the fact that I promised to offer to them ongoing support during all the phases of the programme, without leaving them alone at any point of its implementation. Only one teacher expressed concerns regarding the programme’s effectiveness, but I highly anticipated such a concern to be expressed at the beginning of the programme.

To sum up, most of the teachers claimed to be familiar with the idea of peer tutoring. However, as was drawn from their discussion with them, some had a different understanding of peer tutoring in their minds in comparison to the definitions of peer tutoring in the literature. Two of them had not implemented peer tutoring before, while the others have involved their students in various forms of collaborative learning. All of them expressed their interest and willingness to become part of the peer tutoring programme.

*5.3.1.3 Expected difficulties during the implementation of peer tutoring and suggestion for overcoming them.*

In this section, I will describe the difficulties teachers expect to face during the design, organization, implementation and evaluation of the peer tutoring programme in their classrooms. Additionally, I will discuss the suggestions they made in order to overcome the expected difficulties. Table 17 presents the difficulties teachers expect to encounter and their suggestions for overcoming them.

Table 17.

*Teachers' Experienced Difficulties in the Two-week Implementation of Peer Tutoring and Suggestions for Overcoming Them*

Teachers	Expected difficulties	
	Difficulties	Suggestions for overcoming difficulties
T1	time requirements, content cover pressure, pairing students	Training, having the same class a second year
T2	none	-
T3	pairing students	in-school training
T4	none	-

T5	pairing students	-
	handling students' behaviour and	
T6	noise, organizing peer tutoring's implementation, time requirements	training
T7	time requirements, pairing students, material	training

Pairing students proved as one of the most popular concerns teachers have, followed by the strict time schedules they have along with the pressure for content covering. As clearly stated by T1 “time is a pressure, content is another pressure, I think it is more a matter of time..”. Despite the general feeling of the teachers that there would be certain difficulties, T5 expressed a positive stance by saying “maybe at the beginning, there will be difficulties, but as time goes by they will be resolved”.

All the teachers who offered solutions for the expected challenges, agreed that training can help them overcome many of the obstacles they expect to find during the organisation, implementation and evaluation of peer tutoring. Specifically, for the pairing of students, T1 suggested as a possible solution to implement peer tutoring in the second year of having the same class (“I think..ehm.. in pairing students. This is better, now that I have this class for the second year, that we have known each other pretty well, now that I know and I have understood each child's personality and behaviour.. now I think it is easier..”). T3 suggested that peer tutoring's implementation would be much easier if an expert on the field came to his classrooms and shows him how to organize peer tutoring effectively in practice. T6 also mentioned training as a suggestion for overcoming any difficulties expected, “first of all, I need training on special education issues, because we (mainstream teachers) don't have acquaintance with students with SEND, I need somebody to tell me that whatever I do is in

the right direction for meeting their needs, and then I will be ready to train my students in helping their peers with SEND..”.

I found that matching students in order to form the pairs that will be involved in the peer tutoring programme was the task that teachers were more concerned about. Especially, when we discussed about peer tutoring after their training, they all asked several questions to exemplify the criteria for matching students. Due to their increased concern, we decided that I will help each of the teachers to formulate the pairs. Generally, matching students of mixed abilities is a demanding task, which needs teachers to know well the abilities and the needs of each student individually. I assume that because peer tutoring was implemented at the beginning of the academic year and some teachers had their classes for the first time, they would like a second opinion to secure that they shaped suitable and effective pairs of students. Teachers may be hesitant to engage solely in the matching of students, because at some cases they could not consider students with SEND as potential tutors. Moreover, one more possible explanation for teachers considering the pairing of students challenging is that in order to shape productive pair relationships, you have to take many different aspects in to consideration. Specifically, teachers should select two students who are likely to work well together, students' interest in being tutors or tutees, the academic skills of each student separately and then in combination, the behavioural and personality match between the students and tutor's ability to follow the peer tutoring procedures. All these may have sound difficult and challenging for teachers to do by themselves so they classified pairing of students as one of the most challenging tasks they have to perform.

Teachers suggested as a viable option for overcoming any expected difficulties the extensive training in the form of on-going support during all the stages of the peer tutoring programme. Specifically, when I secured my presence in their classrooms to all the teachers, they all stated that they felt more secure to get involved in the peer tutoring programme.

Teachers need training and on-going support during the implementation of peer tutoring. Specifically, they need training in inclusive practices, which are validated in supporting students with SEND and practical in terms of time and implementation. Teachers need to get acquainted with inclusive instructional strategies, which are both efficient and effective. They see training as the vehicle to the effective inclusion of students with SEND in their classrooms.

As a conclusion, while most of the teachers expressed concerns about the challenges they expect to face during the organization, implementation and evaluation of peer tutoring, less of them offered suggestions for overcoming these difficulties. The rest of them could not think or suggest solutions in order either to prevent or overcome the difficulties they have mentioned. Teachers considered the pairing of students as one of the most demanding tasks they will have to perform. The second most mentioned challenge for teachers was the strict time schedules they have along with the pressure they receive for content cover.

#### *5.3.1.4 Appropriate students' age for participating in peer tutoring.*

In this section, I will discuss the thematic category, which emerged when I asked teachers whom children they think will benefit most from their involvement in peer tutoring arrangements. Two teachers, T2 and T3 suggested in their interviews the appropriate age for peer tutoring to be most effective. They considered that peer tutoring will be more effective in older children than in younger ones. Specifically, T2 stated: "I think that in older students it will be more beneficial, in older students, for example, in fifth and sixth grade". Along the same lines, T3, who had the fifth grade during the academic year that the interviews were conducted, assumed that students attending the sixth grade would probably benefit the most from all the other students. He further explained, that because students are on the last grade

of primary school they know well each other and the needed bonding between team members already exist for interventions, such as peer tutoring, to succeed.

The bonding between team members plays a significant role in the effective implementation of peer tutoring. This is mainly the reason behind teachers' choice of older students as more capable of getting involved in peer tutoring arrangements. Generally, teachers will find easier to train older students in the procedures of peer tutoring than younger children, and, at the same time, they can feel secure that older students can follow effectively both the rules and the procedures of peer tutoring. To sum up, teachers think that peer tutoring would be more effective and easier to be implemented among students of higher-grade levels.

### *5.3.2 Teachers' views from Cycle B of the action research project*

In this section I will describe teachers' views as expressed in their interviews after the completion of the two-week implementation of the peer tutoring programme. I incorporate extracts of my diary, my field notes and my observations in the presentation of teachers' views. Specifically, the key theme categories emerged from the analysis of the interviews I conducted are: a) perceived students' benefits from peer tutoring, b) perceived teachers' benefits from peer tutoring and c) teachers' self-efficacy perceptions. The results of each theme category are presented in detail as follows.

#### *5.3.2.1 Perceived students' benefits from peer tutoring.*

In this section, I will discuss teachers' views towards the students' benefits from their involvement in the peer tutoring programme. Table 18 presents in more detail the perceived students' benefits from peer tutoring during its two-week implementation.

Table 18.

*Teachers' Perceptions of Students' Benefits from Two-week Implementation of Peer Tutoring*

Teachers	Perceived students' benefits			
	Students without SEND		Students with SEND	
	Academic benefits	Social benefits	Academic benefits	Social benefits
T1	-	yes	yes	not sure
T2	-	yes	-	yes
T3	no	yes	yes in literacy, no in maths	yes
T4	yes	yes	yes	yes
T5	not as much as social	yes	yes	yes
T6	-	-	yes	yes
T7	-	yes	yes	-

When I asked the participating teachers about the benefits that students with SEND have gained in the social domain from their involvement in the peer tutoring programme, most of them stated that students with SEND were indeed benefitted. Specifically, T2 agreed that there were benefits for students with SEND in both the academic and social areas, he further stated that the social gains were greater for these children who are usually excluded by their peers. Along the same lines, T3 stressed the need for students with SEND to learn to cooperate with their peers and become part of the class team. He saw peer tutoring helping to this direction. Similarly, T5 stated that both students without and with SEND improved more their social skills compared with their academic, especially students with SEND, "I believe socially, because we have them.. we have them excluded and many children in our schools,



hm.. they behave to them a bit strange..”. On the same direction, T6 claimed: “I believe socially, because these children, despite the fact that we say that we don’t exclude them, they know inside them that they aaaaare a.. bit special and they will see (after the 6-week implementation of the peer tutoring programme) that the others don’t separate them and that they are their friends and all these things...”. T7 highlighted the belonging in the class team as a significant effect of peer tutoring. She stated: “and they (students with SEND) learnt to communicate, because they do not socialize easily, so they are given the opportunity to be included in the team, to be accepted, hmm... their self-esteem will be boosted, I believe...”. On the other hand, T1 seemed quite unsure about the social benefits of students with SEND stating that “hmm...this is (students’ with SEND social skills) the most difficult part, because from my years of experience I see that a student who has not yet socialized from the kindergarten, there are a lot of issues and social discrepancies between students.. this need a lot of time to... and I don’t know socially how much will... will.. will improve (students’ with SEND social skills)”.

Students without SEND benefitted, especially, in the social domain through their involvement in peer tutoring procedures. Teachers mentioned mostly the feelings of offering help and, in general, the notion of learning to offer as some of the benefits that students without SEND accrued from their involvement in the peer tutoring programme and will further develop during the six-week implementation of the programme. Furthermore, according to T5 the involvement in peer tutoring procedures worked towards the direction of learning students to accept difference and not exclude students with SEND from their social groups.

As far as the academic benefits of students are concerned, teachers proved more cautious of peer tutoring’s effect in this area than they were regarding the social benefits. Especially, for students without SEND four teachers did not mention at all effects on this

field. T3 argued that there were no academic benefits for students without SEND, while T4 claimed that there were some academic benefits. In the middle of these two teachers' opinions there is the opinion of T5, who stated that there were academic benefits for students without SEND, but not as much as the social benefits they accumulated. Students with SEND seemed to have benefitted academically more than their peers without SEND, according to most of the interviewed teachers. Specifically, T3 claimed that students with SEND learnt how to cooperate and this close cooperation with a more academically capable peer led to the academic improvement of them, while he further argued that these benefits could be in certain content areas, such as literacy and physics, and not in maths ("in maths students, especially in the 5<sup>th</sup> grade, that I teach have huge deficits that cannot be covered at that point of time, while in literacy and physics, things are much easier, and it (peer tutoring) can be beneficial").

Indeed, my observations reinforce the views expressed by most of the participating teachers, that the social benefits of students with SEND were evident even from the first sessions of the peer tutoring programme. Especially, during the time breaks I noticed students spending more time together with a clear difference at the end of the second session of the programme, playing all together as a team. According to teachers, students were not used to play all together as a team but preferred to create small groups or dyads during break-time. While at the first session, both teachers and participating students were feeling a bit awkward because they have not been involved in something similar before, at the second session they have been more familiarized with the procedures. As I noticed during my observations, while during the first session teachers spent most of the time sitting in their desks, at the second session they increased the time they were monitoring the procedure. Similarly, while students during the first session they were feeling and expressed uncertainty for implementing accurately the peer tutoring procedures, during the second session they implemented their

roles with more confidence. This was testified by the reduced times they asked for help and reinforcement. Another interesting fact that I noted in my field notes during my first observation of T6's classroom was "Ann could not accept at all the idea that she will be pair with Chris. Chris did not like it other. Ann wanted to be pair with her best friend. Chris is a child who is excluded of the peer groups, because of his behaviour and his unwillingness to follow any rules. Indeed, he found difficult to follow the procedures of the peer tutoring programme, and Ann was making great effort to make him work". During the second session of implementing the programme, I wrote in my diary "Ann seemed to have accepted the idea that she will be paired with Chris. Chris was listening to Ann without disrupting her, when she was explaining to him the content of the activity. Ann was more willing to tutor him, and he was listening to her. They did get along together better than the first session". This shift in the behaviours of both students with SEND and peers without SEND were evident in other classrooms, too, such as in the classrooms of T3 and T1. Although it is too early to draw any conclusions concerning students' academic and social benefits, during the second session of peer tutoring, I noticed that both students with SEND and their peers without SEND were more engaged to the procedure and their willingness to collaborate and communicate with each other increased.

As a conclusion, teachers expressed a positive feeling towards students' social benefits emanating from their involvement in the peer tutoring arrangements. Furthermore, most of the teachers argued that both students without and with SEND would benefit socially through their involvement in peer tutoring arrangements. Moreover, teachers believed that students with SEND benefitted academically in a greater extent than their peers without SEND. Lastly, according to most of the participating teachers, peer tutoring offered, even at its short implementation, the opportunity to peers without SEND to open out to their peers with SEND and the other way around.

### 5.3.2.2 Perceived teachers' benefits from peer tutoring.

In this section, I will discuss the benefits that teachers believe they had from their involvement in the two-week implementation of the peer tutoring programme in their classes.

Table 19 presents the perceived teachers' benefits from peer tutoring.

Table 19.

#### *Teachers' Attitudes Towards Their Benefits from Two-week Implementation of Peer Tutoring*

Teachers	Perceived teachers' benefits
T1	content cover, individualized instruction, support to students with SEND
T2	easier delivery of new content, behaviour management, student-centred approaches, more interesting the lesson
T3	educational goals, support to students with SEND
T4	content cover, educational goals, individualized instruction, support to students with SEND
T5	educational goals, support to students with SEND
T6	no benefits
T7	content cover, educational goals, support to students with SEND

Most of the interviewed teachers agreed that there were benefits for themselves emanating from the two-week implementation of the peer tutoring programme in their classrooms. Only T6 could not see in which part of her teaching routine peer tutoring could help her, claiming "I think that (peer tutoring) made my life more difficult, rather than it helped me". Besides T6, all other teachers argued that there were certain benefits for them, with the most popular being the support of students with SEND in their classrooms. Specifically, almost all the teachers described peer tutoring as a powerful means to meet

effectively the academic needs of students with SEND in their mainstream classrooms. Indicatively, T1 stated “it (peer tutoring) can only be seen positively, why could it be negative? It offered me the way I was searching to help students with SEND in meeting their academic goals effectively”. Among other widely mentioned benefits that teachers accumulated from the two-week implementation of the programme were the content cover and the meeting of students’ individual educational goals. Quite interesting are the words of T2 who said that peer tutoring helped in eliminating the teacher-centred approaches used widely in the primary mainstream schools (“I was helped yes, yes, on my teaching, besides that the frontal instructions were eliminated, the noise and the boredom that conquers the classroom, was gone, because all these exist..”). On the same note, T4 claimed: “I was really helped by implementing peer tutoring because it was like I had a co-teacher in my classroom, something like parallel support..”.

I experienced a not so different picture from what teachers claimed to be the benefits from their involvement in the peer tutoring programme. Although the two-week period is a short one for a solid picture on teachers’ benefits to be shaped, I must admit that based on my observations, they seemed to enjoy their involvement. Most of them were really committed and engaged in all the procedures of the peer tutoring programme. Besides their claims in their interviews, my observation records justify their enjoyment and willingness to learn more about peer tutoring and improve their performance on their new roles. Next, I offer a more in-depth insight to the view of T6, who claimed that peer tutoring made her life difficult, rather than helping her, by describing the context in which peer tutoring took place. For doing so, I offer an extract from my diary, where I describe T6’s classroom during the first session of peer tutoring “T6 is teacher who is trying to engage all students in the learning procedure. She is adopting collaborative ways of learning, although she does not want noise in her classroom. She asked for her students to talk silently, when they work together. It is totally

understandable to try to prevent extreme noise in the classroom, but students could not collaborate talking silently. Despite that fact, 20 students talking simultaneously, even silently, will definitely produce certain noise”. So, noise seemed to have affected T6’s general attitude towards peer tutoring and she could not think of any benefit from her involvement in the peer tutoring programme. However, at the end of the second session of peer tutoring, “T6 told me that she was happy for seeing Chris not performing so many instances of disruptive behaviour, as he used to”. However, even that T6 did not gain any benefit from her involvement, she did not think to quit the peer tutoring programme. While the rest of the teachers claimed to have experienced certain benefits from their involvement, they all admitted that they would be able to describe them more explicitly after the six-week implementation of the programme. Indeed, the two-week implementation of the programme is a rather short period of time for both the teachers and myself to reach any concrete conclusion regarding the benefits they would accumulate from their involvement in the peer tutoring programme. However, I add an extract from my diary, which was found in most of the extracts of my diary from the classrooms at the end of the second session, “teacher seem to enjoy the programme, [...] she/he is really happy from the active involvement that students with SEN show”.

To sum up, most of the teachers, except for T6, expressed that their involvement in the peer tutoring programme has helped them in various aspects of their teaching, such as to support effectively students with SEND in their classrooms, to meet their academic and social needs, to offer individualized instruction and to manage students’ disruptive behaviours.

### 5.3.2.3 Teachers' self-efficacy perceptions.

In this section, I will describe teachers' perceptions of self-efficacy for implementing peer tutoring in their classrooms. Specifically, I asked teachers if they need further training in order to organize and implement peer tutoring in their classrooms and what skills they would like to acquire through this training, if they agreed for its need. Table 20 presents teachers' self-efficacy perceptions for implementing peer tutoring.

Table 20.

*Teachers' Attitudes Towards Their Self-Efficacy Skills during the Two-week Implementation of Peer Tutoring*

Teachers		Self-efficacy skills
	Need for training	Skills to acquire
T1	yes	practical implications of peer tutoring
T2	yes	practical implications of peer tutoring
T3	yes	practical implications of peer tutoring
T4	yes	practical implications of peer tutoring
T5	yes	special educational needs theoretical background, instructional strategies for supporting students with SEND, practical implications of peer tutoring
T6	yes	practical implications of peer tutoring
T7	yes	theoretical background of peer tutoring and its practical implications, instructional strategies for supporting students with SEND

As can be seen in Table 20, all the participating teachers would like to receive further training and support for implementing the peer tutoring programme for six weeks. Indicative of this are the words of T5: “I definitely need training, as I don’t have any knowledge on special education issues, I have never attended training on special education”. As far as the type of training they would like to receive is concerned, most of the interviewed teachers opted for in-service training taking place at their school settings for being easier for them to attend it. However, as T1 claimed training in the above form is not usual in the educational environments, “..during my thirty years of teaching experience it never happened, I have never attended a training in-school, besides this time, with you..”. T2 described further the type of training he would wish to attend, by saying “I would really like somebody to come to my class and show me how I can do it, like you did, to be next to me during its implementation, and if this cannot happen in my classroom, I will be happy to see it being implemented in a classroom, in general”. Clearly on the same direction is T3, who also preferred an expert on the field to come to his classroom for one or two weeks to show him how to organize and implement peer tutoring (“I always want that.. when you present to me instructional strategies theoretically, I challenged you to come in my classroom and show me in practice how to do what you’ve described to me..”). T6 also opted for in-school training, while T7 opted for university-based seminars which would combine meaningfully theory to practice.

When I asked teachers, who would like to organize and oversee their training, university was on their top choices. They claimed that university personnel fulfil their requirements for explaining and helping them to understand both the theoretical and practical dimensions of innovative instructional strategies, such as peer tutoring. Moreover, T7 indicated the need for teachers’ training on innovative instructional practices for the inclusion of students with SEND by stating “inclusive education is a sensitive subject that we don’t



have knowledge on.. I've graduated in 1993, and since then many things have changed.. we definitely need an update...". Similarly, T5 stated that she also lacks knowledge on special education issues, raising concerns regarding the implementation of inclusion in mainstream schools. All teachers, as can be seen in Table 20, would like to acquire skills necessary to adopt in practice peer tutoring. As T1 stated: "I would prefer teachers who had already implemented peer tutoring in their classrooms to present to us the procedures followed for implementing peer tutoring..".

Offering an in-depth insight to teachers' attitudes towards their training and the skills they would like to acquire through it, I should admit that adequate teacher training and support at the school level is imperative when implementing peer tutoring. I could not say that I found through my observations during the first two sessions of the programme that teachers lacked in their skills to implement peer tutoring. Although they were a bit reluctant at the beginning to perform their new roles. During the second session, they all showed signs of improvement and confidence to get more actively involved to the programme. Consequently, I fully understood and appreciated the need they expressed and arranged a second round of training. As teachers claimed, a one-shot training workshop was proved inadequate for them to feel well-trained to implement peer tutoring in their classrooms. During teachers' training, I was keeping records about the skills they would like to acquire. Most of them concentrated on the practical implications of peer tutoring because they expressed the need to be offered practical and effective instructional strategies for the inclusion of students with SEND in their mainstream classrooms.

Strikingly, all teachers agreed that they need training to organize, implement and evaluate peer tutoring in their classrooms. They all pinpointed the need for ongoing training, especially in issues regarding the education of students with SEND in mainstream settings, because they feel ill-prepared to foster inclusion in practice. As a conclusion, besides the fact

that all teachers are open and, more importantly, they declared their need for training, they also identified the significance of being offered practical suggestions for organising, implementing and evaluating peer tutoring, in their training.

### *5.3.3 Teachers' views from Cycle C of the action research project*

The key theme categories emerged from the analysis of the interviews I conducted with teachers after the six-week implementation of peer tutoring in their classrooms are: a) inclusion issues and practices, b) peer tutoring procedures, c) perceived students' benefits from peer tutoring, d) perceived teachers' benefits from peer tutoring, e) teachers' self-efficacy perceptions and f) teachers' difficulties. The category that emerged was: i) instances that teachers lost control. The results of each theme category are presented in detail next, with the results from observation sheets and diary logs being incorporated on them.

Before presenting students' views towards peer tutoring, I found useful to compare the attitudes teachers expressed after the two-week implementation of the peer tutoring programme and after the six-week implementation. The thematic categories that were similar and therefore let for comparisons are: a) students' benefits, b) teachers' benefits, c) teachers' self-efficacy skills, d) difficulties suggestions for overcoming the difficulties experienced.

Next, I will present and discuss the key theme categories emerged from my analysis of the interviews I conducted with students after the six-week implementation of the peer tutoring programme, which are: a) peer tutoring procedures, b) students' roles, c) evaluating students' roles, d) evaluating programme's effectiveness. The categories that emerged were: i) students' expectations, ii) students' feelings, iii) peer tutoring's aspects that students liked most and least, iv) tutor's experiences. I present the results of each theme category in detail next.

### 5.3.3.1 Inclusion issues and practices.

In this section, I will discuss teachers' attitudes towards the general notion of including students with SEND in mainstream classrooms. Specifically, when teachers completed the six-week implementation and evaluation of the peer tutoring programme, I asked them, as in the interviews conducted at the end of the two-week implementation of the programme, about the inclusion of students with SEND in their classrooms. Table 21 presents teachers' attitudes towards inclusion issues and practices.

Table 21.

#### *Teachers' Attitudes Towards the Inclusion of Students with SEND in Mainstream Classrooms*

Teachers	Inclusion of students with SEND
T1	+
T2	-
T3	-/+
T4	+
T5	+
T6	+
T7	+

Most of the participating teachers were positive towards the inclusion of students with SEND in mainstream classrooms. However, T2 answered that students with SEND cannot be included in mainstream classrooms without considerable changes in the mainstream schools. As far as T3 is concerned, when I asked him about the inclusion of students with SEND, he responded: "hmm.. well.. it depends to the severity of students' special educational needs.. if they are not severe, mm.. maybe.. yes.. they can be included". T4 also mentioned the severity

of students' SEND and what it demands for being effectively met as important prerequisite of students' effective inclusion "yes, inclusion can become practice in mainstream schools.., but with the presence of a co-teacher, otherwise the student attends the class but doesn't take (academically) what he needs, because of his/her difficulties". T5 pinpointed the need for parallel support in fostering inclusion in her classroom, who said: "I definitely think inclusion can be promoted, but it can be more effective if there is a co-teacher, who will help the specific students all the time in the classroom". On the other hand, T7 suggested that for the effective inclusion of students with SEND in mainstream classrooms individualized instruction carried out by the mainstream classroom teacher is needed.

The general positive attitudes participating teachers expressed towards the inclusion of students with SEND in their classrooms is in line with their willingness to participate in the peer tutoring programme, and adopt innovative instructional strategies to make the inclusion of students with SEND more effective. Even T2 who highlighted in his interview the need for significant changes in mainstream schools for inclusion to become effective practice, admitted, later in his interview that the academic and social benefits of peer tutoring on students with SEND were unexpectedly positive. It is worth mentioning that he continued using peer tutoring in his classroom, after the completion of the programme, and for the next two months that I was present at the school. Generally, in today's schools, any classroom and any mainstream teacher may find himself/herself in the position to include students with a variety of SEND who require different instructional arrangements to ensure individualized instruction and effective inclusion. As far as the teachers express positive attitudes and are willing to work towards the effective inclusion of students with SEND in mainstream classrooms, we can say that inclusion has a grounded future in the mainstream schools.

To sum up, most of the teachers agreed that students with SEND can be taught in mainstream classrooms, along with their peers without SEND. As a conclusion, the teachers I

interviewed perceived the inclusion of students with SEND as feasible and effective, when certain conditions are met, such as parallel support from a specialised-on SEND teacher and offer of individualised instruction.

### 5.3.3.2 Peer tutoring procedures.

In this section I will describe how teachers experienced their involvement in the peer tutoring procedures and their evaluative reflections on peer tutoring's effectiveness as an inclusive means. Moreover, I will discuss if teachers are willing to implement peer tutoring in the future in their classrooms. Table 22 summarizes the peer tutoring procedures followed in each class along with teachers' attitudes towards peer tutoring as an inclusive approach and their willingness for future implementation.

Table 22.

#### *Teachers' Attitudes Towards the Peer Tutoring Procedures Followed*

Teachers	Peer tutoring procedures				
	Number of students	Students' type of SEND	Programme's duration	Inclusive practice	Future implementation
T1	20	1 with ADHD; 1 with quadriplegia	8 weeks	yes	yes
T2	21	2 with LD	8 weeks	yes	Yes/no
T3	22	1 with LD	8 weeks	no	no
T4	23	1 with ADHD; 1 with high-functioning autism	8 weeks	yes	yes
T5	21	1 with dyslexia; 1 with LD	8 weeks	yes	yes

T6	20	1 with ADHD and LD; 1 with LD	8 weeks	yes	yes
T7	22	1 with LD	8 weeks	yes	yes

Notes: ADHD: Attention Deficit Hyperactivity Disorder; LD: Learning Disability

After the completion of the six-week implementation of the peer tutoring programme, all teachers, except from one, agreed that peer tutoring can be adopted as an inclusive practice in mainstream classrooms. Specifically, T1 stated that “especially for the students who face difficulties it is.. very good”. Interestingly, and contrary to most of the teachers, T3 expressed concerns regarding peer tutoring as an inclusive approach. He stated: “the specific student has several and serious gaps in mathematics, which cannot be covered through this procedure.. he certainly needs more targeted help from a specialized teacher”. When I asked him, if the results would be different on a another content area, such as on literacy, he stated: “it (peer tutoring programme) would certainly have more possibilities of success.. mathematics is a difficult content area..”. Although T3 acknowledged from our very first meeting that mathematics is a difficult and challenging content area for peer tutoring to be implemented, he did not make any other effort to collaborate and work with me in making peer tutoring effective for the academic needs of his students in mathematics. He was constantly finding excuses not to work for the preparation needed and for the materials. It was surprising to me that at the end of the six-week implementation of the programme he claimed that peer tutoring might be more successful in the content area of literacy and expressed willingness to test this claim in practice.

T2 found being positive towards the idea of peer tutoring as an inclusive practice, but expressed certain concerns regarding the time pressure teachers experience, which prevents them from adopting inclusive and innovative instructional approaches, “it needs time and a so

tight schedule doesn't let us implementing this kind of strategies without help.. but it definitely works great with students with SEND". Almost all teachers were willing to implement peer tutoring systematically in their classrooms as an inclusive instructional approach. T3 was not willing to continue the implementation of peer tutoring in the content area of mathematics. T2 was not sure, at the time of interview, if he can implement peer tutoring further in his classroom. Indicative of teachers' willingness to implement peer tutoring in the future in their classrooms are their words: "I certainly can do it and I will, sure yes" (T1); "sure yes, and I think it will be much more beneficial for all the students, if I continue its implementation for example, an hour every day" (T4); "I will determine a day each week that for specific exercises we will work in this format, or we can even work in this way for a whole day a week.. it is really good and students will benefit more if they continue working in this way..." (T5); "I will use it.. it did help my students with SEND" (T6). Indicative of their true claims is the fact that four out of the seven participating teachers continued using peer tutoring arrangements in their classrooms in literacy even two months after the completion of the programme.

Most of the teachers followed the peer tutoring procedures with high integrity and fidelity. They were consistent in following peer tutoring's procedure and most of them did not lose their interest during the programme. T3 expressed concerns concerning peer tutoring's use as an inclusive approach and was not willing to continue its implementation in the content area of mathematics. However, he was positive in trying peer tutoring in the content area of literacy to examine approach's effectiveness. It is crucial to mention that peer tutoring in his class did not work as anticipated. He was the only teacher who decided to implement it in the content area of mathematics. Most of the records from my diary, concerning T3's classroom, are indicative of my worrying attitude about teachers' unwillingness to implement peer tutoring as was decided during our discussions, "from the

first moment that we have met he expressed to me his deep concerns regarding the effectiveness of peer tutoring in the content area of mathematics. He accepted the invitation to get involved in the programme, but he was constantly expressing his doubts. He paired the students with my help but was not involved in any other preparations necessary for the programme. He has the result of the programme predefined". Furthermore, while students, in general, seemed to enjoy their participation, the teacher claimed that students were not interested in the programme. However, student's attitudes towards the programme, described later in the thesis, seem to contradict teacher's judgments, with the student contented enjoying her involvement in the programme.

While during his interview after the completion of the programme T2 was hesitant in continuing implementing peer tutoring, he later admitted to have kept the pairs of students as they were and continued implementing peer tutoring not only in literacy, but in all the subjects he taught. Indeed, the two months that I was keep visiting the school, T6 involved all his students in peer tutoring configurations. Another teacher that continued the implementation of peer tutoring was T6, besides her hesitant attitude towards peer tutoring, at the end of the two-week implementation.

As a conclusion, most of the teachers confirmed that peer tutoring can foster the inclusion of students with SEND in mainstream, primary classrooms. Similarly, most of the teachers showed as being willing to implement peer tutoring systematically in their classrooms as an inclusive instructional approach in the future.

#### *5.3.3.3 Perceived students' benefits from peer tutoring.*

In this section, I will discuss how teachers perceived the effectiveness of peer tutoring regarding the academic and social benefits of both students with SEND and their students



without SEND. Table 23 presents the views teachers hold after the completion of the six-week implementation of the peer tutoring programme.

Table 23.

*Teachers' Attitudes on Students' Benefits After the Six-week Implementation of Peer Tutoring*

Teachers	Perceived students' benefits			
	Students without SEND		Students with SEND	
	Academic benefits	Social benefits	Academic benefits	Social benefits
T1	no	no	yes	yes
T2	no	yes	yes	yes
T3	not sure	no	no	same
T4	yes	yes	yes	yes
T5	yes	yes	yes	yes
T6	yes	yes	yes	yes
T7	yes	yes	yes	yes

Teachers expressed several concerns when I asked them about the academic benefits of students without SEND. For example, T1 claimed that students without SEND showed no difference in both their academic and social performance resulting from their involvement in peer tutoring activities. She also expressed concerns for their academic performance, stating “if this (peer tutoring) continued for a long time, I’m pretty sure that they (students without SEND) would be disadvantaged in content knowledge”. She additionally explained that these students were in a high level in both domains, so they couldn’t improve further, “Maria and John were socially very strong compared to the other peers.. so.. they didn’t have to gain anything”. Along the same lines, while T2 recognized the improvement for students with

SEND in both their academic and social skills, he expressed concerns regarding the academic benefits of students without SEND, “they were really strong academically, that was the reason they were chosen to be the pairs of students with SEND, so they didn’t gain academically anything”. On the other hand, T3 who implemented peer tutoring in the content area of mathematics, expressed uncertainty concerning the academic benefits of students without SEND and stated clearly that he showed no difference on their social performance. Besides these teachers, all the others agreed that peer tutoring was beneficial for students without SEND in both their academic and social performance. Specifically, T4 claimed “it (peer tutoring) gave them the opportunity to understand, hmm.. it benefitted them because it made them to feel more responsible and to help their academically vulnerable students..[...] it definitely affected their personality..[...] they were really happy for helping their peers”. T5 also stressed the feeling of offering help to peers, “they (students without SEND) felt excited and pleased for being able to help their peers...”. She further mentioned a specific case where: “besides they (a student with SEND and a peer without SEND) were sitting on the same desk, they were not close at all.. now this situation has changed, he (student without SEND) is much more open in communication to her (student with SEND), they laugh together, and he is still helping her during the lesson”. Indeed, my observation logs depict the difference in the communication pattern between these two students as peer tutoring sessions proceeded. Specifically, during the first three sessions they were both feeling being in an awkward position without knowing how they are expected to behave. From the fourth and until the last session they have improved a lot their communication and collaboration with the student without SEND being extra supportive towards the student with SEND and helping her in all the lessons. Lastly, T7 highlighted the benefits of collaborating, offering help and enhancing their team spirit. She also noted the reduction of selfish and arrogant behaviours performed by students without SEND towards their peers with SEND.

Generally, some teachers expressed concerns regarding the benefits accumulated for students without SEND from their involvement in the peer tutoring programme. This can be attributed to several reasons. Based on my observations from the classrooms where teachers appeared cautious in regard to students' without SEND benefits, it can be concluded that they faced difficulties to appraise the programme's effectiveness for students without SEND because all of their attention was focused to students' with SEND academic and social performance. For instance, T2, based on my diary records, was constantly worried about the academic performance and improvement of students with SEND. We designed the materials based on the academic needs of students with SEND without taking into consideration the further academic improvement of students without SEND.

As far as students with SEND are concerned, most of the teachers agreed that they were benefitted both socially and academically. The only exceptions on this general positive picture, were the concerns expressed by T3. Due to the fact that he evaluated peer tutoring as not being successful in enhancing students' academic and social performance in his class, he stated that students with SEND definitely were not benefitted academically by peer tutoring and showed uncertainty for the social outcomes, "I.. I don't.. don't know.. I can't say..". The rest of the teachers agreed that students with SEND benefitted both academically and socially from their involvement in peer tutoring. T1 highlighted the social outcomes of peer tutoring as it is a domain in which usually students with SEND are weak. She further described the case of Helen, a girl with quadriplegia in her class, "she (Helen) is a little bit excluded from the rest of the girl group, because of her difficulty to move around without her aides. She faces extreme difficulties in communication not only with her peers but also with me. However, I should say that the other girls are trying to communicate with her, but at some point they give up their effort.. peer tutoring gave Maria the opportunity to meet Helen and spend more time together during break times..". As was recorded in my observation logs,

during the first sessions of the programme, and especially during the break times, Helen was not spending much time with her peers. She was predominantly sitting alone at a bench. The picture changed to a great extent at the two subsequent sessions. Helen was still sitting at the same bench but most of her female peers were next to her, chatting and playing together.

T4 offered a different insight into students' with SEND benefits, highlighting "they (students with SEND) felt more comfortable to participate in classroom activities, they were helped to.. [...] they were happy and enjoyed the whole procedure [...] their self-esteem and confidence were boosted [...] they were helped from their peers more than I help them, they came closer with them.. and because they are at the same age, they did not feel embarrassed, they were spontaneous.. in asking questions, they were helped, they did not feel bad when their peers were correcting them, as they feel when I do that.". T5 pinpointed the benefits accrued by students with SEND outside of the classroom settings, who evidenced more positive behaviours towards students with SEND during break times. As far as the in-classroom student behaviours are concerned they were more positive, too. For example, "receiving help from a peer gave her (Sophie) courage to participate and express her opinion in front of the whole class, she was sure that her answer was right and did not feel afraid to express it". I also noticed this change in the behaviour of students with SEND in both the classrooms of T4 and T5 when participating in classroom activities during the peer tutoring programme. I have recorded an increase in the time they were engaged in the programme during the last three sessions. Last but not least, T7 underlined the significance of cooperation among peers by stating "cooperation acts as motivation for the.. development of skills [...] they (students with SEND) try to imitate the more capable peer and they make improvement.. [...]this teamwork method enhances the team belonging and the socialis.. the social development of students with SEND [...] they are more calm, exhibiting lesser disruptive behaviours.. they feel obliged to be more collaborative, more calm".

The most enthusiastic from the teachers, when asked about students with SEND benefits, was T6. She faced significant difficulties in including in her class a boy with ADHD, Chris. He performed a disruptive behaviour and was constantly rejecting any effort to participate in classroom activities. Several self-harming and violent incidents have occurred, making T6 to decide that Chris should be sitting alone on the desk. He was involved in peer tutoring programme but with an obvious hesitation from the teacher. After the completion of the programme, T6 was excited as she finally has found the “key”, as she said, to unlock the heart and the personality of Chris, “in the case of Chris, nobody could expect at the beginning this transformation.. it is like I have a different child in my classroom. All my colleagues and the school’s psychologist have noticed the huge difference on Chris. The fact that he was matched with a girl, who is such a good student and child, helped him a lot both in the lesson and during the break times”. As time implementing peer tutoring progressed, the time that he was engaged on the activities increased. Also, during break times, his active involvement with peers increased too. Teachers have been consistently found, in their interviews in Cycle A and B, to search for ways to reduce the times that students with SEND exhibit disruptive behaviours. As mentioned above by both T7 and T6, peer tutoring improved the behaviour of students with SEND. Specifically, when I examined the records from my observation logs concerning T6’s class, I noticed a significant decrease in students’ outbursts. During the first two sessions, much of the time was spent in calming down the students and handling tantrum incidents. As the sessions proceeded, students’ outbursts decreased, and, finally, during the last two sessions there were no records of any student exhibiting disruptive behaviour.

To sum up, teachers generally considered peer tutoring as beneficial for both students with SEND and their peers without SEND in both the academic and social domains. They contended that peer tutoring benefits mostly students with SEND compared to students

without SEND. Teachers expressed concerns only about the academic benefits of students without SEND.

#### 5.3.3.4 Perceived teachers' benefits from peer tutoring.

In this section I will describe how teachers perceived the effectiveness of peer tutoring in helping them in their teaching. Table 24 presents the views expressed by the seven participating teachers regarding their benefits from the implementation of the peer tutoring programme.

Table 24.

*Teachers' Attitudes Towards Their Benefits After the Six-week Implementation of Peer Tutoring*

Teachers	Perceived teachers' benefits
T1	behaviour management
T2	individualized instruction, behaviour management, content cover
T3	teamworking
T4	individualized instruction, including effectively students with SEND, behaviour management
T5	individualized instruction, content cover, teamworking
T6	individualized instruction, content cover, including students with SEND, behaviour management
T7	behaviour management, teamworking

T1, T2, T3, T6 and T7 contended that involving all the students in peer tutoring arrangements reduced the frequency and the duration of students' disruptive behaviour. As

T2 clearly stated “in the past we have experienced some bullying incidents, especially to students from different ethnic backgrounds and who are below the average academic capability of the classroom. I must admit now that those incidents have clearly reduced and these students are not anymore marginalised..”. Behaviour management proved clearly a challenge for teachers who accommodate in their classrooms students with diverse needs and personalities. T6 admitted that peer tutoring helped her control student’s tantrums and violent outbursts. Interestingly, teachers classified managing students’ disruptive behaviour as a benefit for both their students and for themselves.

The opportunity for individualized instruction is the second most common benefit highlighted by teachers. As T4 claimed the legislation of inclusion of students with SEND in mainstream classrooms proved a quite demanding and challenging task for them, as they could not be sure that they meet effectively the needs of students with SEND, “peer tutoring gave me the opportunity to develop activities specifically for the weak students, in order to be helped to pay attention to the lesson and eliminate disruptive behaviours”. Similarly, T5 stated that peer tutoring helped her in offering constant support to a girl having a statement of dyslexia in her classroom, “having a student next to her all the time, and especially in the lesson of literacy, saved me time and I could circulate and offer feedback to other students who also need it.[...] it is something I will definitely keep using, having a student offering help to her”. I have also noted down the improvement in both her literacy skills and her levels of self-confidence during the last sessions of the peer tutoring programme. I offer an extract from my diary from the 7<sup>th</sup> session, “I don’t know which exact and precise element of the programme has helped Sophie developing her literacy skills. I may attribute to the constant support and focus of Nick to her. He is helping her in writing the words right, in putting the letters in the right position and finding the answers in the activities. Sophie is happy with the help she receives. [...] today, at the end of the session, she told me that having Nick as her

tutor helped her in writing correctly the words more than her teacher”. Along the same lines, T6 mentioned “it helped so much in individualize my instruction and to include my students with SEND, because it usually takes time, ehm.. I don’t have this time, because in order to focus on one student, you have to neglect the rest of them, something that I don’t choose to do..”.

At a deeper level of analysis, most of the participating teachers enjoyed their involvement in the peer tutoring programme. Even teachers who had several concerns regarding its effectiveness, they all admitted that peer tutoring helped them at various aspects of their teaching. Indeed, my observations from most of the classrooms where peer tutoring took place reinforce this initial conclusion, that peer tutoring assisted them in handling students’ disruptive behaviours. Indicative of this are my observation record from the 7<sup>th</sup> session of peer tutoring in T2’s classroom, “while during the first two sessions of peer tutoring, several students, both students without and with SEND, were expressing disruptive behaviours, like constantly complaining, arguing with their peers, making excessive noise and showing unwillingness to collaborate. As sessions proceeded and, especially today, the classroom environment does not remind me of anything I experienced in this classroom during the first two sessions. All the students have understood fully the peer tutoring procedures, the process flows smoothly, and the only noise you hear at the classroom is the whisper of students collaborating to complete their activities. Nobody is complaining and they are all working without arguments.”. I expressed a similar positive surprise during the last sessions of peer tutoring in other classrooms, too, like T4’s and T6’s.

When most of the participating teachers claimed as an important benefit for them emanating from their involvement in the peer tutoring programme the effective inclusion of students with SEND in their classes, I felt that they told me what I was expected to listen. I had to spend several hours to read carefully my field notes, my observation records and my



diary, to justify the conclusion that “peer tutoring is effective in including student with SEND in mainstream classrooms”. I will offer two extracts from the field notes I took during the 3<sup>rd</sup> and the 6<sup>th</sup> session in T6’s classroom concerning the relationships between students with SEND and their peers without SEND, “Chris, a student with ADHD, is in most of the cases I have noticed during the first three sessions of peer tutoring, excluded by the social groups of his classmates during the break times. He is basically sitting alone, while there are very limited instances that he is included in the games of his classmates. After spending a little time playing, for example hide and seek, with them, he is excluded, because he cannot follow the rules of the game and doesn’t admit that he has lost.” (Session 3); “today, I am really surprised from what I see happening at the first break time. Chris is playing with his classmates and is actively engaged in the game. They are playing, as usual, hide and seek. Chris is in the same team with Ann. Ann is helping him follow the rules. Specifically, when they found him hiding, he couldn’t accept that he lost and he had to find the other children who were hidden, and he started complaining. Ann approached him and tried to explain calmly that he had to do this. He started crying, and then Ann gathered all the children and asked them if they have a problem to be a partner with Chris in the game, and search for them both. All children were surprised from the new role that Ann wanted to add in the game, but they all agreed that it is ok. Ann explained to Chris what will happen and Chris stopped crying, gave a hug to Ann, and started running to find the rest children. Chris was playing with his classmates in every single break time of this day. (Session 6)”. It is crucial to mention at that point that T6 also noticed this change along with the teacher who teaches English. While I cannot be sure for how long this change will still take place, I am happy and satisfied that it happened even once.

As a conclusion, teachers considered peer tutoring beneficial for themselves on various aspects of their teaching. Most of the participating teachers mentioned that peer

tutoring has helped them in managing students' disruptive behaviour. Moreover, they claimed that it fostered in many cases the inclusion of students with SEND in their mainstream classroom and the individualization of instruction.

### 5.3.3.5 Teachers' self-efficacy perceptions.

In this section, I will describe and discuss teachers' self-efficacy perceptions after the six-week completion of the peer tutoring programme. I asked them whether they need further training, what kind of skills they would like to acquire through it, the type of training they are willing to attend and which role that they performed during peer tutoring was the most demanding for them. Table 25 presents teachers' perceptions of their self-efficacy skills after the six-week implementation of the peer tutoring programme.

Table 25.

*Teachers' Perceptions of Their Self-efficacy Skills After the Six-week Implementation of the Peer Tutoring*

Teachers	Self-efficacy skills			
	Need for further training	Skills to acquire	Type of training	Demanding teacher role
T1	yes	innovative inclusive strategies	university- based seminars	pairing students, evaluating
T2	no	-	-	none
T3	no	-	-	none
T4	yes	inclusive strategies	in-service	pairing students, evaluating

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		innovative		monitoring the
T5	yes	inclusive strategies, team bonding	seminars, in- service	procedure, supporting students
T6	yes	inclusive strategies	in-service	evaluating
T7	yes	inclusive strategies	university- based seminars	evaluating

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Most of the teachers agreed that they would like to attend further training in order to acquire certain skills for the inclusion of students with SEND in their classrooms. Only the two male teachers, T2 and T3, were negative towards attending further training. T2 stated that his time is limited both in-school and out-school activities along with his personal responsibilities. Similarly, T3 declined any offer for further training by stating that he is too old now to be trained on innovative inclusive practices. On the other hand, the rest of the teachers seemed willing to participate in additional training sessions, in order to “broaden our knowledge on supporting students with SEND in our classrooms”, as T1 argued.

As far as the skills they would like to acquire through training are concerned, they would like to learn more about innovative inclusive instructional strategies. As T5 stated, “now that we have learned some things on peer tutoring, it would be interesting to learn more on peer tutoring, discussing about our experience, and why not, learn other strategies, like peer tutoring.. I think it will be really helpful”. All the teachers that responded positively on the idea of further training, would like to get further acquainted with innovative inclusive approaches, since the inclusion of students with SEND proved the most demanding task in their jobs the last years. T4 supported with her claims the above notion by stating “it (peer

tutoring) finally proved so easy in its implementation and so..oh..so effective in supporting students with SEND in my classroom.. they improved both academically and socially.. I am really keen on learning more inclusive strategies, but in practice, as we did..”. Most of the participating teachers were interested on the practical skills needed to implement inclusive instructional approaches. However, they understood the importance to comprehend and the theoretical background of such approaches. This is the reason that most of them opted for in-service training, which is run by the university. As can be seen in Table 25, there were also teachers who would prefer to attend a training at the university, as they have said “there have been many years since we graduated from university, so I would me more than excited to go back there and learn new stuff..” (T1).

When I asked them about the most demanding role they were called to play during the organization, implementation and evaluation of peer tutoring in their classrooms, most of them concluded that pairing the students, evaluating the procedure and offering support to students were the hardest parts of the process. As stated by T5 “I believe that.. monitoring them working together, all of them.. it was the most difficult part because.. you observe.. ehmm.. behaviours, and sometimes intense behaviours.. and sometimes they argued.. for example, who would be the tutor and the tutee. Yes, these incidents were not easy on handling..”.

Based on my observation records, indeed the pairing of students took extra time from what was expected. Besides the explicit guidelines I gave them during their training, our reflective discussion on this topic after the completion of their training and our private meetings in order to form the students’ pairs, teachers continued to consider it as one of the most demanding tasks they had to do. One possible explanation for this could be that pairing students is one of the most important aspects that can affect significantly the effectiveness of

the peer tutoring programme. Students had to be carefully paired because the tutor should be able to provide correct, targeted and appropriate feedback to the tutee.

To sum up, most of the participating teachers claimed that they would like to attend further training in order to acquire certain skills needed for the effective inclusion of students with SEND in their mainstream classrooms. According to the teachers that I interviewed, the two most demanding roles they performed were pairing students and evaluating the outcomes of the peer tutoring programme.

### 5.3.3.6 Teachers' experienced difficulties.

In this section, I will discuss the difficulties teachers experienced during all the phases of the peer tutoring programme. I asked them also to describe to me possible suggestions for overcoming the difficulties they encountered. All these are presented in Table 26, that follows.

Table 26.

#### *Teachers' Experienced Difficulties and Suggestions for Overcoming Them*

Teachers	Experienced difficulties and suggestions for overcoming them	
	Difficulties	Suggestions for overcoming difficulties
T1	pairing students, content understanding	change pairs, implementing it on already taught material or mathematics
T2	none	-
T3	evaluating	extra time
T4	none	-
T5	pairing students	training
T6	content targets	less pressure to cover content from the

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		Ministry
T7	none	-

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While not all the participating teachers found difficulties during the organization, implementation and evaluation of the peer tutoring programme, there were teachers who encountered certain difficulties. For example, T1 found difficulties in resolving the arguments that occurred in some students' pairs, and suggested that changing pairs, when students do not get along well with each other could possibly solve these kinds of issues. She also expressed some concerns about ensuring the comprehension of the new content taught exclusively through peer tutoring, "well.. the activities were on content already taught and I must say it did work well, but what will happen when new content must be delivered?". However, she further added "but, perhaps another student may find better ways to transmit the new content knowledge than me.. because they think the same way...". She later predicted that peer tutoring would be extremely suitable to be implemented during the practice time in mathematics, "it will be really good in mathematics, because we usually say, say, say and then we start practicing... and at this point hm.. it can help, let's say to see the beginning of an exercise or to ask for help from his peer and.. ehm.. make a step..". It should be mentioned that T1 had to resolve the constant arguments of one pair of students. Based on my observations she devoted extra time to handle the difficulties occurring during the collaboration of this pair. At one point (session 6, according to my diary record, she told me: "I must have done something wrong in the pairing of the students. I thought I have made the most suitable choice but it turns out that things didn't work as I have expected. I discussed with her the situation and we tried to fix the problem occurred by changing the pair and giving attention to both the new pairs to see if things work well. In case they don't, we will move to new changes". The only difficulty T3 experienced concerned the correction of the

handouts used during peer tutoring. He said that he needed extra time for this job, while his time schedule is already too strict. On the other hand, T5 found some difficulty on pairing students but with my help, she overcame it. She further suggested that targeted training on the practical issues of peer tutoring and ongoing support during its implementation could resolve these kinds of issues, as it did in her case. Lastly, T7 discussed the pressure that teachers, in general, feel to cover the content based on the commands of the Greek Ministry of Education. She suggested that more flexibility on content cover would be on the right direction for teachers to adopt innovative instructional strategies in their classrooms and to meet effectively the academic and social need of their diverse student population. The general feeling of stress was pervasive among participating teachers even from the first meetings with them. They have expressed feeling pressure to cover the content and pressure from the strict timetables, while at the same time being anxious regarding the time that is needed for the peer tutoring programme to be designed, organised, implemented and evaluated.

Teachers claimed that pairing of students was one of the most demanding tasks for them and this was also reported as a significant consider when I asked them about their self-efficacy skills. Pairing of students was a task that I purposefully spent much of the time during the organization of the programme. Matching the academic abilities of students with their personalities and establishing the degree of heterogeneity within the pair, which can either be fixed-role or reciprocal affect the efficacy of the whole programme. So, we spent extra time to secure that we have formed the most suitable and appropriate pairs of students. One possible explanation that I can suggest for teachers finding difficult the pairing of students is that it was one of the tasks that they asked for my intense support. So, perhaps they think that it would be much more difficult, if they had to shape students' pairs without my support. As far as the content cover and the securing of the content understanding are concerned, I should mention that the development of inclusive practices is not merely about

adopting specific “recipes”. It involves and needs social learning processes that take place in a given workplace, in this case in schools. Perhaps, in some cases, the content understanding could not be secured for all the participating students. However, the constant involvement of teachers in peer tutoring procedures will help them to recognize any deficiency of the programme and act to resolve it at its early stages. As a conclusion, based on my field notes and observation records, teachers, in general, did not experience significant difficulties that hindered the implementation of the programme in their classrooms.

To sum up, pairing students, content cover and content understanding are some of the difficulties that teachers encountered during the organization, implementation and evaluation of the peer tutoring programme. Not all teachers were willing to offer suggestions for overcoming the difficulties experienced. However, among the mentioned suggestions were changing students’ pairs, training and offer of extra time.

#### *5.3.3.7 Incidents that teachers lost control.*

In this section, I will describe some incidents where teachers lost control during the implementation of the peer tutoring programme and asked for my help to handle and resolve the issues that occurred.

One such incident happened at T1’s classroom. One of the pairs showed signs of incompatibility between them from the second session of the peer tutoring programme. Specifically, John, who was paired to the student with ADHD, Gregor, grumbled constantly because he could not handle the tantrums of his peer, and his unwillingness to participate in the procedure. As T1 described “he (student without SEND) didn’t want to keep working with him (student with ADHD), because we know that sometimes he cannot collaborate because of his condition... and, besides that, perhaps he couldn’t handle him, and perhaps another peer could do”. In agreement with the teacher I tried to resolve the conflict between



the two students and I was present at each session, in order to keep them calm and concentrated on their activities. However, there were still times that the situation got worse, so we decided matching differently these two students. After careful consideration and discussion with the teacher about the most suitable peer for Gregor, we decided that a really calm in classroom and strong academically girl would be the next and more suitable partner of him. Surprisingly, it proved the right choice, as they got along really well and Gregor expressing tantrums with the frequency he did, when was paired with John.

T5 faced difficulty during the implementation of peer tutoring in handling students who didn't like their pairs. Since peer tutoring was implemented in class-wide basis, T5 had to manage students' arguments and complaints who did not want to collaborate with specific students. Specifically, one day two girls argued intensively for reasons that were irrelevant to the peer tutoring project. However, this really affected their collaboration during the programme and an angry outburst from both the girls took place at the fourth session, making the whole class upset and as a result, affecting the collaboration of all the students. The teacher tried to negotiate with both the girls and to calm them down by discussing the problem. However, she could not be able to manage the situation and sought for my help. After a 10-minute discussion with both the girls in private, they decided to continue their task and put their argument aside until the time-break when they would discuss in more detail the reasons behind their argument.

I anticipated many things to go wrong during the organization, implementation and evaluation of the peer tutoring programme. However, running the programme was not as difficult as I have thought. I was obliged by various circumstances to alter a lot of things in the programme, especially the time it was implemented and adopt my time schedule to that one of the participants. However, I did not face significant difficulties and challenges in my collaboration with both the participating teachers and students. I hope I was a supporter for

the teachers and to have helped them significantly and practically during all the stages of the peer tutoring programme and not have put on them an additional weight on them with the implementation of the programme. I think that we kept the quality of our communication and collaboration in a high level and at the end, we all expressed our willingness to collaborate again in the future, examining more innovative inclusive instructional strategies in practice.

#### *5.3.4 Comparisons of teachers' views after the two-week and six-week implementation of peer tutoring*

In this section I will compare teachers' attitudes after the two-week implementation of the peer tutoring programme with the ones expressed after the six-week implementation in their classrooms. The thematic categories that were similar in the two time periods of implementing peer tutoring, and therefore let for making comparisons are: a) students' benefits, b) teachers' benefits, c) teachers' self-efficacy perceptions and d) teachers' difficulties.

##### *5.3.4.1 Students' benefits.*

Teachers after the implementation of peer tutoring in their classrooms in both time periods believed that the most benefitted from this programme were students with SEND. While teachers interviewed after the completion of the two-week implementation expressed several concerns regarding the academic benefits of students without SEND, after the six-week implementation three of them agreed that there were academic benefits for the participating students without SEND. However, they clearly stated that these benefits were not in such a great extent as were the academic benefits of students with SEND. As far as students' without SEND social benefits are concerned, the picture is slightly different from the one concerning their academic benefits. In other words, teachers after the two-week

implementation of the programme were more enthusiastic for the social gains of students without SEND than they were found to be after the six-week implementation of the programme. Specifically, two teachers who responded positively regarding the students' without SEND social gains after the two-week implementation, stated after the six-week completion that the programme didn't developed the social gains of these students. On the other hand, one teacher who after the two-week implementation was not sure, declared positive attitudes for students' without SEND social gains after the six-week completion of the project.

Teachers considered students with SEND as the most benefitted from the programme in both the time periods. While two teachers expressed concerns regarding their academic benefits after the two-week implementation, only one teacher remained negative after the completion of the programme. The specific teacher is the one who chose to apply peer tutoring on the content area of maths. As far as students' with SEND social gains are concerned, teachers found to be more positive after the completion of the programme than after the two-week implementation of the peer tutoring. While after the two first weeks, two teachers expressed concerns, after the completion of the programme, both agreed that peer tutoring contributed to the development of students' with SEND social skills. However, one teacher that expected further improvement on students' with SEND social skills due to their extended involvement on the programme, stated that finally their social skills still remained at the same level, as at the end of the two weeks.

My interpretation of the comparisons made between teachers' attitudes expressed after the two-week period and the six-week period is that the longer teachers are involved in peer tutoring procedures the better they appraise the effectiveness of the programme on both the social and academic functioning of the participating students. The main intention when asking teachers to assess the effect of the peer tutoring programme was, besides

understanding if they consider it as effective or not, to foster the development of re-appraisal and re-thinking the use of the existing teaching practices and focusing on the potential of using different instructional strategies to move inclusive practice forward.

#### *5.3.4.2 Teachers' benefits.*

Teachers attitudes towards the benefits for themselves emanating from their involvement in the peer tutoring programme did not differ a lot between the two periods of the programme. While most of the participating teachers after the two-week implementation of peer tutoring claimed that peer tutoring helped them in supporting students with SEND generally, after the completion of the programme they were much more specific regarding the benefits emanating from the programme. Specifically, they argued that peer tutoring offered them significant help on handling students' disruptive behaviours, performed more frequently by students with SEND and less often by students without SEND.

The second most mentioned perceived benefit by teachers after the two-week implementation was the opportunity to cover greater content material. Indeed, teachers agreed that peer tutoring helped them on content cover and especially on individualise the instruction offered to students with SEND. Teachers expressed as key concerns the individualized instruction and the meet of the academic needs of students with SEND in mainstream classrooms. As I found from the analysis of teachers' interviews after the completion of the peer tutoring programme, the programme indeed offered to them the opportunity for individualized instruction and, generally, assisted teachers in including more effectively students with SEND in their mainstream classrooms. Most of the teachers highlighted the access to the mainstream curriculum given to students with SEND through their involvement on the peer tutoring arrangements as an important benefit emanating from the programme.

Teachers valued a number of common elements that were believed to be beneficial for them from their involvement in the peer tutoring programme, such as supporting students with SEND, offer individualised instruction and handle students' disruptive behaviours. As can be easily concluded most of the benefits teachers mentioned were related to the inclusion of students with SEND in mainstream classrooms. Many years after the passing of the inclusive legislation in Greece, teachers still find it challenging to include effectively students with SEND in their mainstream classrooms and seek for practices that will help them move towards this direction. However, inclusive education should not be seen as a special education system located inside the mainstream schools, but rather a vital and significant dimension of the mainstream school.

#### *5.3.4.3 Teachers' self-efficacy perceptions.*

When I asked teachers about their self-efficacy skills for implementing peer tutoring in their classrooms, both after the two-week and the six-week implementation of the peer tutoring programme, they stressed the need for receiving training specialised on practical and innovative instructional strategies for including students with SEND effectively in their classrooms. After the two-week implementation of peer tutoring teachers expressed their interest on learning more about the practical aspects of peer tutoring and, specifically, how to develop their skills on organizing, implementing, monitoring and evaluating it in practice. Only two teachers showed interest on the theoretical background of peer tutoring. When teachers implemented peer tutoring in their classrooms for six weeks, I asked them if they would like to receive further training. Most of them responded positively and were really interested in learning how to perform more and alternative, innovative, inclusive strategies in their mainstream classrooms. As after the two-week implementation, teachers were still interested on the practical dimension of these strategies and not to their theoretical dimension

at the end of the programme. In other words, they would like to see the proposed instructional strategies been implemented in practice, before they adopt them in their classrooms.

Teachers expressed their need for on-going professional development on instructional arrangements for the effective inclusion of students with SEND in their mainstream classrooms. Teachers' desire for additional training is closely linked to the demanding role they are called to play in inclusive educational systems. This shift in their roles requires moving away from traditional teacher-centred instruction, where teachers lecture and students are expected to listen passively and quietly, to collaborative instructional strategies, where students are responsible for their own and their peers' learning. Additionally, they should use strategies that make curriculum accessible, meaningful and engaging to all students' diverse academic needs.

#### *5.3.4.4 Teachers' difficulties and challenges.*

Teachers both after the two-week and six-week implementation of the peer tutoring programme answered questions regarding their experienced difficulties and challenges, but in both cases were reluctant on offering suggestions for overcoming these difficulties and challenges. However, teachers acknowledged that they did not actually face significant difficulties when they were implementing peer tutoring. Four teachers mentioned pairing the students as a difficulty during the two-week implementation of the programme and two teachers considered it as a challenge, after the completion of the programme. While at the end of the two-week implementation, teachers were concerned of the time needed to implement such an instructional approach and their strict time schedules, none of the teacher made any reference to the time demands of this approach after the completion of the programme. On the other hand, teachers stated that in some cases, it did save enough of their teaching time.

While at the end of the two-week implementation, teachers offered as the main solution to the experienced difficulties, training, after programme's completion, they made more targeted and specific suggestions to overpass the challenges they have faced. Specifically, they contended that changing pairs, when students do not get along well, could be a viable solution. Moreover, implementing it on content already taught could secure content's understanding. Generally, teachers were not faced with significant difficulties during the organization, implementation and evaluation of peer tutoring, as they concluded in their interviews.

Matching students to pairs and especially assign the tutor role to a child demands careful consideration. It seems advisable to assess student's tutoring skills and mastery of the content before giving the role of tutor. Furthermore, teachers should ensure pairing compatibility at the personal level prior to the beginning of the programme. Following this, teachers can be secured that tutors will implement their role efficiently and effectively. Pairing of students is a critical component of the peer tutoring programme which affects significantly the effectiveness of the programme. So, I can understand why teachers considered it as the most challenging task. Teachers claimed that training and on-going professional development could assist them in overcoming the difficulties and challenges experienced. This can be explained by the fact that teachers seek to find new instructional strategies to secure that they remain responsive to the academic and social needs of all students in their classrooms.

### *5.3.5 Students' views from Cycle C of the action research project*

In this section I will describe and discuss the key theme categories that were predefined and emerged from my analysis of the interviews I conducted with students after the completion of the implementation of peer tutoring. They are: a) peer tutoring procedures,

b) students' roles, c) evaluating students' roles, d) evaluating programme's effectiveness. The categories that emerged were: i) students' expectations, ii) students' feelings, iii) peer tutoring's aspects that students liked most and least, iv) tutor's perceptions. I present the results of each theme category in detail next.

#### 5.3.5.1 Students' attitudes towards peer tutoring.

In this section, I will present students' attitudes towards the peer tutoring programme. Specifically, I asked them to assess their involvement in the peer tutoring programme as positive or negative and explain their choice, and to guess the purpose behind the implementation of the programme in their classrooms. Table 27 presents students' attitudes towards the peer tutoring programme.

Table 27.

*Students' Attitudes Towards Peer Tutoring*

Students	Peer tutoring	
	Evaluation of the experience of peer tutoring	Purpose of peer tutoring
Chris	+	help me writing
Helen	+	learn to collaborate and helping each other
Sophie	+	learn to collaborate
Athina	+	learn each other's personality
Adele	+	learn to collaborate and learn each other's personality
Jim	+	learn each other's personality and become better students
John	+	learn to collaborate



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Ann	+	help the weak student
Chara	+	learn to collaborate
George	+	learn to collaborate
Maria	+	help each other
Margarita	+	learn to collaborate
Gregor	+	learn to collaborate
Eirini	+	learn to collaborate
Nick	+	learn to collaborate
Vasilis	+	be more focused
Aris	+	learn if students can teach other students
Stella	+	learn to collaborate
Liza	+	help each other

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All students participated in the peer tutoring programme, were found to have enjoyed their involvement into it. As it can be seen in Table 27, both students with SEND and their peers without SEND expressed positive feelings regarding their participation on the peer tutoring programme. Indicative are the words of some of the participating students:

“I really really liked it, we had great time” (Chris)

“I liked how we cooperated with each other, it did work well” (Sophie)

“it was really interesting and very different from what we usually do, I surely liked it”  
(Aris)

According to my observation records, most of the participating students actually enjoyed their involvement in the peer tutoring programme. I have recorded limited and specific pair-centered incidents of students who did not like their involvement in the programme.

When I asked students to describe the purpose of peer tutoring programme, most of them argued that the main reason behind this programme was for them to learn to collaborate with their peers. Students stated as aims of the peer tutoring programme to “learn to offer help to each other”, “learn each other’s personality”, “become better students”, and “learn if students can teach other students”. However, students mentioned more widely the notion of collaboration as the main purpose of this programme. Interestingly, one student with SEND, Chris, who participated in a fixed-role configuration of peer tutoring, when I asked him about the purpose of the programme, responded “to help me writing”. On the other hand, a student without SEND, Athina, who participated in a reciprocal peer tutoring format, offered a different explanation for the purpose of the programme, “you wanted us to see the good sides of the others, because we may have misunderstood the personality of some of our classmates”. Along the same lines, Adele, a peer without SEND, described peer tutoring as an opportunity to learn better the peer she is sharing the same desk with, and noted the possibility of becoming friends through their involvement in peer tutoring. Jim, a student without SEND, mentioned the academic benefits as the purpose of the programme, “to learn better each other and become better students”. The students without SEND, who participated in fixed-role formats of peer tutoring, and therefore took only the role of the tutor, claimed that the main purpose of the programme was to help their peers, who are weak in the academic subjects, such as Ann who stated “because he (Chris) was weak in the literacy, but he wanted to learn, I was helping him”. Last but not least, the comment made by Aris, a student with SEND, described how he perceived the purpose of the peer tutoring procedure, “to see if students who have learned more can teach other students who know less”.

The general excitement and enthusiasm expressed by all students were evident to me during my observations. Even though there were some incidents of students arguing with each other and facing difficulties during their collaboration with their peers, these incidents

were not enough to change students' overall positive feelings and evaluate their experience as an interesting one. At a deeper level of analysis, I would attribute expressed students' attitudes to their perceptions of the value of peer interactions, their previous experiences in working with groups and in teacher's explicitness when explaining the purpose of the programme. When I asked students about the purpose of the peer tutoring programme, most of them could not explain to me precisely the aim of the programme, and they were hesitant to discuss further with me about this.

To sum up, students were generally favourable regarding their involvement in the peer tutoring programme based on the follow-up interviews. Most of them expressed the desire to continue the programme in the future. Most of them claimed that the main purpose of their involvement in the peer tutoring programme was to develop their collaborative skills.

#### *5.3.5.2 Students' perceptions of their roles in peer tutoring.*

In this section I will describe the perceptions of students regarding the roles they and their peers took during the peer tutoring programme. As can be seen in Table 28, next to the name of each student is the type of peer tutoring configuration they participated in. Next, I asked students if they had the same role with their peers. Later, I asked participating students to describe to me how they perceived their experience of getting involved in the peer tutoring programme and how they collaborated with their peers.

Table 28.

#### *Students' Perceptions of Their Roles in Peer Tutoring*

Students	Students' roles		
	Type of peer	Same role	Experience

tutoring

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Chris	fixed-role	yes	collaborating, helping me
Helen	reciprocal	yes	collaborating, helping each other
Sophie	fixed-role	no	solving the exercises, checking them
Athina	reciprocal	no	solving the exercises, checking them
Adele	fixed-role	no	asking him for the answer, explaining, writing
Jim	reciprocal	yes	explaining, helping him, trying to help me
John	reciprocal	yes	arguments, trying to explain to him
Ann	fixed-role	no	working together, checking, explaining to him
Chara	fixed-role	no	explaining to him
George	reciprocal	yes	arguments, checking, trying to explain to me
Maria	reciprocal	yes	helping each other
Margarita	reciprocal	yes	working together, correcting each other
Gregor	reciprocal	yes	arguments, working together
Eirini	reciprocal	yes	helping him, working, checking
Nick	fixed-role	no	working together, checking, helping her
Bill	fixed-role	no	explaining to me
Aris	fixed-role	no	working together, checking, discussing
Stella	reciprocal	yes	arguments, working together
Liza	fixed-role	no	explaining to him, working together

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When I asked students if they had the same role with their peer, I expected students involved in fixed-role formats to answer negatively, that they did not perform the same role with their peer, and students involved in reciprocal formats to answer positively, that they did perform the same role with their peer. Most of the students answered correctly according to

the format of peer tutoring they participated in. However, two students, Chris and Athina perceived their roles differently from the ones they actually had. Chris, a student with ADHD, perceived as having the same role with his peer, Ann, even though he had the role of tutee and Ann the role of tutor and participated in fixed-role peer tutoring. This can be attributed to his constant desire to be the leader, and especially, during the play in break times, something that has costed him socially by being rejected from his peer group. However, at this point it is crucial to mention that Ann has really helped him to become part of the peer group by helping him understand the rules of the games, and restrain his constant desire to be the leader. As far as Athina is concerned, she argued that it could not be possible to have the same role as Margarita, because she is more academically capable than her. However, later in the interview she claimed “we were working together not thinking of our roles, we were the same for the good of the team”.

When I asked students to describe their experience of getting involved in peer tutoring activities and how they collaborated with their peers, interesting perceptions evolved. Most of the participating students mentioned in their comments that they “collaborated”, they “helped or were helped” and that they “explained or received explanations”. According to the role they took, students described differently their collaboration with their peers. Specifically, students who only took the role of tutees described differently from their peers who only took the role of tutor their experience, like Sophie who said “because Nick is stronger than me in the subjects, I know that we didn’t have the same role.. [...] I was focused on him when he was explaining to me the activities and I tried to give the right answers.[...] if I was wrong, he would give me more time to think and give the right answer.”. Similarly, Bill, who only served as tutee described the peer tutoring experience like “I was writing and she was explaining to me the activity and what I have to do, she was helping me in every item”. Bill and Chara were one of the pairs that worked exceptionally well, based on my diary records,

with both of them being concentrated and having enjoyed the process, as was also noted in their teacher's interview and in my observation records, from which I offer an extract "Chara is an excellent tutor. She is really supportive towards Bill and helping him to understand and fill in the activities. Bill accepts the tutoring from Chara and is focused on his activities. He asks his enquiries to Chara and she always shows great willingness to answer. (Session2); "Bill shows a bit discomfort with Chara being solely focused on him. He complains that he has no time to rest from the time Chara was assigned as his tutor and he wants to stop working. Chara takes her role seriously and responds to him that you can take three minutes to relax, but then we will work to fill in the activities. Bill accepts Chara's offer. [...] Bill is working with Chara without complaining anymore." (Session3); "Bill and Chara worked collaboratively and focused during all the session without any complaints or arguments." (Session 4).

Students without SEND who only took the role of tutors described the peer tutoring procedure, as mentioned earlier, quite differently from their peers who served only as tutees. They usually showed that they were the ones who led the whole procedure and had the dominant role, as can be seen from the words of Adele, who said "I usually knew the answers but I didn't tell them to my peer, before I heard from him the right answer. When he didn't know the answer, I was asking him several questions so he could find the right answer by himself.[...] we were working slowly together". Another student who served only the role of tutor described the peer tutoring process as "I was telling him to first solve the activities by himself, while I was also solving them, and then we were checking them together, and if he had something wrong, I would explain to him.. we weren't working fast, but at least he was understanding.. [...] I really liked being the tutor of him.". Along the same lines, Chara argued "it was great.. when he didn't understand something, I explained it to him and he understood it. He started working at home after peer tutoring and making revisions. [...] I found it easy to

be the tutor, because I understand things quicker than Bill, and he was a really good tutee. It was really nice”. Similarly, Nick described peer tutoring procedures with him being in the general charge of controlling the whole process, “it was great, we were doing everything together, when we finished an activity, we checked it and then proceeded on the next one [...] yeah, I was helping her, Sophie, as much as I could, for her to understand the activity and give me the right answer [...] when she couldn’t find the right one, I gave her more time and I asked her questions to lead her to the right answer”. Likewise, Lisa said “I was showing him how to do it [...] I was first asking him if he knows the answer, and if he didn’t, I would explain it to him and then we were solving the exercise together, if he didn’t know..”. As a conclusion and based on the analysis of my observation records, students without SEND were found to enjoy having the leading role in the learning process and expressed satisfaction when helped their peers learning the content practiced.

Both students without and with SEND who were involved in reciprocal formats of peer tutoring described the sharing of knowledge between them. As Jim stated “it was really nice because I had the opportunity to know him better, because I haven’t sat on the same desk with him before..[...] I was giving advice to my peer to solve the activity without making mistakes... I was trying to help him as much I could [...] he was also trying to help me and even he sometimes couldn’t make it, he tried... he showed great willingness to learn”. However, there were students who opted being tutors than tutees, as George who said “I really liked being the tutor, I liked it more than being a tutee”, who further described that was better in the role of tutor than his peer, “two to three times she tried to explain something to me, but it was really hard for her.. she was trying though, but didn’t succeed.. [...] she couldn’t help me”.

Students with SEND who took the role of tutor, gave special credits during their interviews to the sessions they were helping their peers. Specifically, Helen stated “I really

liked the moments that I could also help Maria”, and then she further continued “she was helping me and I was helping her”. Along the same lines, when I asked Margarita to describe peer tutoring procedures, she mainly described the cases she was on the role of tutor, despite the fact that she was involved in reciprocal peer tutoring, “I was correcting her mistakes, I was telling her where to put commas”. On the other hand, students without SEND who participated in reciprocal formats of peer tutoring also acknowledged the significance of the moments that their peers with SEND served as tutors, like Maria who confirmed the help she received from her peer, “I helped her and she helped me.. in some cases she really helped me, something that I couldn’t expect to happen.. and I saw her being happy for helping me”. Similarly, Eirini stated that when her peer served as tutor their collaboration was completely different from the sessions when he was the tutee, “when he was tutor he was much better, he was careful not saying nonsenses, he was correcting my mistakes, a totally different person”. This is a completely different picture from the one she described when her peer was the tutee, “it wasn’t something wow, because he is a student who if you don’t make him a bad remark about his behaviour, he won’t change it, so it was difficult for me to keep him focused, when I was the tutor”. She further continued “I was helping him understand the activity and then we were working on it and at the end we were checking our answers, but this was the moment when he got really bored and started making noise”.

However, there were incidents where the two peers faced difficulties in their collaboration due to various reasons, such as Athina who claimed “it was really hard sometimes, because we didn’t agree to write an answer.. I didn’t like when we were arguing, but because we are both too stubborn, we didn’t change our minds easily [...] later, we found the way to collaborate without arguing.. we explained and discussed each activity, we were working separately on it, and then we checked and discussed on the ones that were different..”. However, it is crucial to mention at that point that Athina’s peer, Margarita, did



not mention any arguments occurring between them. On the contrary, she expressed her positive feelings and how close friends she is with Athina. Another student who argued with his peer was John who described the difficult situations he faced when paired with Gregor, a student diagnosed with ADHD. As was also recorded in my observation sheets and on my diary, there were several times when Gregor was difficult to be handled by his peer. He stated “sometimes it wasn’t good at all, because many times he was pinching me with his pencil and he was writing whatever came to his head..[..] I was trying to explain to him not to do such things as pinching me and start writing, but he didn’t understand and continued do his things.. I was constantly trying to make him do things different from the ones he did..”. John’s peer, Gregor, also described his collaboration with him as difficult and with several moments of arguing by saying “awful, we were constantly arguing and saying different things [..] John was writing down his own stuff.. and then I was writing mine”. However, he stated that sometimes they were collaborating but these times were lesser than those they were arguing. George, also described the times that he argued with his peer, Stella, especially during the first times that they got involved in the peer tutoring programme. He stated “we had several arguments with Stella, especially at the beginning. Sometimes she was writing other things from what we decided to write”. However, Stella perceived quite differently the peer tutoring experience, as she did not make any reference to their arguments. On the contrary she said only positive things about George, “I was answering to every question he asked me [...] he was really helpful, he was paying attention to me, and gave me time to solve the activities...we were working together [..] he was helping me find the answer by making me explain the activity and be sure that I comprehended it”.

I decided to investigate students’ perceptions regarding their role and their experience from their involvement in the peer tutoring programme, because understanding the responsibilities of their roles is an influential factor for their engagement in the peer tutoring.

Based on the answers students gave me to my questions, it was evident for me that most of them critically reflected on their and their peers' roles, which means that they understood both their roles and the responsibilities that derive from them. It is crucial to mention at this point that students did not experience any difficulties in following the procedures and the roles of the programme. After their initial training, conducted by their teachers, which involved role-playing, they implemented the peer tutoring procedures with high fidelity.

As a conclusion, most of the students who served only as tutees expressed their dependence on their tutors during peer tutoring and acknowledged tutors' deeper knowledge on the content materials. Tutors, on the other hand, expressed in their interviews the leading role they had during the peer tutoring process. Students with SEND, who performed the role of tutor, were predominantly talking about this in their interviews. Lastly, students who participated in reciprocal formats of peer tutoring highlighted the sharing of knowledge between them and their peer during peer tutoring.

#### *5.3.5.3 Students evaluating their roles.*

In this section, I will discuss how students evaluated their participation in the peer tutoring programme. Specifically, I asked students if they liked the way they collaborated with their peers, if they faced any difficulties during their collaboration and from whom they asked for help to overcome the experienced difficulties. I asked students who had only the role of tutee if they would like their tutors to have worked with them in a different way that it would be more suitable for them. To the students who performed the role of tutor, I also asked them how they think could be better prepared for the role of tutor. Table 29 presents the views of students expressed when I asked them to evaluate the peer tutoring procedure and their roles.

Table 29.

*Students' Evaluations of Their Roles in Peer Tutoring*

Students	Evaluating students' roles		
	Like the collaboration	Difficulties	Prepare for the role of tutor
Chris	yes	none	n/a
Helen	yes	none	read more
Sophie	yes	none	n/a
Athina	no	arguments	change my personality
Adele	yes	none	revision of the subject
Jim	yes	communicating with peer	read more
John	ok	handling peer	read more
Ann	yes	handling peer	read more
Chara	yes	none	read more
George	yes	communicating with peer	working with peer in break times
Maria	yes	none	read more
Margarita	yes	none	read more and make revision of the subject
Gregor	no	communicating with peer	read more
Eirini	yes	handling peer	read more
Nick	yes	none	read more
Bill	yes	none	n/a
Aris	yes	none	n/a
Stella	yes	communicating more	read more
Liza	yes	none	read more

As can be seen in Table 29, most of the participating students liked the collaborating style they adopted with their peers. However, there were participating students, like Athina, who argued that she did not enjoy how she collaborated with Maria, “no, I didn’t like it, it was difficult collaborating with Maria, because we had different views and each of us wanted hers to be the right”. Based on my observation records, there were incidents where Athina and Maria argued for various reasons, such as disagreeing on the right answer to one activity or unwillingness to collaborate. Likewise, Gregor was not satisfied from his collaboration with John, “I would have enjoyed and liked it more if in the position of John was another child”. John was more mediocre in his reactions than Gregor by expressing a simple “it was ok”, when I asked him to evaluate the collaboration between him and his peer. Besides these three students, all the others claimed to have enjoyed the way they had collaborated with their peers.

Generally, based on my observations, most of the participating students seemed to favour their collaboration with their peers. However, both Athina and Maria claimed not to have enjoyed every moment of their collaboration, which is the case not only with this pair, but with most of the participating pairs. When you collaborate with someone that you are not friends with and you do not know him/her well, things can get wrong many times. The critical point is how you overcome this and if you are willing to overcome it. Specifically, the competitive environment that was developed between these two students, could not let them overcome any difficulties and focus on the aspects that they both agreed. They mainly focused on the things that they disagreed, especially during the first sessions of the programme. However, their overall concluding evaluating remarks were extremely positive and favourable towards the programme.

When I asked students to communicate the difficulties, they have faced in their collaboration with peers, most of them did not mention any. However, some students expressed certain concerns, like Athina, who could not face the constant arguments between her and Maria, “it was difficult because we both were supporting each own opinion and we didn’t respect the opinion of the other, we should have found a way not to argue, but we didn’t”. Although she later admitted “during the last days we corrected all this bad environment, a little bit, though we corrected it”. Several students mentioned communicating effectively with their peers as a difficulty they have faced during their participation in the programme. Specifically, Jim stated “yes, sometimes I had difficulties on the activities because he had them wrong and he couldn’t understand it.. [...] I would like to give more information for my mistakes, because he didn’t say a lot”. Likewise, George said that he would like to communicate more with Stella, and especially when she served as a tutor “I would like to collaborate more [...] to correct more carefully my activities”. Stella expressed same concerns regarding her communication with George. Similarly, Gregor contended several issues when communicating with John, “he was writing everything, and didn’t let me say anything [...] I wished we had a better friendship and to collaborate more, to listen to each other”. Students without SEND noted as their primary difficulty to handling their peers with SEND. For example, John found difficult to handle Gregor’s tantrums, Ann to handle the tantrums and the disruptive behaviour performed by Chris, and, lastly, Eirini to handle her peer’s disruptive behaviour and inability to stay concentrated on the activities. As a conclusion and based on my observation logs, almost all pairs in the peer tutoring programme experienced at some point incidents of argument and disagreement with their peer. Even the pairs that were working effortlessly collaboratively, they have disagreed during some sessions. These kind of incidents were largely expected based on the assumption that children

usually exhibit competitive behaviours and are not used in working collaboratively in the way and in the extent they did work during the peer tutoring programme.

There were certainly several times when students found difficult to handle each other both the students without and with SEND. Indeed, according to my observation records, it was challenging for John to handle Gregor, especially when he did not want to collaborate with him, not even to listen to him. Similarly, Chris, especially during the first sessions was not happy with him not being the tutor and performed several anger outbursts, with Ann trying to calm him down and find ways to motivate him. Along the same lines, Eirini tried hard to keep her peer focused on the process and the activities. As I noted in my diary, there were also many other cases where students experienced challenges and difficulties during their involvement in the peer tutoring programme. However, most of them worked collectively to overcome any disagreements and stay engaged to the process and the activity. Besides working collaboratively, one other basic purpose of the peer tutoring programme is to know in more depth our peers, and this was achieved.

I asked students to state if they sought for help to face the occurring difficulties. Generally, most of the students sought for help at some point of the peer tutoring procedure, either for receiving further explanation on an activity or receiving help in handling peer's disruptive behaviour. Most of them asked for help from their teacher. Lesser students asked for help from a peer from another pair, like Lisa, Chara and Jim, who asked and received help from the tutors of the pairs sitting next to them. Lisa described the process she followed when looking for help like, "usually with Joanna (another tutor) were checking to see if we have the same answers, if I couldn't explain something further, I was asking for the teacher to help me explain to him". When I first noticed Lisa asking for help from her peer sitting in the next desk to her, I thought that something was going wrong. I offer the extract of my diary from that session (3), "while most of the peers in the pairs were working collaboratively with each

other, I noticed Lisa chatting with the tutor from the pair sitting to the next desk from her. I, firstly, thought that she has found the opportunity to chat with her friend and not work with her peer. As I approached to see what exactly was happening and ask her for the reason not working collaboratively with her peer, I heard of a discussion about the answer on the activity they were working on. She told me that she was unsure about the answer and in order not to give wrong feedback to her peer, she asked the tutor of the other pair, to secure that she will give the right answer and feedback to her peer.”. Reflecting on this incident, I must admit that students can always find new ways to have their help reached quickly and effortlessly. So, knowing that the teacher may need extra time to answer to their question, they sought for help from the next expert, according to them, their classmates who also serve the role of tutor.

Most of the pairs asked for help from me and the teachers, especially during the first sessions of peer tutoring, where teachers did not know whom to help first. I was also offering help to the students, especially during the first sessions, in order to support teachers and make them feel less stressed. As sessions proceeded, the frequency of seeking help from their teachers has reduced significantly, based on my observation logs. Specifically, during the last two sessions of the programme, most of the participating pairs did not ask for my help at all. It is totally understandable that students involved in a process not familiar with it, will ask for help at some point.

Several students opted for collaborating differently with their peers at some point of the peer tutoring procedure. For example, Chris would like when cooperating with Ann to do the things as he wanted. As has mentioned earlier, he sought several times to be the leader of tutoring process, as recorded also in my observation logs. However, he enjoyed Ann being his tutor, especially during break times, as I noted in my observation records. On the other hand, Ann stated that she would have enjoyed more the tutoring process, if Chris stopped

complaining. Indeed, there were several incidents, especially during the first sessions of the programme, where Chris was constantly complaining for various reasons and showed unwillingness to collaborate and focus on his peer. Along the same lines, another pair, Gregor and John, claimed both that they would like to change the behaviour expressed by each other's, and suggested to change pair, as a solution to all the difficulties they both faced. As was noted in my observation logs, Gregor and John was one of the pairs which has puzzled both class's teacher and myself several times. Their relationship was more than fragile and had a negative effect on their collaboration. We spent several hours with the teacher discussing on possible suggestion to alleviate the negative attitudes shaped between these two students in order to collaborate more effectively and without exhibiting so many argument incidents. Athina would like to change the selfish attitudes expressed by both herself and her peer, which she argued to have affected the peer tutoring process, "we shouldn't be as stubborn as we were, we should go back and, luckily, the last days we corrected, slightly, our behaviour". The rest of the interviewed students did not express any willingness to collaborate differently with their peers.

I asked students who had the role of tutee, if they would like their tutors to collaborate with them differently, in order to have their need met more effectively. Several students who participated in reciprocal formats of peer tutoring and had students with SEND as their tutors made suggestions, like Athina "I would like her to explain better the activities to me and to help me more and to encourage me and not say to me that this would be definitely a mistake". Similarly, Jim suggested "to give me more information about my mistake, because he didn't say much to me". Along the same lines, John argued "to listen more and collaborating with me and doing constantly what he had in his head". Likewise, George would like "to check my answers a little more, and to be more focused". As a conclusion, it is worth mentioning



that the only students who would like their tutors to work differently with them were the students without SEND who were tutored by students with SEND.

As was highly anticipated, all students who served as tutors enjoyed their role. Moreover, students who participated in reciprocal formats of peer tutoring found to have enjoyed more the role of tutor than the role of tutee. The only exception was Margarita, a student with SEND who as claimed enjoyed more being tutored than being the tutor. Specifically, she stated that “I didn’t like telling her what was right and what was wrong, because I was doing mistakes. I would like only her to be the tutor..”. The rest of the students seemed to have enjoyed being tutors for various reasons, like the feeling of helping others, claimed by Athina, Adele and Maria. Several students, like Lisa, Eirini, George, Ann and Jim enjoyed performing the tutor role because it is their dream to become teachers in the future.

When students with SEND performed the role of tutor, most of them were enthusiastic and seemed to enjoy it more than when they had the role of tutee. As was found based on my observation records, they were exhibiting great confidence in their ability to enhance the learning experience of their peers without SEND. This was a role that they were not used to play, so they gained great satisfaction when implemented it. They were more focused, especially Steve, who “is behaving like being another child, he is so focused on the lesson, he is obviously the leader of the process, he asks Eirini to be concentrated on her activities, he offers feedback to her, and he shows great engagement in the process. He is very responsive and shows a very different picture from when he was performing the role of tutee” (extract from my diary).

Lastly, I asked participating students who served as tutors, how they could be better prepared for the role of tutor. As can be seen in Table 29, most of the students interviewed stated that they would read more prior to the implementation of the programme, and before each session. On the other hand, Athina suggested changing her personality and specifically,

her selfish attitude, to perform more effectively the role of tutor and help better her peer. Also, George made an interesting suggestion different from the widely mentioned ‘reading more’, claiming “I would sit with Stella in break times and get prepared, to give fast and right answers”.

To sum up, most of the participating students favoured their collaboration with their peers and were satisfied from the way they collaborated. Several students opted for collaborating differently at some point of the peer tutoring procedures, especially the pairs who had students with ADHD. Almost all tutors enjoyed the role of tutor and specifically students with SEND. Lastly, tutors responded that they would read more prior to the implementation of the programme in order to be prepared for the peer tutoring sessions.

#### *5.3.5.4 Students evaluating programme’s effectiveness.*

In this section, I will discuss how students perceived the effectiveness of the peer tutoring programme in the academic and social skills of themselves and their peers. Specifically, I asked them whether the programme helped themselves and their peer academically, whether they were friends prior to the implementation of the programme and if they are friends after. In order to examine the social benefits of peer tutoring, I asked participating students whether they were friends prior to the implementation of the programme and if this status has changed after the completion of the programme. The aim of these questions was to examine the perceptions participating students hold towards peer tutoring’s effect on their academic and social skills. Table 30 presents students’ perceptions regarding programme’s effectiveness.

Table 30.

#### *Students’ Perceptions of Peer Tutoring’s Effectiveness*

Students	Programme's effectiveness			
	Academic benefits for yourself	Academic benefits for your peer	Friends prior to the implementation	Friends after the implementation
Chris	+	n/a	+	+
Helen	+	+	+	+
Sophie	+	n/a	+	+
Athina	+	+	-	+
Adele	+	+	-	+
Jim	+	+	-	+
John	-	-	-	+
Ann	+	+	-	+
Chara	+	+	+	+
George	+	+	-	+
Maria	+	+	+	+
Margarita	+	+	+	+
Gregor	-	-	-	+
Eirini	+	+	-	+
Nick	+	+	+	+
Bill	+	n/a	+/-	+
Aris	+	n/a	-	+
Stella	+	+/-	-	+
Liza	-	+	+	+

I asked participating students in the last part of their interview to evaluate the effectiveness of the peer tutoring programme, they were involved in. As can be seen in Table 30, most of the students with SEND agreed that peer tutoring helped them academically, as clearly indicated in the words of students, like Chris who stated “with Ann I learn much better”, Helen who claimed “I’ve learned literacy better these times that I worked with Eirini”, and Aris who described peer tutoring as “the easiest way to learn, I didn’t feel ashamed to express my opinion, even if it was wrong, like I feel when I have to talk to teacher, we can say our opinions, finally” . It is crucial to mention that not only students with SEND felt their academic skills to have improved because of their involvement in the peer tutoring programme, but also their peers without SEND expressed the same feelings, like Athina who argued “I started learning better and understand more” and Jim who claimed “it (peer tutoring) helped me understand better the activities in literacy and in grammar” and George who answered “yes, I’ve learned better, I’ve learned how to manage my subjects more effectively”. Especially, as sessions proceeded, in almost all of my observation records from the participating classes, there was evident an improvement in the collaboration of the pairs and, also, an evident improvement in their academic skills, based on the time they needed to complete an activity and the number of the right answers given. However, some students felt that peer tutoring did not lead to the further development of their academic skills. The pair of students who have repeatedly described peer tutoring as a difficult experience, because they could not cope with each other, argued that there were no academic benefits for both of them. They further explained that this was due to their inability to concentrate on their activities, because they have spent most of their time arguing, as John claimed “no, there are no academic benefits for me, because he was constantly bothering me”. Similarly, Gregor mentioned “no, there was no academic benefit for me, because we were arguing all the time, if I wasn’t with him, I’m sure I would have”. Lastly, Lisa, a student

without SEND who served only as tutor, claimed that there was “no loss and no gain” regarding her academic skills.

When I asked students to evaluate the academic effect of peer tutoring on their peers, most of them agreed that it did develop the academic skills of their classmates. Both students without SEND and students with SEND, who served as tutors, claimed that peer tutoring led to the improvement of their peers’ academic skills. Specifically, Athina addressed the significance of repeating the grammatic rules in the development of the literacy skills of Margarita, “she definitely improved academically, because I was repeating to her all the grammatic rules she has forgotten, in order to do the activity”. Adele noticed the academic improvement of Aris “he is now writing much more on his book than before we started peer tutoring”. Similarly, Jim described the academic benefits from peer tutoring “yes, I believe that the collaboration we had made him a better student and made him love the subjects and the school more. [...] he is a student different from the others and he proved that he can make more things than we expect him to do”. Most of the participating students agreed that the academic skills of their peers improved because of their involvement in the programme. As can be concluded from my diary extracts and my observation logs, there was an improvement mainly in the collaborating style adopted by most of the pairs. As sessions proceeded the students gained the familiarity needed to collaborate effectively and contribute to the academic skills of their peers. However, John and Gregor, answered that there were no academic benefits for their peers, as they answered regarding their own academic benefits. They both attributed the lack of any academic benefit to their poor collaboration because of their constant arguments. Last but not least, Stella stated that the academic performance of George remained the same as before the peer tutoring programme, explaining “he was already a good student, so there was no benefit for him, as for me.. he is still a good student”.

As far as the social skills emanating from their involvement in the peer tutoring programme, all the participating students considered the peer that were paired with during peer tutoring as their friends, after the completion of the programme. While certain pairs of students considered themselves already friends, there were cases where students entitled their peers as friends only after they were involved in peer tutoring. Athina, who argued a lot with Margarita during their collaboration claimed “our relationship is much better, I’ve learned her more, I’ve changed my opinion about her and she did the same for me”. Along the same lines, Jim stated “now yes.. I can say that we are a little bit more friends than before, from the moment we collaborated”. The most interesting change of friendship status occurred between John and Gregor, a pair that was constantly arguing and who had agreed not enjoying the peer tutoring programme. They both claimed that after the completion of the peer tutoring programme they play a lot more during break times, “before we didn’t play as much as we play now” (John) and “yeah, now we are better friends, we play more in break times” (Gregor). Similarly, while prior to the peer tutoring programme, George and Stella barely talked to each other, after the completion of the programme they both agreed that they talk much more and there are times that they play together, an activity that they did not perform earlier, according to both teachers’ and students’ claims.

At a deeper level of analysis and based on my observation records, most of the participating students with SEND have increased their learning motivation and their engagement in the learning process during their involvement in the peer tutoring programme. Especially during the last sessions of the programme this improvement was more obvious than prior. As far as their social relationships are concerned, even in the cases where students did not get along, like John and Gregor, they claimed that they are now playing more together during break times. Indeed, my observations reinforce this claim, with both students spending much more time together than they used to prior to their involvement in the programme. Ann

and Chris is another pair, whose social interactions increased significantly after their involvement in the programme.

In conclusion, participating students perceived peer tutoring as beneficial for the academic and social skills of themselves and their peers. Specifically, students without SEND claimed that peer tutoring led to the improvement of the learning of their peers with SEND. On the other hand, the academic improvement of the students without SEND was not as significant as the one experienced by students with SEND. Lastly, most of the students who were not friends with their pair prior to the implementation of the programme, argued that their relationship has been clearly enhanced after the completion of the programme.

#### *5.3.5.5 Students' expectations.*

In this section I will describe how students understood peer tutoring when they first heard about it and what expectations they had. Specifically, students described the picture they first shaped in their heads when they were told that they would participate in the peer tutoring programme and that they would serve in the roles of tutor and tutee. In other words, they explained the expectations they had prior to the implementation of the programme. There were students that had their expectations met, while there were other students who performed a role different from what they expected at the beginning. For example, Chris, who expected to play the role of tutor, was involved in a fixed-role format of peer tutoring, with him having the role of tutee. Helen was one of the most students who expected to perform specific activities depending on the role she took, which she actually did, "when I am the tutor, I will help Maria, and when I am the tutee, I will be helped by Maria". Sophie who only performed the role of the tutee described her expectations as "I was expecting that I would answer all the questions correctly.. and if I answer wrongly, I will continue trying until I get it correctly, something that actually happened, when working with Nick". Athina, on the

other hand, who participated in a reciprocal format of peer tutoring, described the role of tutor as “I thought I would teach, I would correct and that she would listen to me carefully, and these did happen, because she was interested in the lesson” and the role of tutee as “I thought I would raise my hand to talk, and that it would be like we do with the teacher, and that she would show to me many things and that she would be an actual teacher”.

Generally, most of the students did not shape a picture completely different from reality. In most of the cases, they performed the roles and the activities that they have first thought they would. Although there were students who expected to serve the role of tutor, while they served the role of tutee, this did not prevent them to enjoy their involvement in the programme.

#### 5.3.5.6 Students' feelings.

In this section I will discuss how students described their feelings at the three stages of peer tutoring; prior, during and after the programme's completion. Table 31 presents participating students' feelings prior to the implementation of the programme, during its implementation and after its completion.

Table 31.

#### *Students' Feelings*

Students	Students' feelings		
	Prior to the implementation of the programme	During the programme	After the completion of the programme
Chris	like a lot	like, but I was complaining	sad that finished
Helen	joy	joy	joy



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Sophie	a bit strange	happy for learning easier	sad that finished
Athina	sad	sadness gone	happy for the experience
Adele	sad	started liking it	like to continue
Jim	a bit strange	nice	sad that finished
John	scared	less scared, sometimes I even liked it	ok
Ann	a bit strange	joy and enthusiasm	sad that finished
Chara	ok	ok	happy for helping him
George	a bit strange	liked it	ok
Maria	joy and a little nervous	joy	happy for helping her
Margarita	didn't expect it	liked it	sad that finished
Gregor	didn't like it	liked it at the beginning, but after no	relief that is over
Eirini	hesitant for being pair with him	liked it	sad that finished
Nick	nice	nice	nice
Bill	nice	liked it	tired
Aris	nice	liked it	sad that finished
Stella	strange	liked it	sad that finished
Liza	nice	happy for helping him	ok

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As can be seen in Table 31, while most of the participating students were concerned when starting the peer tutoring programme, these concerns turned to positive feelings during the implementation of peer tutoring. When students were actively involved in peer tutoring

processes, they realised that collaborating with a peer is not as bad as they have first thought. For example, Sophie claimed “at the beginning I felt a bit strange, it was like I have never worked with Nick before, something that is not true.. during peer tutoring I felt so much joy that I can learn so easy with him..”. While Athina experienced several difficulties in her collaboration with Margarita, she said “at the beginning I was really sad because I wanted to sit with my best friend and I didn’t want to collaborate with anyone else and sit with a student I don’t want to... but then the sadness gone, because I felt better that I learned more Margarita.. now.. I would say that I’m happy for collaborating with Margarita”. Adele would also like to collaborate with her best friend instead of Aris and described similar feelings with the ones expressed by Athina, “I would like to work with my best friend, I didn’t want to change desk and sit with Aris.. after we started collaborating and being his tutor, I started liking it more and now, now I would definitely like to continue working like this with him”. Likewise, Jim’s feelings changed through the three stages of peer tutoring, as he clearly described “oh.. I felt a bit.. a bit strange because I have never collaborated with him before, and we weren’t friends..., then I felt nice, I wasn’t nervous at all, we collaborated good I must say,.. now.. hmm.. I feel a bit sad.. it was so much interesting the lesson that way..”. Ann, George, Margarita, Eirini and Stella expressed similar positive changes in their feelings. Quite interesting are the words that John and Gregor used to describe their feelings, who experienced many issues during their collaboration, “I was scared.. I didn’t want to be pair with him.. sometimes when started collaborating, I was still scared, only the first time went well..” (John) and “at the beginning I didn’t like at all the idea to be pair with him... the first time that we collaborated it worked well, but this was the only time.. now, I feel relieved that is over..” (Gregor).

It was highly anticipated for me that students would express hesitant and reluctant feelings and attitudes prior to their involvement in the peer tutoring, as they would do with

any procedure that they have never been involved before. As noted on my observation logs, students during the first one to two sessions of peer tutoring were reluctant in implementing their new roles and showed uncertainty in following the rules and the procedures described to them by their teachers during their training. As sessions proceeded, it became evident that students became more familiarized with the procedures of peer tutoring and with their peers, leading to a more enthusiastic and positive learning environment. My records from the last session of the programme in all the classrooms makes evident that most of the participating students expressed negative feeling concerning the end of the programme. I personally consider the positive change in their feelings as the sessions proceeded as a success for the peer tutoring programme. This further means that participating students did enjoy their involvement in the programme, with several of them expressing their sadness that the programme completed.

As a conclusion, both students without and with SEND expressed that their feelings turned more positive as the peer tutoring sessions proceeded, and several of them being unhappy that the programme finished.

#### *5.3.5.7 Peer tutoring's features that students liked most and least.*

In this section I will discuss the parts of the peer tutoring programme that participating students liked the most and the least. These are presented in the following Table 32.

Table 32.

*Peer Tutoring's Parts that Students Liked Most and Least*

Students	Like most	Like least
Chris	the help from Ann	arguing
Helen	collaborating	-
Sophie	easy learning	the noise in the class
Athina	collaborating	arguing
Adele	helping my peer	when he was not listening to me
Jim	collaborating and learning	when he was losing his attention
John	being part of the programme	my peer
Ann	being the tutor	when he was complaining
Chara	being the tutor	-
George	collaborating	when she was losing her attention
Maria	helping Helen	-
Margarita	collaborating	-
Gregor	collaborating	my peer
Eirini	collaborating	when he was losing his attention
Nick	everything	-
Bill	learning more	being tired
Aris	exchanging opinions	-
Stella	learning better	-
Liza	when he understood what I've explained to him	when he didn't understand what I've explained to him

As can be seen in Table 32, all participating students indicated in their interviews aspects of the peer tutoring programme that liked most, while not all of them described the least pleasant situation for them that they got involved. Most of the participating students

argued that they enjoyed the collaboration with their peers, like Jim “I really liked that we did completely new things with him, because we, both of us, learnt more and in collaboration”, and Eirini “I liked that we felt more free to express our opinions, and to collaborate with our peer”. Students with SEND who only performed the role of tutee claimed that they enjoyed receiving help from their peers, like Chris “I liked that Ann helped me in everything, she helped so much, so much”, and Sophie “I learned much easier when I was working with Nick and I liked it much”. Likewise, Bill argued that the best part of peer tutoring was that he learned more and easier and, that he really enjoyed the whole process, even though he got tired during the last sessions. On the other hand, students without SEND who only served the role of tutor, enjoyed, as they claimed, offering their help to their peers. Moreover, as stated by Lisa “I really liked when I’ve explained to him an activity and he understood my explanations and filled the activity”. Similarly, Chara described that the best feeling she ever experienced during peer tutoring was when she explained things to Bill and he comprehended them.

The most unexpected comments were the ones made by John who contended “I enjoyed being part of this programme, even though I didn’t have the peer I would wish for”. Although he experienced many difficulties during the programme, it was surprising that he enjoyed his participation in it. Similarly, Gregor said “I really enjoyed the first time that we collaborated so good with John”. Indeed, this session was recorded in both my diary and in my observation records as one of the very limited sessions that these two students worked collaboratively without arguments and complaints.

As far as the situations that students liked the least are concerned, several of the participating students, as can be seen in Table 32, did not mention any. As Helen stated “there was nothing I liked the least, everything was nice”. Along the same lines, Chara claimed “it was a great experience, I liked everything”. On the other hand, Sophie was

disturbed by the noise occurring during peer tutoring and led her sometimes to lose her attention. It should be mentioned at this point and based on my observation records that Sophie's class was not one of the noisiest classrooms of the programme. However, due to the nature of Sophie's SEND she needs a quite learning environment to think and stay focused. Many students without SEND who served the role of tutor, like Adele, Jim, George and Eirini, argued that one of the most uncomfortable moments of their collaboration was when their peers did not pay attention to them or lose their attention. Lisa, who also served as tutor, contended that she did not like "when he didn't understand what I've explained to him". As I recorded in my observation logs, most of the times the reason behind students' arguments was the inadequate focus and attention paid by their peers to them. Bill, who had only the role of tutee, stated "at the end I felt so tired, I've never had worked so much in any other lesson". The teacher of the class noticed also that Bill used not to participate actively in the learning procedure. However, since he was involved in the peer tutoring programme and with the constant support of his tutor, Chara, he increased a lot the time he was engaged in the learning process. Finally, two students, John and Gregor, agreed that the worst part of the peer tutoring was, for both, the choice of their peers.

Chris claimed that the worst part of the programme was his arguments with Ann, "I didn't like when we were arguing with Ann". Ann agreed with Chris that the most awkward moment was when he was complaining. She further described "I couldn't stand him, so I started crying". Indeed, this incident was recorded during the observation and for the pair to continue its collaboration, there was a meeting with the teacher to solve the issue that led to this outburst by both students. It is worth mentioning that this incident was the only one occurred which disturbed their collaboration, and after that they continued cooperating successfully, as described by the teacher and recorded in my observation logs.

To sum up, most of the participating students enjoyed their collaboration with their peers. Specifically, students with SEND appreciated receiving help from their peers and similarly, peers without SEND were happy for offering their help to their peers. Moreover, several students with SEND claimed to have learned the content material easier and better. On the aspects that participating students liked least from their involvement in the peer tutoring programme were the moments that their peers complained, did not pay attention to them or argued with them.

#### 5.3.5.8 Tutors' perceptions.

In this section I will describe how students who performed the role of tutor perceived this experience. Specifically, I asked them if they have experienced any difficulties while implementing the role of the tutor, if they were concerned about their academic development, for how long they were willing to participate in the peer tutoring programme and if their feelings towards their peers with SEND have changed positively after the completion of the programme. Table 33 presents participating tutors' perceptions.

Table 33.

#### *Tutors' Perceptions*

Students	Difficulties experienced	Tutors' experiences		
		Concerns for academic development	Duration of participating in peer tutoring	Change feelings towards students with SEND
Helen	none	none	as much as needed	n/a
Athina	correcting my peer	none	for ever	yes

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Adele	when my peer faced difficulties	none	for a long time	yes
Jim	when my peer did not understand	none	3-4 years	yes
John	with my peer	yes	as much as needed	yes
Ann	when explaining	none	until the end of primary school	yes
Chara	none	none	as much as needed	same
George	communicating	none	for 5 weeks more	yes
Maria	to think how to explain to her	none	as much as needed	yes
Margarita	none	none	one more week	n/a
Gregor	communicating	none	never	n/a
Eirini	none	none	for a while	yes
Nick	none	none	as much as needed	yes
Stella	none	none	for a long time	n/a
Liza	none	none	twice a week	yes

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As can be seen in Table 33, some students claimed that they did not face any difficulties, like Nick “nothing was difficult, everything worked easy and well”. However, there were students who addressed several difficulties, like Athina who found it difficult to correct her peer “it is difficult to correct the mistakes of other, and it doesn’t suit me, I don’t



like correcting others”. As I recorded, the difficulty which Athina mentioned was also one of the main reasons for arguing with her peer. Most of the participating tutors claimed that the most difficult part in the peer tutoring procedure was when peers could not comprehend the explanations given by them or faced difficulties in filling the activities, like Adele “it was difficult when my student faced difficulties in everything, in the whole activity” and Jim “sometimes it was difficult that despite the information and explanation I was giving him he couldn’t understand”. John and Gregor faced difficulties with each other, as it was proven by the fact that these two students could not get along together.

Most of the participating tutors argued that they did not have any concerns that their involvement in peer tutoring would restrain them from further developing their academic skills. Only one student, John “being pair with Gregor it was the most difficult part, to constantly tell him to stay sat in his seat, to behave well, to write nice letters, and generally to write”. As far as the time that tutors were willing to implement peer tutoring is concerned, their views vary from one week to for ever, as can be seen in Table 33. The most common answer of the participating tutors was “as much as needed”. However, Gregor clearly declared that he is not willing at all to continue participating in peer tutoring without changing peer.

I asked students without SEND who served the role of tutor if their feelings and attitudes towards their peers with SEND improved after their involvement in the peer tutoring programme. All of them stated that their feelings towards their peers with SEND did improve. Only Chara said that her feelings remained the same, as she was already “explaining to peers who didn’t understand something in the activities”. Despite Chara, the rest of the interviewed tutors expressed a positive change in their feelings towards their peers with SEND. Indicatively are given the words of some tutors who claimed a positive change in their feelings, like Athina “peer tutoring helped me understand her more and understand

her difficulties”, and Ann “I understood that he is not a bad boy, he only needs somebody to explain things to him and then he understands them [...] now I’m always with him and during our games, I explain to him the rules so he can play”. Indeed, based on my observation records especially during time breaks, students with SEND increased the time they spent with their peer groups by being actively engaged in playing activities. This was the case in almost all of the participating students with SEN. However, I noticed a similar positive change in classroom activities. The answers that students with SEND gave were more appreciated by their peers and they helped them in reaching the right ones, even when they were not participating in the programme.

Indeed, my observations reinforce the difficulties experienced by certain tutors. Tutors had difficulties when their tutees did not pay attention to them and when they could not understand the explanations they offered to them. In most of the cases, tutors handled the situation by themselves without seeking for help. When the situation was really difficult for tutors to handle, especially when tutees performed disruptive behaviour, they asked help from their teacher or me. However, these recorded incidents were not many and enough to affect the procedures of the programme. As far as tutors’ positive change in their feelings towards their peers with SEND is concerned, it was noticed that in all cases, even in the case of John and Gregor, the social relationships of the students who formed the pair were improved. I noticed this in my observations both inside the classroom and outside, during the break times.

As a conclusion, among the difficulties that tutors experienced were their peers’ inability to understand the explanations and the tutoring they offered them and when they were not concentrated on the peer tutoring procedures. Most of the participating tutors were willing to be involved in the peer tutoring programme as much as needed. Lastly, they all claimed that their feelings towards their peers with SEND either remained the same or improved after the completion of the programme.

### *5.3.6 Teachers' and students' views on peer tutoring's effectiveness*

In this section I have made an effort to compare the attitudes teachers hold towards the effectiveness of peer tutoring with the ones hold by the participating students. Generally, I have found that teachers hold positive attitudes regarding the benefits of peer tutoring to both students with SEND and their peers without SEND. However, most of them claimed that students with SEND were more benefitted than their peers without SEND. Teachers seemed to be particularly concerned about the academic effects of peer tutoring on students without SEND. However, most of the teachers did not express any concerns regarding the social or academic benefits for students with SEND. Furthermore, several teachers pinpointed the social benefits of students with SEND, especially the benefits accrued by students with SEND in outside classroom environments, like during the break times.

Participating students were found also to hold positive attitudes towards peer tutoring's effectiveness. Specifically, most of the students noted academic benefits to both themselves and their peers, while all of the interviewed students agreed that they all benefitted socially from their involvement in peer tutoring. However, a student without SEND, Lisa, who only served as tutor, claimed that she remained at the same academic level as she was prior to her participation in the peer tutoring arrangements. Furthermore, most of the students without SEND claimed that peer tutoring improved the academic skills of their peers with SEND. Moreover, as was concluded, peer tutoring helped peers in developing friendships and, actually, consider their peers as friends.

As a conclusion, both teachers and students evaluated peer tutoring as an effective instructional strategy for both students with SEND and their peers without SEND. However, they both pinpointed the social benefits of the programme in comparison to the academic ones. Although both teachers and students contended that there were academic benefits

resulted from the programme, these were not described in the extent that the social ones were argued.

## Chapter 6: Discussion

This study sought to address five main research questions. Table 34 reminds the reader of them. Firstly, I will describe briefly the answers to each research question of this thesis. However, the overlap among the answers to these research questions is inevitable. The findings presented incorporate the results of the enquiry across all the phases of the research study and all the cycles of the action research project. Secondly, I will try to outline the implications for practice emanating from my main findings. Thirdly, I will discuss the limitations of my study and I will offer suggestions for future research. I will close this thesis with some concluding thoughts and my reflections upon my research journey.

### 6.1 Addressing the research questions

Table 34.

#### *Study's Research Questions*

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#### Research questions

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1. What are the attitudes towards inclusion and their self-efficacy perceptions towards inclusive practices of mainstream teachers and how these differ from the ones of their special education counterparts?
  2. What benefits do mainstream teachers perceive as emanating from the implementation of a peer tutoring programme?
  3. To what extent do mainstream teachers' attitudes towards inclusion and peer tutoring and their self-efficacy for inclusive practices predict their willingness to implement a peer tutoring programme in their classes?
  4. How teachers' attitudes, beliefs, and feeling towards peer tutoring have been shaped
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after implementing the peer tutoring programme in their classrooms?

5. How the attitudes, beliefs, and feelings of students with SEND and of their peers without SEND were shaped after their involvement in the peer tutoring programme?

- 
1. ‘What are the attitudes towards inclusion and their self-efficacy perceptions towards inclusive practices of mainstream teachers and how these differ from the ones of their special education counterparts?’

In line with previous studies, the participating mainstream teachers reported neutral attitudes towards the general philosophy of inclusion (Avramidis & Kalyva, 2007; Engelbrecht, Savolainen, Nel, & Malinen, 2013). Given that inclusive education has been legislated as the official policy for students with SEND in Greece, it was anticipated that the participating teachers would report favourable attitudes towards the general philosophy of inclusion. However, the reported neutral attitudes mean that Greek teachers despite embracing the principles of inclusion, remain skeptical and have concerns about its effective implementation, a finding also reported in studies conducted in other countries (Galović, Brojčin, & Glumbić, 2014; Savolainen et al., 2012). On the other hand, the participating special teachers reported more positive attitudes towards inclusion than their mainstream counterparts. This finding could be attributed to the enhanced special education knowledge they possessed as well as the specific training they had received on inclusive pedagogical practices (Hsien, Brown, & Bortoli, 2009).

The results of the current study replicate those reported in earlier studies in other countries (Sharma et al., 2012; Savolainen et al., 2011) in that the TEIP scale can be divided into three sub-scales; efficacy in using inclusive instructions, efficacy in collaboration, and efficacy in managing behaviour and therefore provides additional support to the validity of the instrument. The undoubtedly better training that special educators have received also

accounts for their significantly higher scores in the scales measuring their efficacy for adopting inclusive instructional strategies, their efficacy for collaborating with other professionals and parents, and their efficacy for implementing a peer tutoring programme. By contrast, mainstream teachers were found to hold more positive perceptions of efficacy for managing disruptive behavior. This finding could be attributed to the extensive teaching experience mainstream teachers had accumulated over the years in comparison to their special counterparts, who had only recently been deployed in mainstream schools.

The comparisons conducted between different groups of mainstream teachers determined by their gender failed to detect significant differences between the attitudes towards inclusion and their self-efficacy for inclusive practice held by the two groups which is in agreement with other international studies (Avramidis & Norwich, 2002; De Boer, Pijl, & Minnaert, 2011). The only notable difference was with regard to self-efficacy for implementing peer tutoring, where female teachers were more positive than their male counterparts. However, no firm conclusions can be drawn about this gender difference on the basis of this study's limited evidence. Interestingly, the comparison by age revealed that young teachers held more positive attitudes and self-efficacy perceptions for implementing peer tutoring than their middle-aged colleagues. At the same time, the 50+ group of mainstream teachers also held more positive attitude towards inclusion than the middle-aged teachers. It could be suggested that the participating youngest group (up to 39 years of age) had qualified more recently and, therefore, had received more training in relation to teaching students with SEND than their middle-aged colleagues (40-49 years of age). At the same time, teachers belonging to the 50+ group had substantially more experience in teaching students with SEND in mainstream classrooms, thus affecting positively their attitudes.

To sum up, it is well recognized that negative teachers' attitudes towards inclusion are considered a significant obstacle to the effective inclusion of students with SEND in

mainstream classrooms. Previous studies also implied that negative attitudes are usually related to practical concerns rather than ideological opposition to the general notion of inclusion (Burke & Sutherland, 2004; Malinen, Savolainen, & Xu, 2012).

2. 'What benefits do mainstream teachers perceive as emanating from the implementation of a peer tutoring programme?'

In order to answer this research question, I will first discuss teachers' perceptions of students' benefits as were formed from the analysis of the questionnaires and from the analysis of teachers' interviews from cycle B and C of the action research project. Then, I will discuss teachers' perceptions of benefits that emanate from their involvement in the peer tutoring programme as were shaped from the analysis of the questionnaires and from the analysis of teachers' interviews from cycle B and C of the action research project.

The mainstream teachers who completed the questionnaire emphasized predominantly on the social benefits that students with and without SEND would gain through their participation in peer tutoring arrangements. Academic benefits were also rated favourably by the participating teachers, albeit to a lesser extent reflecting their concerns about meeting effectively the educational needs of a diverse class population. Participating teachers in the peer tutoring programme expressed positive feelings regarding students' benefits from the two-week implementation of the programme. Specifically, they claimed that there were social benefits for both students without SEND and their peers with SEND. Participating students benefitted academically, but to a lesser extent than socially. However, teachers argued that students with SEND improved academically more compared to their peers without SEND during the two-week implementation of the programme. When teachers were interviewed after the completion of the programme, they still believed that students' involvement in the programme has benefitted them both academically and socially. However, they contended



that peer tutoring benefitted primarily students with SEND and they expressed concerns regarding the academic development of students without SEND.

These findings were expected given the plethora of studies demonstrating the social benefits gained through peer tutoring such as improved peer relations, students' self-efficacy and self-confidence, developing social and communication skills and supporting students who are struggling (Carter et al., 2015; Evans & Moore, 2013; Fougner, 2013; Maheady & Gard, 2010; Sinha, Zhao, & Cassell, 2015; Shenderovich, Thurston, & Miller, 2016). As far as the academic benefits of participating students are concerned, several studies examining the impact of the peer tutoring programme have found that students' involvement lead to improved attendance at school, regulating their own and their peers' comprehension and learning (De Backer, Van Keer, & Valcke, 2014; Shenderovich, Thurston, & Miller, 2016). As a conclusion it has been argued by various authors that positive social relationships among peers foster the development of the academic skills and leaning of students (Sinha, Zhao, & Cassell, 2015).

The general positive outcomes mentioned by most of the participating teachers as emanating from students' involvement in the peer tutoring programme were not experienced by T3 who chose to implement peer tutoring in the content area of mathematics. For him, peer tutoring was not beneficial in improving the mathematic skills of participating students. He was disappointed by this outcome and expressed his belief that the programme would have better outcomes, if was implemented in the content area of literacy. The fact that the peer tutoring programme did not work as expected in the content area of mathematics was also observed in other studies, too. For example, the recent systematic review and meta-analysis conducted by Shenderovich, Thurston, and Miller (2016) failed to detect significant effects for mathematics. However, the study of Maheady and Gard (2010) concluded that both students without and with SEND improved their multiplication fluency skills, their

understanding on math tasks and their confidence in solving difficult multiplication problems.

Participating teachers expressed certain concerns regarding the academic development of students without SEND who get involved in the peer tutoring programme. The study of Wright and Cleary (2006) confirms this finding by concluding that tutors who exhibit a high degree of competency in the task which is being tutored failed to benefit academically from their involvement in the peer tutoring arrangements. On the other hand, Calhoun and Fuchs (2003) found in their study that PALS increased the mathematics achievement of high-, average- and low-achieving students.

Potential teacher benefits were also rated highly by the participating teachers. Specifically, implementing peer tutoring as a means to effectively include students with SEND in their classes was the most favourably rated potential benefit. Indeed, this finding is well in line with peer tutoring literature portraying the approach as suitable and effective for engaging students with SEND in mainstream educational settings (Jones, 2007). Interestingly, the least rated benefit concerned the covering of content material which reflects the teachers' preoccupations about the substantial time needed to set up peer tutoring configurations.

3. 'To what extent do mainstream teachers' attitudes towards inclusion and peer tutoring and their self-efficacy for inclusive practices predict their willingness to implement a peer tutoring programme in their classes?'

The study examined Greek teachers' attitudes towards inclusion and their self-efficacy for inclusive practices as predictors on their willingness to adopt innovative inclusive practices such as a peer tutoring programme. The third research question pursued in this investigation provided some interesting insights into the importance of attitudinal and

self-efficacy measures. Specifically, the present study showed that teachers' attitudes towards inclusion, their 'self-efficacy for collaboration', their 'self-efficacy for peer tutoring' and their 'efficacy for inclusive instruction' predict to a large degree their willingness to implement peer tutoring programme. However, the variable 'self-efficacy for managing behaviour' did not emerge as a significant predictor of teachers' willingness to implement peer tutoring. Along the same lines, Malinen, Savolainen, and Xu (2012) in their study found that the dimension 'self-efficacy for managing behaviour' did not have a significant relationship with teachers' attitudes towards inclusion of students with SEND, when all self-efficacy factors were controlled for in the prediction model, as in the current study.

Interestingly, an increase in the predictor variable 'efficacy for inclusive instruction' is accompanied with an increase in the probability of teachers not showing an interest in applying peer tutoring. This finding could be explained by the fact that participating teachers who perceived themselves as efficient in applying inclusive instructions (and therefore feel that they have effectively included students with SEND in their classes) did consider implementing peer tutoring as a means to inclusion. Similarly, in the study of Fuchs, Fuchs, and Stecker (2010) teachers who were fully supporting inclusion reported greater confidence in their capacity to accommodate all students with diverse needs in their classrooms. This association has been consistently reported in more recent studies where the teachers' self-efficacy is positively associated with their reported attitudes towards teaching in inclusive classrooms and, more importantly, the adoption of inclusive practices in their classrooms (Savolainen et al., 2012; Sharma, Loreman, & Forlin, 2012; Yada & Savolainen, 2017).

4. 'How teachers' attitudes, beliefs, and feeling towards peer tutoring have been shaped after implementing the peer tutoring programme in their classrooms?'

Teachers expressed positive feelings towards the peer tutoring programme and specifically, in regard with its benefits for the participating students. This finding is constantly reached in studies worldwide. Specifically, Staubitz et al. (2005) presented qualitative evidence suggesting that teachers were positive towards the use of the peer tutoring programme and, moreover they felt that it had facilitated students' academic performance. Moreover, Ryan, Reid, and Epstein (2004) in their meta-analysis concluded that teachers, in the studies included, reported a 100% approval rating. All teachers suggested the continuation of the programme focusing on the students' benefits.

Further, the teachers in my study argued that both students without SEND and their peers with SEND had benefitted socially. However, they claimed that students with SEND benefitted to a greater extent in both the academic and social domain than their peers without SEND. This is in line with the study of Sideridis et al. (1997) where the gains in the spelling performance of students with mild disabilities were higher than the ones of the peers without SEND who participated in the peer tutoring programme. On the other hand, Hughes and Fredrick (2006) found in their study that both students with LD and students without mastered the targeted vocabulary words.

Especially, after the six-week implementation of the peer tutoring programme, teachers expressed concerns regarding the academic development of peers without SEND. Indeed, studies, like the one conducted by Saenz, Fuchs, and Fuchs (2005) failed to detect academic improvement in the high achieving students participated in reading. However, different studies have found that peer tutoring configurations have benefited academically students without SEND, like the study of Mortweet et al. (1999) in which participating students increased their spelling accuracy skills.

In my study, all teachers but one, agreed that peer tutoring had helped them in their teaching routine and specifically in supporting effectively students with SEND, meeting their

academic and social needs, individualizing their instruction and managing their students' disruptive behaviours. One teacher in the study of Bowman-Perrott (2009) claimed that peer tutoring gave them the opportunity to support the academic needs of students of below average ability in her classroom and to keep students engaged and focused. Similarly, teachers in the study of Brewer, Reid, and Rhine (2003) found peer tutoring useful in reducing office referrals and expressed their willingness to continue implementing the programme.

Teachers' need for further and on-going in-service training was highlighted in their interviews both after the two-week and six-week implementation of the programme. They expressed their need for specific SEND training and practical instructional arrangements for fostering the inclusion of students with SEND in their mainstream classrooms. The highlighting of the significance of training in teachers' comments is also highlighted in the study of Bowman-Perrott, Greenwood, and Tapia (2007), where teachers claimed training as an important part of the peer tutoring programme, which gave them the opportunity to independently carry out the programme effectively.

The most demanding tasks they had to perform during the implementation of the peer tutoring programme were the judicious matching of students and the evaluation of the programme's outcomes. According to Tsuei (2012), matching of students constitutes the main variable that affects the efficacy of peer tutoring process. Although it is considered as a significant element of the peer tutoring programme by many authors as mentioned in the systematic review and meta-analysis of Shenderovich, Thurston, and Miller (2016), not many studies discuss about matching tutors with tutees.

As a conclusion, teachers were found to be more positive towards peer tutoring and towards the benefits accumulated for the participating students after the six-week implementation and completion of the peer tutoring programme. This can be attributed to

several reasons, such as the actual practice and implementation of peer tutoring. Teachers being involved in the peer tutoring procedures could estimate the strengths and weaknesses of the programme and to examine the benefits that it had to both themselves and to the participating students. Most of them admitted that peer tutoring proved effective in developing primarily the academic and social skills of students with SEND and offering to them the opportunity for individualised instruction and finally, inclusion of them in their mainstream classrooms.

5. 'How the attitudes, beliefs, and feelings of students with SEND and of their peers without SEND were shaped after their involvement in the peer tutoring programme?'

Participating students claimed to have enjoyed their involvement in the peer tutoring programme. This finding is in line with most of the peer tutoring studies examining participating students' attitudes, like the ones conducted by Falk and Wehby (2001) and Mastropieri et al. (2001). Participating students in the studies of Bowman-Perrott, Greenwood, and Tapia (2007), Saenz, Fuchs, and Fuchs (2005), Spencer, Scruggs, and Mastropieri (2003), Sutherland and Snyder (2007), and Oddo et al. (2010) reported a positive evaluation of the peer tutoring programme they were involved in. Similarly, same conclusions were reported and in the synthesis of Wexler et al. (2015). The participating students in my study further argued that the main aim of the programme was for them to develop their collaborative skills.

Tutees acknowledged their tutors' deeper knowledge on the content materials and expressed that they felt dependent on their tutors to follow the peer tutoring procedures. Participating students with SEND talked mainly about their role as tutors and expressed their enthusiasm for having the leading role in the peer tutoring procedures and for their academic development, as in the study of Mastropieri et al. (2003) where students with SEND claimed

that the time spent in the peer tutoring programme was one of the shortest academic quarters for them and helped them recall more information and easier. Moreover, in the study of Sideridis et al. (1997) participating students with SEND claimed that they liked the collaboration with their peers, although at the beginning they were more than reluctant in participating in the peer tutoring programme, and that they further improved their spelling performance.

Most of the participating students were satisfied from the way they have collaborated with their peers. Only students without SEND who were paired with students with ADHD expressed some disliking comments with regard to their peers' inability to stay focused on the peer tutoring procedure. Difficulties and challenges were also expressed on other studies, too, which involved the implementation of a peer tutoring programme, such as in the study of Mastropieri et al. (2001) where the participating students expressed concerns regarding the material used, their partners and suggesting changing pairs as an overcome to their difficulties. Participating students without SEND in my study found it hard sometimes to keep their peers' with SEND focus on the procedures and were irritated when they seemed not to understand their tutoring and explanations. Similar findings were reached in the study of Mastropieri et al. (2001) where students regarded as the hardest parts of the programme the difficulties they had interacting with their peers and comprehension difficulties.

Participating students concluded in their interviews that the peer tutoring programme was beneficial for them and their peers. Specifically, students without SEND argued that the programme developed both the academic and social skills of their peers with SEND. This finding is in line with the findings of the study of Harper, Mallette, Maheady, Parkes, and Moore (1993). On the other hand, they claimed that they had not developed their own academic skills as they have thought they would. Similarly, in the study of Mastropieri,

Scruggs, and Marshak (2008) some students felt that they already knew the materials and wanted to proceed faster to a more difficult content material.

Students who were not friends prior to the implementation of the programme showed their relationship with their peers to have improved after the completion of the programme. The positive social outcomes of their involvement in a peer tutoring programme with students perceiving themselves friendlier towards their peers and their peers towards them were also reported by the participating students in the studies of Harper et al. (1993) and Klavina et al. (2014). Along the same lines, participating students with SEND in the study of Sideridis et al. (1997) argued that peer tutoring changed the way they perceived themselves and were perceived by their peers, formulating friendships.

To sum up, it was generally anticipated that participating students would enjoy their involvement in peer tutoring procedures. A number of reasons could justify the positive students' comments. First of all, working with peers provided a comfort zone for most of the participating students, especially students with SEND, making them feel comfortable asking questions, when they did not understand an activity. Secondly, most of them claimed that they had learnt different aspects of their peers' personality, making students with SEND feel appreciated and accepted, and respectively, making students without SEND appraise their peers' with SEND strengths and becoming friends.

## 6.2 Implications for practice

I hope that the findings of this research study, could contribute to the field of inclusive education in Greece and internationally. Following the completion of this study, I have reached the conclusion that mainstream schools can both foster and restrict the inclusion of students with SEND with the practices and instructional arrangements they decide to implement. Inclusion in most of the cases and times perceived at a locational level. However,



certain adaptations and transformations in the school environment can make the difference in the participation of students with SEND and in their school life, in general, in mainstream schools.

Specifically, mainstream teachers' attitudes, beliefs, views, and values can enhance or impede the inclusion of students with SEND in mainstream classrooms. Teachers have been found being supportive towards the notion and general idea of inclusion of students having a diagnosis of SEND, but at the same time they feel ill-prepared and unable to implement effectively inclusion in their classrooms. As a result, in order for mainstream teachers to develop inclusive practices, they should be trained sufficiently and efficiently to understand that they have the skills and the power to adopt inclusive instructional arrangements in their classrooms, such as peer tutoring.

The findings of the present study can contribute towards the formulation of the content of undergraduate and postgraduate teacher training programmes to promote inclusive education. Far from concentrating on traditional instructional strategies (e.g. characteristics of specific types of disabilities), these programmes ought to emphasize on fostering positive teachers' attitudes and boosting their self-efficacy for collaboration with other professionals and parents (Montgomery & Mirenda, 2014). This means that for the enhancement of inclusive practices in mainstream classrooms such as peer tutoring, the pre-service and in-service teachers should be trained on issues related to changes in their attitudes towards the education of students with SEND, how they can develop effective collaboration with other teachers, professionals and parents, and how to design and implement the peer tutoring approach. Based on my findings, pre-service and in-service teacher training programmes with such emphases carry the potential to raise teachers' commitment to inclusion and their confidence in their skills to implement inclusive practices in their classrooms.

It is crucial to mention that government funding plays an essential role in planning and implementing training for teachers (O'Hanlon, 2003). In Greece especially, the current financial crisis put education issues at the bottom of the government's agenda. Cuts in both teachers' salaries and schools' funding have significantly affected inclusive practice in Greek schools.

Since many tasks in mainstream classrooms are taught in one-to-one instructional situations and with high student-teacher ratios, many students, and especially students with SEND are left working independently over a prolonged period of time. Peer tutoring can foster the collaboration between peers and also, using peers without SEND for models of appropriate social and play behaviours. Peer tutoring appears to be a viable and effective instructional alternative for mainstream teachers who are trying to meet the academic and social needs of a diverse educational population in mainstream, primary classrooms.

The findings reached highlight the unique contribution that peer tutoring can make in the participation of students with SEND in the learning process and in the formulation of less restrictive settings for their inclusion, where collaboration can become a productive part of the classroom activity. It seems that we all need to rethink and reconceptualize formal and informal pedagogies so that collaborative group-work assumes more prominence in the national curriculum and takes a more central role in educational practices. This is by no mean the sole responsibility of mainstream teachers but instead requires all stakeholders to be involved and support teachers in making inclusion works.

Given the range of views around the issue of Greek mainstream teachers' attitudes towards inclusion, the evidence from this research suggests that a revision of the current inclusive legislation should take place. Inclusive legislation ought to take into account the attitudes, fears and wishes of teachers, who are the key people in implementing inclusion. At

the same time, the voices of both children with SEND and of their parents should be heard and considered by policy makers.

### 6.3 Limitations

The present study has a few obvious limitations that need pointing out. With regard to the quantitative phase of the study, it is worth noting that the cross-sectional design adopted only measured teachers' attitudes and perceptions at a particular point in time. By contrast, a longitudinal design would allow the monitoring of teachers' attitudes and perceptions of self-efficacy over a period of time and, therefore, would undoubtedly offer a richer understanding of the development of such concepts. Secondly, in survey designs there is always the danger of the respondents giving politically correct and socially desirable answers that have no or little correlation with their true beliefs or actual behavior. Thirdly, when attitudes are studied, it is crucial to take into consideration the context where these attitudes arise which is impossible to capture in a survey design. Nevertheless, it is certainly encouraging that the findings of this study support the results reported in other studies regarding teachers' beliefs and perceptions regarding inclusion.

With regard to the qualitative phase of the study, some additional limitations need pointing out. Firstly, a purposive sample strategy was used to select the targeted schools and therefore the results reached cannot be generalized to the whole population of Greek teachers and students. Secondly, this study was conducted within a strict time frame, that is, one academic term and, therefore, was limited to three cycles of action research. In this respect, examining the maintenance effects of the peer tutoring programme implemented was not possible. Thirdly, one drawback of the study concerns the inclusion of only students who had been officially diagnosed as having SEND thus leaving out some students with substantial difficulties but without an official diagnosis. Lastly, no data were collected to assess the

actual impact of the peer tutoring programme on the academic performance and social development of the participating students. Notwithstanding these limitations, the results emerged from this action research study advance the existing knowledge and offer a new insight on mainstream teachers' attitudes towards instructional arrangements such as peer tutoring.

#### 6.4 Directions for future research

Recognising these limitations, the findings of the present study contribute to existing theorizing in the field through confirming the relevance of teachers' attitudes and their self-efficacy perceptions to the successful implementation of inclusive education. Specifically, this study represents a modest attempt to show that both attitudes and self-efficacy beliefs can predict teachers' willingness to adopt inclusive practices in their classes. Future research efforts could be directed towards examining the impact of newly developed training programmes on teachers' attitudes, sense of self-efficacy, and the adoption of inclusive pedagogies in their classes. Other studies could endeavour to examine how teachers' attitudes and their sense of self-efficacy impact on the academic performance and social functioning of students with SEND in their classrooms. Large-scale studies utilizing multimethod research designs and spanning over significant periods of time would be particularly promising in the pursuit of this research agenda.

The employment of an action research project proved particularly promising in elucidating the complexities surrounding the implementation of inclusive instructional arrangements such as peer tutoring. More research of this kind is needed to address the effectiveness of similarly innovative inclusive instructional approaches. The proposed action research projects could be of longer duration and involve the collection of a wider range of data. For example, in my study peer tutoring was not well-received by a teacher in the

context of mathematics lesson who considered it an ineffective approach. The use of standardized tests measuring students' mathematic achievement could have offered an additional assessment of the efficacy of peer tutoring in the content area of mathematics.

#### 6.5 Looking to future: some methodological considerations

Further research is needed to identify the needs of mainstream teachers in their effort to meet inclusion's demands. Specifically, it would be very interesting to assess the factors that affect teachers' attitudes towards inclusion. Additionally, a study focusing primarily on teachers having expressed negative attitudes towards inclusion and on the factors that led these teachers to be negative, would offer a new insight into inclusion in mainstream schools.

In considering the existing attitudinal literature some important methodological considerations are worth mentioning. First, the vast majority of the identified studies has taken the 'individual self' as both the starting-point and the focus of analysis thus resulting in 'individualistic' experiences of inclusion. In this respect, these studies could be classified as 'reductionist' in the sense of only minimally addressing the complexity of individual 'attitudes'. In other words, most of the studies in the field are limited in their coverage since they fail to capture the dynamic interactions between cultural-historical contextual issues, including educational policies, socio-economic circumstances, pedagogical structures, and prevailing social values all of which contribute to the shaping of attitudes towards inclusion. Put it simply, the available research studies are often limited to measuring 'attitudes' without considering the broader school and societal context within which inclusive education is enacted. We would therefore contend here that the field would benefit from studies which make connections between the elicited individual attitudes towards inclusion and the particular cultural and historical context of inclusion.

A second important observation about the current state of research in the field concerns the prevalence of single methodological research designs, which provide a partial understanding of stakeholders' attitudes. Indeed, some studies have solely relied on paper and pencil measures with few attempts to include other sources of data such as interviews or other unobtrusive techniques to validate the measurements taken. Further, the significance of these studies lies in the assumption that the reported attitudes will be expressed in behavior. Given the fact that 'inclusion' is a morally and politically correct idea, there is always the danger of the respondents giving socially desirable answers that have little or no correspondence with their behavior. Teachers, for example, may endorse general statements in favor of having children with SEND in their classrooms, but it is another matter entirely how willing they are to make specific adaptations for these children. Students might also report positive attitudes towards including a peer with SEND, which might not necessarily transfer into their everyday interactions with actual peers with SEND. For this reason, it is recommended that quantitative measures are combined with other more ecological techniques such as observations of actual behavior. Correspondingly, pure qualitative studies in the field are also limited in their capacity. While these studies recognize that 'attitudes' are context dependent and responsive to factors within a particular sociocultural environment, they tend to be small-scale thus failing to produce generalisable conclusions. I would therefore advocate the utilization of mixed-method research designs which have the capacity to provide more powerful insights of individual attitudes and, by extension, the enactment of inclusive education. A recent attempt in this direction, was made by Engelbrecht and Savolainen (2018) who judiciously combined quantitative and qualitative elements within their comparative study of South African and Finish teachers' attitudes towards inclusion.

A third methodological observation worth mentioning concerns the lack of longitudinal research designs in the field. Indeed, most studies depict static situations offering

a snapshot of attitudes towards inclusion. I contend here that tracking attitudes over a significant period of time would reveal attitudinal changes and identify the factors producing such changes in either direction (positive or negative). Consequently, on the basis of such knowledge concerning attitudinal changes, specific steps could be taken so that positive attitudes towards inclusion can be achieved. Specifically, school-based inclusive interventions could be implemented with their effects evaluated through experimental research designs supplemented with qualitative evidence.

In conclusion, although there have been some notable research studies about teachers' and students' attitudes to date, I suggest that research in the field over the next decade still needs to address questions and problems in these areas. Far from viewing attitudes as immutable and inevitable, prospective researchers could pursue innovative research along the above-mentioned suggestions in order to produce results that have the potential to alter 'attitudes' and 'practices' in genuinely inclusive directions.

## 6.6 Concluding thoughts

This study has tried to capture the picture of Greek primary, mainstream teachers' attitudes towards inclusion, their self-efficacy perceptions for implementing inclusion in their mainstream classrooms. Furthermore, after implementing the peer tutoring programme in their classrooms participating teachers and students were asked to express their attitudes, beliefs and feelings emanating from their involvement in the peer tutoring programme.

Today in Greece all children have the right to attend the primary, mainstream school of their neighborhood. As a result, students with SEND are eligible to attend the mainstream school close to their homes. However, this does not by default mean that all children irrespectively of their needs are fully and effectively included in the mainstream schools. Mainstream teachers are called to meet all the academic and social needs of the diverse

student population entered the mainstream schools. As a result, their attitudes and self-efficacy perceptions are of great significance when trying to understand and elucidate the inclusive practice in Greece. Teachers' need for specialized on SEND training and their acquaintance with inclusive instructional arrangements for the support of students with SEND was reported as constant and important for participating teachers. Peer tutoring was offered as an alternative instructional procedure to foster the inclusion of students with SEND in mainstream, primary classrooms and schools. Through their involvement and active participation both teachers and students claimed to have enjoyed the procedures followed and that certain benefits were accumulated for the academic and social development of students with SEND.

Writing this thesis has encouraged me to reflect further on the notion of inclusion of students with SEND in education. Inclusive education has to be encouraged further by offering on-going support and training to mainstream teachers who are called to foster inclusion in practice in order to overcome the barriers that any child may encounter during their inclusion in the mainstream classrooms of their neighborhood's school. The aim and purposes of this thesis were limited to the inclusion of students identified as having SEND. However, I am fully aware that inclusion is a multi-dimensional phenomenon which does not regard only students with SEND, but also students from minority groups, immigrant children and children from different socio-economic backgrounds. Inclusion is a continuously on-going process which demands educational and pedagogical reforms in order to develop and improve the education offered to all students. Rather than seeing inclusion as a notion concerning solely educational contexts, inclusion in education lays the foundations for inclusion in society, in general.

The scope of this thesis was not to reach any concrete conclusion but rather to contribute to the discussion concerning inclusive policy and, specifically, inclusive practices



to foster the inclusion of students with SEND in the mainstream schools. Moreover, the basic concern was to provide teachers with instructional arrangements which are easy to be implemented by teachers and enjoyed by the students. However, it is of great significance to mention at that point that this peer tutoring programme is not considered a ‘recipe’ which can be implemented in any context, from any teacher and with the participation of any students. Careful consideration of the “ingredients” of this peer tutoring programme are needed to be adapted in order to meet and fit the needs of both participating teachers and students. Peer tutoring can be adopted by any teacher who is willing to work towards making mainstream classrooms meeting effectively the needs of each students and, at the same time, develop further the strengths of each student in the class.

## Appendices

### Appendix A: Cover letter to headteachers



**ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΙΑΣ**  
**ΠΑΙΔΑΓΩΓΙΚΟ ΤΜΗΜΑ ΕΙΔΙΚΗΣ ΑΓΩΓΗΣ**  
Ηλίας Αβραμίδης Επίκουρος Καθηγητής Π.Τ.Ε.Α.

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**Θέμα:** Συμμετοχή σε διδακτορική έρευνα

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Αγαπητέ Διευθυντή/τρια

Με την επιστολή αυτή θα θέλαμε να ζητήσουμε τη συμμετοχή του σχολείου σας σε μία διδακτορική έρευνα που διεξάγεται υπό την επίβλεψη μου στο Παιδαγωγικό Τμήμα Ειδικής Αγωγής του Πανεπιστημίου Θεσσαλίας από τη φοιτήτρια Αναστασία Τουλιά με τίτλο «Η διδασκαλία ομηλικών ως μέσο εφαρμογής της ένταξης παιδιών με ειδικές εκπαιδευτικές ανάγκες (ΕΕΑ): Διαδικασία και Αποτελεσματικότητα» με αριθμό αδείας από το Υπουργείο Παιδείας

Αναλογιζόμενοι το φόρτο εργασίας που έχουν οι συνάδελφοι εκπαιδευτικοί στη συγκεκριμένη χρονική περίοδο και προκειμένου να μην επιβαρύνουμε σημαντικά τα συμμετέχοντα σχολεία αποφασίσαμε να αναβάλλουμε κάποιες από τις προγραμματισμένες ερευνητικές δραστηριότητες μας για το επόμενο ακαδημαϊκό έτος. Ωστόσο, θα το εκτιμούσαμε ιδιαίτερα αν μεριμνούσατε για τη συμπλήρωση των ερωτηματολογίων που συνοδεύουν την παρούσα επιστολή από τους δασκάλους και ειδικούς παιδαγωγούς που εργάζονται στο σχολείο σας. Τα ερωτηματολόγια είναι ανώνυμα και αποσκοπούν στην καταγραφή των απόψεων των εκπαιδευτικών σχετικά με τη διδασκαλία ομηλικών ως μέσο ένταξης παιδιών με ΕΕΑ. Ένα μέλος της ερευνητικής ομάδας θα επικοινωνήσει μαζί σας προκειμένου να επισκεφτεί το σχολείο σας και να παραλάβει τα συμπληρωμένα ερωτηματολόγια.

Το υλικό που θα συλλεγεί στη συγκεκριμένη έρευνα είναι αυστηρά εμπιστευτικό, χρησιμοποιείται αποκλειστικά για ερευνητικούς σκοπούς και δεν δημοσιοποιείται. Σε καμία περίπτωση δεν πρόκειται να αποκαλυφθεί η ταυτότητα των συμμετεχόντων σχολείων.

Η ερευνητική ομάδα είναι στη διάθεσή σας για οποιαδήποτε περαιτέρω πληροφορία ή διευκρίνιση.

Ευχαριστούμε εκ των προτέρων για τη συγκατάθεσή σας.

Ο επιστημονικός Υπεύθυνος

Ηλίας Αβραμίδης  
Επίκουρος καθηγητής ΠΤΕΑ



**ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΙΑΣ**  
**ΠΑΙΔΑΓΩΓΙΚΟ ΤΜΗΜΑ ΕΙΔΙΚΗΣ ΑΓΩΓΗΣ**  
Αναστασία Τουλιά, Υποψήφια Διδάκτωρ

**Θέμα:** Συμμετοχή σε διδακτορική έρευνα

Αγαπητέ εκπαιδευτικέ,

Με την επιστολή αυτή θα θέλαμε να ζητήσουμε τη συμμετοχή σας στην έρευνα που διεξάγεται από το Παιδαγωγικό Τμήμα Ειδικής Αγωγής του Πανεπιστημίου Θεσσαλίας με τίτλο «Η διδασκαλία ομηλικών ως μέσο εφαρμογής της ένταξης παιδιών με ειδικές εκπαιδευτικές ανάγκες (ΕΕΑ): Διαδικασία και Αποτελεσματικότητα». Η έρευνα αποσκοπεί στην περιγραφή και στην ανάλυση των εκπαιδευτικών εμπειριών των μαθητών με και χωρίς εκπαιδευτικές ανάγκες, καθώς και των εκπαιδευτικών σε τάξεις που εφαρμόζεται η διδασκαλία ομηλικών. Οι τάξεις που μπορούν να συμμετάσχουν είναι η Δ', Ε' και Στ', και εφόσον διαθέτουν στο μαθητικό δυναμικό τους παιδιά με ΕΕΑ.

Αρχικά, κρίνουμε σκόπιμο να διευκρινήσουμε ότι η διδασκαλία ομηλικών είναι μία μορφή συνεργατικής μάθησης κατά την οποία η γνώση επιτυγχάνεται μέσω της συνεργασίας, της εξατομικευμένης διδασκαλίας και πρακτικής μεταξύ των μαθητών σε δυάδες. Κατά την προσέγγιση αυτή ο εκπαιδευτικός αναθέτει μία εκπαιδευτική δραστηριότητα σε δύο μαθητές, από τους οποίους ο ένας είναι τυπικής ανάπτυξης και ο άλλος έχει ΕΕΑ. Ο ένας μαθητής αναλαμβάνει το ρόλο του διδασκόμενου, ενώ οι ρόλοι συχνά εναλλάσσονται. Η παραπάνω προσέγγιση στοχεύει στην ανάπτυξη τόσο των ακαδημαϊκών όσο και των κοινωνικών δεξιοτήτων όλων των μαθητών.

Η διάρκεια της παρούσας έρευνας θα είναι για περίπου 5-6 εβδομάδες και η εφαρμογή της διδασκαλίας ομηλικών θα γίνεται δύο φορές την εβδομάδα, σε μέρα και ώρα που θα βολεύει το πρόγραμμά σας.

Κατά τη συμμετοχή σας, εφόσον το επιθυμείτε, στην έρευνα, θα ήταν χρήσιμο ΠΡΙΝ την εφαρμογή της διδασκαλίας ομηλικών να εξασφαλιστεί η γονική συγκατάθεση των συμμετεχόντων μαθητών. Στη συνέχεια, να συναντηθείτε με την ερευνήτρια προκειμένου να αποφασίσετε τις ενότητες της γλώσσας ή των μαθηματικών που θα θέλατε να εφαρμόσετε τη διδασκαλία ομηλικών, προκειμένου να ετοιμαστεί από την ερευνήτρια το κατάλληλο υλικό, αλλά και τις ώρες και μέρες που σας βολεύει να γίνει η εφαρμογή. Ακόμα, πριν ξεκινήσει η εφαρμογή θα πραγματοποιηθεί μια συνέντευξη μαζί σας διάρκειας περίπου 15-17 λεπτών. ΚΑΤΑ ΤΗ ΔΙΑΡΚΕΙΑ της εφαρμογής θα πραγματοποιηθούν παρατηρήσεις των ζευγαριών των μαθητών που συμμετέχουν από την ερευνήτρια. ΜΕΤΑ την ολοκλήρωση της εφαρμογής της διδασκαλίας ομηλικών θα πραγματοποιηθούν συνεντεύξεις τόσο με εσάς όσο και με τους μαθητές που συμμετείχαν (παιδί με ΕΕΑ και παιδί με το οποίο συνεργάστηκε), διάρκειας 15-17 λεπτών.

Τα αποτελέσματα της έρευνας θα ανακοινωθούν στο Υπουργείο Παιδείας, θα παρουσιαστούν σε ερευνητικά περιοδικά και θα συμβάλλουν στην επιμόρφωση εκπαιδευτικών γενικής και ειδικής εκπαίδευσης. Τα ονόματα των εκπαιδευτικών, των μαθητών και των σχολείων δεν θα αναφερθούν σε κανένα έγγραφο. Όλοι οι συμμετέχοντες (εκπαιδευτικοί και μαθητές) έχουν δικαίωμα άρνησης ή απόσυρσης από την έρευνα οποιαδήποτε στιγμή το επιθυμούν. Το υλικό που θα συλλεγεί στη συγκεκριμένη έρευνα είναι αυστηρά εμπιστευτικό, χρησιμοποιείται αποκλειστικά για ερευνητικούς σκοπούς και δε δημοσιοποιείται.

Είμαι στη διάθεσή σας για οποιαδήποτε περαιτέρω πληροφορία ή διευκρίνιση. Ευχαριστώ εκ των προτέρων για τη συγκατάθεσή σας.

Αναστασία Τουλιά

Υποψήφια Διδάκτωρ του Πανεπιστημίου Θεσσαλίας

## Appendix C: Consent form for teachers

### Υπεύθυνη Δήλωση Παροχής Συναίνεσης

Όνομα Ερευνήτριας: Τουλιά Αναστασία

Τίτλος Διδακτορικής Έρευνας: «Η Διδασκαλία Ομηλίκων ως μέσο εφαρμογής της ένταξης παιδιών με ειδικές εκπαιδευτικές ανάγκες: Διαδικασία και αποτελεσματικότητα»

Διαβεβαιώνω ότι:

- Είμαι ενημερωμένος/η για τον σκοπό, τις διαδικασίες και τη συμμετοχή μου στην παραπάνω έρευνα
- Γνωρίζω ότι η συμμετοχή μου περιλαμβάνει τη συμπλήρωση ενός ερωτηματολογίου
- Είμαι ενημερωμένος ότι η συμμετοχή μου είναι εθελοντική και μπορώ να αποχωρήσω από την παραπάνω έρευνα οποιαδήποτε στιγμή και χωρίς να δικαιολογηθώ
- Γνωρίζω ότι όλες οι προσωπικές μου πληροφορίες θα παραμείνουν απόρρητες και ότι η ερευνήτρια θα διατηρήσει την ανωνυμία μου
- Μπορώ να επικοινωνήσω με την ερευνήτρια για περισσότερες πληροφορίες
- Δέχομαι να συμμετάσχω στην παραπάνω έρευνα

Ημερομηνία .....

Υπογραφή .....



**ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΙΑΣ**  
**ΠΑΙΔΑΓΩΓΙΚΟ ΤΜΗΜΑ ΕΙΔΙΚΗΣ ΑΓΩΓΗΣ**  
Αναστασία Τουλιά, Υποψήφια Διδάκτωρ

**Θέμα:** Συμμετοχή σε διδακτορική έρευνα

Αγαπητοί γονείς,

Με την επιστολή αυτή θα θέλαμε να ζητήσουμε τη συγκατάθεσή σας για τη συμμετοχή του παιδιού σας στην έρευνα που διεξάγεται από το Παιδαγωγικό Τμήμα Ειδικής Αγωγής του Πανεπιστημίου Θεσσαλίας με τίτλο «Η διδασκαλία ομηλικών ως μέσο εφαρμογής της ένταξης παιδιών με ειδικές εκπαιδευτικές ανάγκες (ΕΕΑ): Διαδικασία και Αποτελεσματικότητα».

Η έρευνα αποσκοπεί στην περιγραφή και στην ανάλυση των εκπαιδευτικών εμπειριών των μαθητών που συμμετείχαν στη διδασκαλία ομηλικών.

Θα επιθυμούσαμε το παιδί σας να συμμετάσχει σε συνέντευξη που θα διαρκέσει 15-17 λεπτά και θα εμπεριέχει πολύ απλές ερωτήσεις για το πώς αντιλήφθηκε τη συνεργασία του με τον συμμαθητή του, που βοηθήθηκε και που δυσκολεύτηκε. Συγκεκριμένα, μία ερευνήτρια-εκπαιδευτικός από το Πανεπιστήμιο Θεσσαλίας θα επισκεφτεί το σχολείο του παιδιού σας και θα συζητήσει μαζί του για το πώς αντιλήφθηκε τους ρόλους και τις αρμοδιότητες τόσο τις δικές του όσο και του συμμαθητή του κατά τη συνεργασία τους, αν του αρέσει ο τρόπος συνεργασίας με τον συμμαθητή του και τέλος, αν θα ήθελε να συνεχίσει να συνεργάζεται με τον συμμαθητή του. Η συνέντευξη ΔΕ θα μαγνητοφωνηθεί.

Μέχρι σήμερα δεν υπάρχει δημοσιευμένη έρευνα που να αξιολογεί το πρόγραμμα της διδασκαλίας ομηλικών από τη σκοπιά των μαθητών και έτσι θεωρούμε ότι η συγκεκριμένη έρευνα θα συμβάλλει ουσιαστικά στη διεξαγωγή συμπερασμάτων αναφορικά με τους αποτελεσματικούς τρόπους εφαρμογής της.

Τα αποτελέσματα της έρευνας θα ανακοινωθούν στο Υπουργείο Παιδείας, θα παρουσιαστούν σε ερευνητικά περιοδικά και θα συμβάλλουν στην επιμόρφωση εκπαιδευτικών γενικής και ειδικής εκπαίδευσης. Τα ονόματα των μαθητών, καθώς και των σχολείων θα διατηρηθούν μυστικά και δεν θα αναφερθούν σε κανένα έγγραφο.

**ΤΟ ΥΛΙΚΟ ΠΟΥ ΘΑ ΣΥΛΛΕΓΕΙ ΣΤΗ ΣΥΓΚΕΚΡΙΜΕΝΗ ΕΡΕΥΝΑ ΕΙΝΑΙ ΑΥΣΤΗΡΑ ΕΜΠΙΣΤΕΥΤΙΚΟ, ΧΡΗΣΙΜΟΠΟΙΕΙΤΑΙ ΑΠΟΚΛΕΙΣΤΙΚΑ ΓΙΑ ΕΡΕΥΝΗΤΙΚΟΥΣ ΣΚΟΠΟΥΣ ΚΑΙ ΔΕΝ ΔΗΜΟΣΙΟΠΟΙΕΙΤΑΙ.**

Η έρευνα διεξάγεται με άδεια από το Υπουργείο Παιδείας

Η ερευνητική ομάδα είναι στη διάθεσή σας για οποιαδήποτε περαιτέρω πληροφορία ή διευκρίνιση.

Ευχαριστώ εκ των προτέρων για τη συγκατάθεσή σας.

Αναστασία Τουλιά

Υποψήφια Διδάκτωρ του Πανεπιστημίου Θεσσαλίας

Όνομα και Επώνυμο Γονέα: .....

Υπογραφή Γονέα:

.....

## Appendix E: Questionnaire

### Ερωτηματολόγιο Διδακτορικής Έρευνας

Σας ευχαριστώ που δεχθήκατε να συμμετάσχετε στη διδακτορική μου έρευνα με τίτλο «Η διδασκαλία ομηλικών ως μέσο εφαρμογής της ένταξης παιδιών με ειδικές εκπαιδευτικές ανάγκες (ΕΕΑ): Διαδικασία και Αποτελεσματικότητα». Οι απαντήσεις σας στις παρακάτω ερωτήσεις θα είναι ιδιαίτερα πολύτιμες, καθώς θα αποτυπωθούν ακριβέστερα οι απόψεις των εκπαιδευτικών πρωτοβάθμιας εκπαίδευσης σχετικά με τη διδασκαλία ομηλικών ως μέσο ένταξης παιδιών με ΕΕΑ. Θα σας παρακαλούσα να απαντήσετε με όσο το δυνατόν περισσότερη ειλικρίνεια, έτσι ώστε να αποσαφηνιστούν οι αντιλήψεις των εκπαιδευτικών σχετικά με τη διδασκαλία ομηλικών ως μέσο ένταξης παιδιών με ειδικές εκπαιδευτικές ανάγκες στις γενικές τάξεις δημοτικών σχολείων. Σας διαβεβαιώ ότι όλες οι απαντήσεις θα παραμείνουν αυστηρώς απόρρητες και θα διατηρηθεί η ανωνυμία σας. Εκτιμώ ειλικρινά το χρόνο και την προθυμία σας να συμπληρώσετε το παρακάτω ερωτηματολόγιο.

Αναστασία Τουλιά

Υποψήφια Διδάκτωρ του Πανεπιστημίου Θεσσαλίας

### ΔΗΜΟΓΡΑΦΙΚΑ ΣΤΟΙΧΕΙΑ

Φύλο	<input type="checkbox"/> Άνδρας <input type="checkbox"/> Γυναίκα			
Ηλικία	_____			
Μήνες / χρόνια συνολικής εκπαιδευτικής εμπειρίας	_____ χρόνια    _____ μήνες			
Εργάζομαι ως	<input type="checkbox"/> Εκπαιδευτικός Γενικής Τάξης	<input type="checkbox"/> Εκπαιδευτικός Παράλληλης Στήριξης	<input type="checkbox"/> Εκπαιδευτικός Τμήματος Ένταξης	
Σπουδές (συμπληρώστε όλα τα πτυχία που κατέχετε):	<input type="checkbox"/> Πτυχίο στη Γενική Αγωγή	<input type="checkbox"/> Πτυχίο στην Ειδική Αγωγή		
	<input type="checkbox"/> Μεταπτυχιακό στη Γενική Αγωγή	<input type="checkbox"/> Μεταπτυχιακό στην Ειδική Αγωγή		
	<input type="checkbox"/> Διδακτορικό στη Γενική Αγωγή	<input type="checkbox"/> Διδακτορικό στην Ειδική Αγωγή		
		<input type="checkbox"/> Επιμορφωτικό σεμινάριο 400 ωρών στην Ειδική Αγωγή		
Στην τάξη που εργάζομαι έχουν Παράλληλη Στήριξη (γράψε αριθμό)μαθητής/ές με ΕΑ.				
Τάξη μαθητή: _____		Αριθμός μαθητών στην τάξη: _____		
Στην τάξη συνδιδασκαλίας διδάσκω μαθητές που παρουσιάζουν:	<input type="checkbox"/> Αυτισμό υψηλής λειτουργικότητας	<input type="checkbox"/> Αυτισμό χαμηλής λειτουργικότητας	<input type="checkbox"/> Κώφωση/ Βαρηκοΐα	<input type="checkbox"/> Τύφλωση/ Προβλήματα όρασης
<input type="checkbox"/> Κινητικές αναπηρίες	<input type="checkbox"/> Μαθησιακές δυσκολίες/Δυσλεξία	<input type="checkbox"/> Νοητική Καθυστέρηση/ ανωριμότητα	<input type="checkbox"/> ΔΕΠΠΥ	<input type="checkbox"/> Άλλο. Τι; _____

### ΜΕΡΟΣ Α. ΠΑΙΔΑΓΩΓΙΚΗ ΤΗΣ ΕΝΤΑΞΗΣ

## **ΟΡΙΣΜΟΣ ΕΝΤΑΞΗΣ**

Η ένταξη αποτελεί εκπαιδευτική προσέγγιση που κατοχυρώνει το δικαίωμα της φοίτησης όλων των παιδιών, συμπεριλαμβανομένων όσων αντιμετωπίζουν ειδικές εκπαιδευτικές ανάγκες (ΕΕΑ), σε γενικά σχολεία. Για τους σκοπούς της παρούσας έρευνας, ο όρος «ένταξη» θα οριστεί ως η εκπαιδευτική πρακτική που επιτρέπει στους μαθητές με ΕΕΑ να φοιτούν και να λαμβάνουν ποιοτική εκπαίδευση μαζί με τους τυπικά αναπτυσσόμενους συμμαθητές τους σε γενικές τάξεις. Για την επίτευξη των παραπάνω στόχων, τόσο οι αρχές όσο και οι πρακτικές του γενικού σχολείου θα πρέπει να τροποποιηθούν για να ανταποκρίνονται αποτελεσματικότερα στις ανάγκες του κάθε παιδιού ξεχωριστά.

## **ΦΙΛΟΣΟΦΙΑ ΤΗΣ ΕΝΤΑΞΗΣ**

Επιλέξτε το βαθμό συμφωνίας με τις παρακάτω δηλώσεις.

Δηλώσεις	Διαφωνώ απόλυτα	Διαφωνώ	Ούτε διαφωνώ ούτε συμφωνώ	Συμφωνώ	Συμφωνώ απόλυτα
1. Οι μαθητές με ΕΕΑ έχουν το δικαίωμα να εκπαιδεύονται στο ίδιο τμήμα με τους τυπικά αναπτυσσόμενους συμμαθητές τους.	1	2	3	4	5
2. Η ένταξη παιδιών με ΕΕΑ στη γενική τάξη ΔΕΝ είναι επωφελής πρακτική για τους περισσότερους μαθητές τυπικής ανάπτυξης.	1	2	3	4	5
3. Είναι δύσκολο να διατηρηθεί η τάξη σε ένα τμήμα που περιλαμβάνει μαθητές με ΕΕΑ, μαθητές με ιδιαίτερες ικανότητες και ταλέντα και μαθητές μέσου επιπέδου.	1	2	3	4	5
4. Οι μαθητές με ΕΕΑ θα πρέπει με την πρώτη ευκαιρία να εκπαιδεύονται σε τμήματα γενικής εκπαίδευσης.	1	2	3	4	5
5. Η ένταξη μπορεί να είναι ωφέλιμη και για τους γονείς των μαθητών με ΕΕΑ.	1	2	3	4	5
6. Οι γονείς των μαθητών με ΕΕΑ προτιμούν να φοιτά το παιδί τους σε τμήματα γενικής εκπαίδευσης.	1	2	3	4	5
7. Οι περισσότεροι εκπαιδευτικοί ειδικής αγωγής δεν έχουν τις βασικές γνώσεις που είναι απαραίτητες για να εκπαιδεύσουν αποτελεσματικά τυπικά αναπτυσσόμενους μαθητές.	1	2	3	4	5
Δηλώσεις	Διαφωνώ	Διαφωνώ	Ούτε	Συμφωνώ	Συμφωνώ

	απόλυτα		διαφωνώ ούτε συμφωνώ		απόλυτα
8. Ο εκπαιδευτικός της γενικής τάξης ΔΕΝ είναι σε θέση να ανταπεξέλθει στις ατομικές ανάγκες των μαθητών με ΕΕΑ.	1	2	3	4	5
9. Πρέπει να ενημερωθούμε περισσότερο για τα αποτελέσματα της ενταξιακής εκπαίδευσης πριν αυτή εφαρμοστεί σε ευρεία κλίμακα.	1	2	3	4	5
10. Ο καλύτερος τρόπος για να ξεκινήσουμε να εκπαιδεύουμε τους μαθητές σε ενταξιακά εκπαιδευτικά περιβάλλοντα είναι απλώς να το επιχειρήσουμε.	1	2	3	4	5
11. Οι περισσότεροι μαθητές με ΕΕΑ συμπεριφέρονται σωστά σε ενταξιακά περιβάλλοντα μάθησης.	1	2	3	4	5
12. Είναι εφικτό να διδάσκονται μαθητές με ΕΕΑ, ιδιαίτερες ικανότητες και ταλέντα και μαθητές μέσου επιπέδου στην ίδια αίθουσα.	1	2	3	4	5

## ΕΦΑΡΜΟΓΗ ΤΗΣ ΕΝΤΑΞΗΣ

Επιλέξτε το βαθμό συμφωνίας με τις παρακάτω δηλώσεις

Δηλώσεις	Διαφωνώ απόλυτα	Διαφωνώ	Ούτε διαφωνώ ούτε συμφωνώ	Συμφωνώ	Συμφωνώ απόλυτα
1. Μπορώ να κάνω σαφείς στους μαθητές τις προσδοκίες μου για τη συμπεριφορά τους.	1	2	3	4	5
2. Είμαι σε θέση να ηρεμήσω έναν μαθητή που κάνει φασαρία.	1	2	3	4	5
3. Μπορώ να κάνω τους γονείς να νιώθουν άνετα να έρχονται στο σχολείο.	1	2	3	4	5
4. Μπορώ να στηρίζω τις οικογένειες στο πως να βοηθούν τα παιδιά τους να βελτιωθούν στο σχολείο.	1	2	3	4	5
5. Μπορώ να εκτιμήσω με ακρίβεια τι έχουν κατανοήσει οι μαθητές μου απ' όσα έχω διδάξει.	1	2	3	4	5
Δηλώσεις	Διαφωνώ	Διαφωνώ	Ούτε	Συμφωνώ	Συμφωνώ



	απόλυτα		διαφωνώ ούτε συμφωνώ		απόλυτα
6. Μπορώ να παρέχω τις κατάλληλες μαθησιακές προκλήσεις στους πολύ ικανούς μαθητές.	1	2	3	4	5
7. Νιώθω σίγουρος/η για την ικανότητα μου να παρεμποδίζω την ενοχλητική συμπεριφορά πριν αυτή συμβεί στην τάξη.	1	2	3	4	5
8. Νιώθω σίγουρος/η ότι έχω την ικανότητα να εμπλέκω τους γονείς των παιδιών με ΕΕΑ στις σχολικές τους δραστηριότητες.	1	2	3	4	5
9. Μπορώ να ελέγχω την ενοχλητική συμπεριφορά στην τάξη.	1	2	3	4	5
10. Νιώθω σίγουρος/η για το σχεδιασμό μαθησιακών δραστηριοτήτων για να καλύπτονται οι ατομικές ανάγκες των παιδιών με ΕΕΑ.	1	2	3	4	5
11. Είμαι σε θέση να κατευθύνω τα παιδιά να ακολουθούν τους κανόνες της τάξης.	1	2	3	4	5
12. Μπορώ να συνεργαστώ με άλλους επαγγελματίες (π.χ. ειδικούς εκπαιδευτικούς ή λογοθεραπευτές για το σχεδιασμό εκπαιδευτικών προγραμμάτων για μαθητές με ΕΕΑ.	1	2	3	4	5
13. Είμαι σε θέση να συνεργάζομαι με άλλους επαγγελματίες και προσωπικό (π.χ. βοηθούς, ειδικούς εκπαιδευτικούς) για τη διδασκαλία μαθητών με ειδικές εκπαιδευτικές ανάγκες μέσα στην τάξη.	1	2	3	4	5
14. Νιώθω σίγουρος/η ότι έχω την ικανότητα να κατευθύνω τους μαθητές να εργάζονται σε ζευγάρια ή μικρές ομάδες.	1	2	3	4	5
15. Μπορώ να χρησιμοποιήσω ποικίλες μεθόδους αξιολόγησης [για παράδειγμα, αξιολόγηση φακέλου (portfolio), τροποποιημένες δραστηριότητες αξιολόγησης, αξιολόγηση με βάση την επίδοση, κ.λπ.).	1	2	3	4	5
16. Νιώθω σίγουρος/η ότι έχω την ικανότητα να ενημερώνω άλλους που γνωρίζουν λίγα πράγματα για τους νόμους και την πολιτική σχετικά με την ένταξη των μαθητών με ΕΕΑ.	1	2	3	4	5
Δηλώσεις	Διαφωνώ απόλυτα	Διαφωνώ	Ούτε διαφωνώ ούτε	Συμφωνώ	Συμφωνώ απόλυτα

			συμφωνώ		
17. Νιώθω σίγουρος/η όταν αντιμετωπίζω μαθητές που ασκούν σωματική βία.	1	2	3	4	5
18. Είμαι σε θέση να παρέχω μια εναλλακτική εξήγηση ή ένα παράδειγμα όταν οι μαθητές είναι μπερδεμένοι.	1	2	3	4	5

## **ΜΕΡΟΣ Β – ΔΙΔΑΣΚΑΛΙΑ ΟΜΗΛΙΚΩΝ**

### **ΟΡΙΣΜΟΣ ΔΙΔΑΣΚΑΛΙΑΣ ΟΜΗΛΙΚΩΝ**

Η διδασκαλία ομηλικών είναι μια μορφή συνεργατικής μάθησης κατά την οποία η γνώση επιτυγχάνεται μέσω της συνεργασίας, της εξατομικευμένης διδασκαλίας και πρακτικής μεταξύ των μαθητών σε δυάδες ή σε μικρές ομάδες. Κατά την προσέγγιση αυτή, ο εκπαιδευτικός αναθέτει μία εκπαιδευτική δραστηριότητα σε δύο μαθητές, από τους οποίους ο ένας είναι τυπικής ανάπτυξης και ο άλλος έχει ΕΕΑ. Ο ένας μαθητής αναλαμβάνει το ρόλο του διδάσκοντα και ο άλλος το ρόλο του διδασκόμενου, ενώ οι ρόλοι συχνά εναλλάσσονται. Η παραπάνω προσέγγιση στοχεύει στην ανάπτυξη τόσο των ακαδημαϊκών όσο και των κοινωνικών δεξιοτήτων όλων των μαθητών.

### **ΣΧΕΤΙΚΑ ΜΕ ΤΗ ΔΙΔΑΣΚΑΛΙΑ ΟΜΗΛΙΚΩΝ**

1. Έχω εφαρμόσει στην τάξη μου τη διδασκαλία ομηλικών. Ναι  Όχι
2. Ενδιαφέρομαι να εφαρμόσω συστηματικά τη διδασκαλία ομηλικών στην τάξη μου.  
Ναι  Όχι
3. Ενδιαφέρομαι να εφαρμόσω συστηματικά τη διδασκαλία ομηλικών για να εντάξω αποτελεσματικά μαθητές με ΕΕΑ στην τάξη μου.  
Ναι  Όχι

### **ΠΙΘΑΝΑ ΟΦΕΛΗ ΤΗΣ ΔΙΔΑΣΚΑΛΙΑΣ ΟΜΗΛΙΚΩΝ ΓΙΑ ΤΟΥΣ ΜΑΘΗΤΕΣ**

Επιλέξτε το βαθμό συμφωνίας με τις παρακάτω δηλώσεις.

Δηλώσεις	Διαφωνώ απόλυτα	Διαφωνώ	Ούτε διαφωνώ ούτε συμφωνώ	Συμφωνώ	Συμφωνώ απόλυτα
1. Η διδασκαλία ομηλικών μπορεί να βελτιώσει τις ακαδημαϊκές δεξιότητες των παιδιών με ΕΕΑ.	1	2	3	4	5
2. Η διδασκαλία ομηλικών μπορεί να βελτιώσει τις ακαδημαϊκές δεξιότητες των παιδιών χωρίς ΕΕΑ.	1	2	3	4	5

3. Οι μαθητές με ΕΕΑ θα επωφεληθούν ακαδημαϊκά όταν αναλάβουν το ρόλο του διδάσκοντα-μαθητή κατά την εφαρμογή της διδασκαλίας ομηλικών.	1	2	3	4	5
4. Οι μαθητές χωρίς ΕΕΑ θα επωφεληθούν ακαδημαϊκά όταν αναλάβουν το ρόλο του διδάσκοντα-μαθητή κατά την εφαρμογή της διδασκαλίας ομηλικών.	1	2	3	4	5
5. Οι μαθητές με ΕΕΑ θα επωφεληθούν κοινωνικά όταν αναλάβουν το ρόλο του διδασκόμενου-μαθητή κατά την εφαρμογή της διδασκαλίας ομηλικών.	1	2	3	4	5
6. Οι μαθητές χωρίς ΕΕΑ θα επωφεληθούν κοινωνικά όταν αναλάβουν το ρόλο του διδασκόμενου-μαθητή κατά την εφαρμογή της διδασκαλίας ομηλικών.	1	2	3	4	5
7. Η διδασκαλία ομηλικών μπορεί να βελτιώσει τις κοινωνικές δεξιότητες των παιδιών με ΕΕΑ.	1	2	3	4	5
8. Η διδασκαλία ομηλικών μπορεί να βελτιώσει τις κοινωνικές δεξιότητες των παιδιών χωρίς ΕΕΑ.	1	2	3	4	5
9. Πιστεύω πως οι μαθητές με ΕΕΑ θα θεωρήσουν ευχάριστη τη διδασκαλία ομηλικών.	1	2	3	4	5
10. Πιστεύω πως οι μαθητές χωρίς ΕΕΑ θα θεωρήσουν ευχάριστη τη διδασκαλία ομηλικών.	1	2	3	4	5

### **ΠΙΘΑΝΑ ΟΦΕΛΗ ΓΙΑ ΤΟΥΣ ΕΚΠΑΙΔΕΥΤΙΚΟΥΣ**

Επιλέξτε το βαθμό συμφωνίας με τις παρακάτω δηλώσεις.

Δηλώσεις	Διαφωνώ απόλυτα	Διαφωνώ	Ούτε διαφωνώ ούτε συμφωνώ	Συμφωνώ	Συμφωνώ απόλυτα
1. Η εφαρμογή της διδασκαλίας ομηλικών στην τάξη δίνει τη δυνατότητα στον/στην εκπαιδευτικό να εξατομικεύσει τη διδασκαλία του/της.	1	2	3	4	5

2. Η εφαρμογή της διδασκαλίας ομηλικών στην τάξη δίνει τη δυνατότητα στον/στην εκπαιδευτικό να εντάξει αποτελεσματικότερα τους μαθητές με ΕΕΑ σε αυτήν.	1	2	3	4	5
3. Η εφαρμογή της διδασκαλίας ομηλικών στην τάξη δίνει τη δυνατότητα στον/στην εκπαιδευτικό να αξιολογήσει την πρόοδο του κάθε μαθητή εξατομικευμένα.	1	2	3	4	5
4. Η εφαρμογή της διδασκαλίας ομηλικών στην τάξη δίνει τη δυνατότητα στον/στην εκπαιδευτικό να περιορίσει προβλήματα συμπεριφοράς μεταξύ των μαθητών.	1	2	3	4	5
5. Η εφαρμογή της διδασκαλίας ομηλικών στην τάξη δίνει τη δυνατότητα στον/στην εκπαιδευτικό να καλύψει τους διδακτικούς του/της στόχους.	1	2	3	4	5
6. Η εφαρμογή της διδασκαλίας ομηλικών στην τάξη δίνει τη δυνατότητα στον/στην εκπαιδευτικό να καλύψει περισσότερες διδακτικές ενότητες.	1	2	3	4	5

### **ΕΦΑΡΜΟΓΗ ΤΗΣ ΔΙΔΑΣΚΑΛΙΑΣ ΟΜΗΛΙΚΩΝ**

Πιστεύω πως θα μπορούσα να εκπληρώσω τους παρακάτω ρόλους κατά το σχεδιασμό και την εφαρμογή της διδασκαλίας ομηλικών στην τάξη μου

Δηλώσεις	Διαφωνώ απόλυτα	Διαφωνώ	Ούτε διαφωνώ ούτε συμφωνώ	Συμφωνώ	Συμφωνώ απόλυτα
1. Να επιλέξω τα ζευγάρια των μαθητών που θα συμμετάσχουν στη διδασκαλία ομηλικών.	1	2	3	4	5
2. Να καθορίσω τις διδακτικές ενότητες και τις διδακτικές ώρες που θα λάβει χώρα η διδασκαλία ομηλικών.	1	2	3	4	5
3. Να εκπαιδεύσω τους μαθητές, ώστε να ανταποκριθούν στους ρόλους τους.	1	2	3	4	5
4. Να παρακολουθώ τη διδασκαλία ομηλικών κατά την εφαρμογή της.	1	2	3	4	5

5. Να υποστηρίξω τους διδάσκοντες-μαθητές σε τυχόν δυσκολίες που θα αντιμετωπίσουν.	1	2	3	4	5
6. Να ελέγχο την όλη διαδικασία.	1	2	3	4	5
7. Να εκτιμήσω την αποτελεσματικότητα της διδασκαλίας ομηλικών τόσο για τους διδάσκοντες-μαθητές όσο και για τους διδασκόμενους-μαθητές.	1	2	3	4	5

### **ΠΡΟΒΛΗΜΑΤΑ/ΔΥΣΚΟΛΙΕΣ-ΠΡΟΤΑΣΕΙΣ**

1. Πιστεύω πως θα υπάρξουν δυσκολίες στο σχεδιασμό και στην εφαρμογή της διδασκαλίας ομηλικών στην τάξη μου. Ναι  Όχι

Αν ναι, ιεραρχήστε τις δυσκολίες που πιστεύετε ότι θα υπάρξουν ξεκινώντας από την πιο σημαντική.

- α)  
.....  
β)  
.....  
γ)  
.....

2. Θα μπορούσατε να σκεφτείτε προτεινόμενες προτάσεις για την αντιμετώπιση των τυχόν παραπάνω δυσκολιών που αναφέρατε κατά την εφαρμογή της διδασκαλίας ομηλικών στην τάξη σας, που αναφέρατε;

- α)  
.....  
β)  
.....  
γ)  
.....

### ΦΙΛΟΣΟΦΙΑ ΤΗΣ ΕΝΤΑΞΗΣ

1. Αισθάνεστε πως το επάγγελμά σας έγινε πιο απαιτητικό μετά τη θεσμοθέτηση της ένταξης παιδιών με ΕΕΑ στη γενική τάξη;
2. Έχετε υιοθετήσει πρακτικές ένταξης στην τάξη σας;
3. Αν ναι, τι είδους;

### ΣΧΕΤΙΚΑ ΜΕ ΤΗ ΔΙΔΑΣΚΑΛΙΑ ΟΜΗΛΙΚΩΝ

1. Γνωρίζετε τι είναι η διδασκαλία ομηλικών και ποιους αφορά;
2. Έχετε εφαρμόσει τη διδασκαλία ομηλικών στην τάξη σας;
3. Αν ναι, ανάμεσα σε ποιους μαθητές και με ποιο σκοπό;
4. Θα θέλατε να εφαρμόσετε συστηματικά στο μέλλον τη διδασκαλία ομηλικών στην τάξη σας ως μέσο ένταξης μαθητών με ΕΕΑ;

### ΠΡΟΒΛΗΜΑΤΑ/ΔΥΣΚΟΛΙΕΣ-ΠΡΟΤΑΣΕΙΣ

1. Πιστεύετε πως θα υπάρξουν δυσκολίες στο σχεδιασμό και στην εφαρμογή της διδασκαλίας ομηλικών στην τάξη σας;
2. Αν ναι, ιεραρχήστε τις δυσκολίες που πιστεύετε ότι θα υπάρξουν ξεκινώντας από την πιο σημαντική.
3. Θα μπορούσατε να σκεφτείτε προτεινόμενες προτάσεις για την αντιμετώπιση των τυχόν παραπάνω δυσκολιών που αναφέρατε κατά την εφαρμογή της διδασκαλίας ομηλικών στην τάξη σας;

Appendix G: Teachers' interview schedule-Cycle B of the action research project

ΠΙΘΑΝΑ ΩΦΕΛΗ ΤΗΣ ΔΙΔΑΣΚΑΛΙΑΣ ΟΜΗΛΙΚΩΝ ΓΙΑ ΤΟΥΣ ΜΑΘΗΤΕΣ

1. Τι ωφέλη πιστεύετε πως θα αποκομίσουν οι μαθητές με ΕΕΑ από την εφαρμογή της διδασκαλίας ομηλικών;
2. Τι ωφέλη πιστεύετε πως θα αποκομίσουν οι μαθητές τυπικής ανάπτυξης από την εφαρμογή της διδασκαλίας ομηλικών;

ΠΙΘΑΝΑ ΩΦΕΛΗ ΤΗΣ ΔΙΔΑΣΚΑΛΙΑΣ ΟΜΗΛΙΚΩΝ ΓΙΑ ΤΟΥΣ ΕΚΠΑΙΔΕΥΤΙΚΟΥΣ

1. Τι ωφέλη πιστεύετε πως θα αποκομίσετε εσείς από την εφαρμογή της διδασκαλίας ομηλικών στην τάξη σας;

ΑΥΤΟΑΠΟΛΕΤΕΣΜΑΤΙΚΟΤΗΤΑ ΤΩΝ ΕΚΠΑΙΔΕΥΤΙΚΩΝ

1. Πιστεύετε πως χρειάζεστε πρόσθετη επιμόρφωση προκειμένου να σχεδιάσετε και να εφαρμόσετε τη διδασκαλία ομηλικών στην τάξη σας;
2. Αν ναι, ιεραρχήστε τις δεξιότητες που θα θέλατε να αποκτήσετε ξεκινώντας από την πιο σημαντική;

ΦΙΛΟΣΟΦΙΑ ΤΗΣ ΕΝΤΑΞΗΣ

1. Πιστεύετε πως είναι εφικτό να διδάσκονται στην ίδια τάξη μαθητές με ΕΕΑ και μαθητές τυπικής ανάπτυξης;

ΣΧΕΤΙΚΑ ΜΕ ΤΗ ΔΙΔΑΣΚΑΛΙΑ ΟΜΗΛΙΚΩΝ

1. Ύστερα από την εφαρμογή της διδασκαλίας ομηλικών στην τάξη σας, πιστεύετε πως μπορεί να λειτουργήσει αποτελεσματικά σαν πρακτική ένταξης μαθητών με ΕΕΑ στη γενική τάξη;
2. Ανάμεσα σε ποιους μαθητές εφαρμόσατε τη διδασκαλία ομηλικών;
3. Πόσοι μαθητές συμμετείχαν;
4. Πόσο χρόνο διήρκεσε;
5. Θα θέλατε να εφαρμόσετε συστηματικά στο μέλλον τη διδασκαλία ομηλικών στην τάξη σας ως μέσο ένταξης μαθητών με ΕΕΑ;

ΩΦΕΛΗ ΤΗΣ ΔΙΔΑΣΚΑΛΙΑΣ ΟΜΗΛΙΚΩΝ ΓΙΑ ΤΟΥΣ ΜΑΘΗΤΕΣ

1. Υπήρξαν ακαδημαϊκά οφέλη για τους μαθητές με ΕΕΑ από την εφαρμογή της διδασκαλίας ομηλικών;
2. Υπήρξαν κοινωνικά οφέλη για τους μαθητές με ΕΕΑ από την εφαρμογή της διδασκαλίας ομηλικών;
3. Υπήρξαν ακαδημαϊκά οφέλη για τους μαθητές τυπικής ανάπτυξης από την εφαρμογή της διδασκαλίας ομηλικών;
4. Υπήρξαν κοινωνικά οφέλη για τους μαθητές τυπικής ανάπτυξης από την εφαρμογή της διδασκαλίας ομηλικών;

ΩΦΕΛΗ ΤΗΣ ΔΙΔΑΣΚΑΛΙΑΣ ΟΜΗΛΙΚΩΝ ΓΙΑ ΤΟΥΣ ΕΚΠΑΙΔΕΥΤΙΚΟΥΣ



1. Υπήρξαν ωφέλη για εσάς από την εφαρμογή της διδασκαλίας ομηλικών;  
(εξατομίκευση της διδασκαλίας, αποτελεσματικότερη ένταξη, εξατομικευμένη αξιολόγηση, διαχείριση προβλημάτων συμπεριφοράς, κάλυψη διδακτικών στόχων, κάλυψη διδακτικών ενοτήτων)

#### ΑΥΤΟΑΠΟΤΕΛΕΣΜΑΤΙΚΟΤΗΤΑ ΤΩΝ ΕΚΠΑΙΔΕΥΤΙΚΩΝ

1. Πιστεύετε πως χρειάζεστε περισσότερη επιμόρφωση προκειμένου να σχεδιάσετε και να εφαρμόσετε τη διδασκαλία ομηλικών στην τάξη σας;
2. Αν ναι, ιεραρχήσετε τις δεξιότητες που θα θέλατε να αποκτήσετε ξεκινώντας από την πιο σημαντική;
3. Ποιος πιστεύετε πως είναι ο καλύτερος τρόπος για να αποκτήσετε τις παραπάνω δεξιότητες; (σεμινάρια, συνέχιση σπουδών, εσωτερική επιμόρφωση, εξωτερική επιμόρφωση)
4. Ποιος ήταν ο πιο απαιτητικός ρόλος που αναλάβατε κατά το σχεδιασμό και την εφαρμογή της διδασκαλίας ομηλικών; (επιλογή ζευγαριών, καθορισμός των διδακτικών ενοτήτων και διδακτικών ωρών, παρακολούθηση της διδασκαλίας ομηλικών κατά την εφαρμογή της, υποστήριξη των διδασκόντων-μαθητών σε δυσκολίες που αντιμετώπισαν, έλεγχος της όλης διαδικασίας, εκτίμηση της αποτελεσματικότητας της διδασκαλίας ομηλικών τόσο για τους διδάσκοντες-μαθητές όσο και για τους διδασκόμενους-μαθητές)

#### ΠΡΟΒΛΗΜΑΤΑ-ΔΥΣΚΟΛΙΕΣ/ ΠΡΟΤΑΣΕΙΣ

1. Υπήρξαν δυσκολίες κατά τον σχεδιασμό της διδασκαλίας ομηλικών;
2. Υπήρξαν δυσκολίες κατά την εφαρμογή της διδασκαλίας ομηλικών;
3. Ποια πιστεύετε πως ήταν η πιο σημαντική δυσκολία σε κάθε μία από τις παραπάνω περιπτώσεις;
4. Πως μπορούν, κατά τη γνώμη σας, να αντιμετωπιστούν οι παραπάνω δυσκολίες;

## Appendix I: Students' interview schedule

### Μαθητές τυπικής ανάπτυξης

### Μαθητές με ΕΕΑ

#### Η κατανόηση της διδασκαλίας ομηλίκων από τους μαθητές

1. Μπορείς να μου μιλήσεις για την εμπειρία σου; Σου άρεσε;
2. Για ποιο λόγο πιστεύεις πως συνεργάστηκες με τον συμμαθητή σου αυτό το διάστημα;

#### Περιγραφή ρόλων/ αρμοδιοτήτων των μαθητών

1. Θα μπορούσες να μου περιγράψεις πως συνεργάστηκες με τον συμμαθητή σου;
2. Θα μπορούσες να μου περιγράψεις την εμπειρία σου ως διδάσκοντας-μαθητής;
3. Πιστεύεις ότι είχατε τον ίδιο ρόλο με τον συμμαθητή σου;
4. Τι έκανες όσο δουλεύατε μαζί;
5. Ο διδάσκοντας-μαθητής σου σε βοήθησε;
6. Ο διδάσκοντας-μαθητής σου σου έδινε σημασία;
7. Ο συμμαθητής σου σου έδινε σημασία;
8. Ο διδάσκοντας-μαθητής σου σου έδινε αρκετό χρόνο για να ασχοληθείς με τις ασκήσεις σου;
9. Ο διδάσκοντας-μαθητής σου σου έλεγε αν είναι σωστά ή λάθος οι ασκήσεις σου;
10. Ο διδάσκοντας-μαθητής σου σου έλυνε τις όποιες απορίες είχες;
11. Ο διδάσκοντας-μαθητής σου σε ενθαρρύνε;

#### Αποτίμηση του ρόλου του κάθε μαθητή

1. Σου άρεσε ο τρόπος με τον οποίο δούλεψες με τον συμμαθητή σου;
2. Δυσκολεύτηκες κάπου;
3. Αν ναι, ζήτησες βοήθεια από κάποιον; (εκπαιδευτικό ή άλλο μαθητή)
4. Θα προτιμούσες να συνεργαζόσουν με διαφορετικό τρόπο με τον συμμαθητή σου;
5. Θα ήθελες ο διδάσκοντας-μαθητής να κάνει κάτι άλλο που θα σε βοηθούσε περισσότερο; Αν ναι, τι είναι αυτό;
6. Σου άρεσε που ήσουν διδάσκοντας-μαθητής; Γιατί;
7. Πώς πιστεύεις πως μπορείς να προετοιμαστείς καλύτερα για αυτόν τον ρόλο που είχες;

Αξιολόγηση της αποτελεσματικότητας της διδασκαλίας ομηλίκων από την πλευρά των μαθητών

1. Τι περίμενες ότι θα κάνεις όταν έμαθες ότι θα είσαι διδάσκοντας-μαθητής;
2. Τι περίμενες ότι θα κάνεις όταν έμαθες ότι θα είσαι διδασκόμενος-μαθητής;
3. Πιστεύεις πως έμαθες τα μαθήματά του καλύτερα ή όχι όσο δούλευες μαζί με τον συμμαθητή σου;
4. Ήσασταν φίλοι με τον συμμαθητή σου πριν ξεκινήσετε να δουλεύετε μαζί στο μάθημα; Παίζατε μαζί στο διάλειμμα;
5. Τώρα είστε φίλοι; Παίζετε μαζί στο διάλειμμα;
6. Θα ήθελες να συνεχίσεις να δουλεύεις με αυτόν τον τρόπο με τον συμμαθητή σου και του χρόνου;
7. Πώς ένιωσες όταν έμαθες ότι θα συνεργαζόσουν με τον συγκεκριμένο συμμαθητή σου, κατά τη διάρκεια της συνεργασίας σας και στο τέλος; (για την απάντηση στη συγκεκριμένη ερώτηση οι μαθητές θα επιλέγουν εικόνες-πρόσωπα με διάφορα συναισθήματα)

8. Ο συμμαθητής σου έμαθε αυτά στα οποία τον βοήθησες;
9. Σου άρεσε που διδάχθηκες από τον συμμαθητή σου;
10. Σου άρεσε που δίδασκες τον συμμαθητή σου;
11. Σου φάνηκε πιο ενδιαφέρον το μάθημα από τη στιγμή που άρχισες να συνεργάζεσαι με τον συμμαθητή σου;
12. Ποιον προτιμάς να σε διδάσκει; Τον δάσκαλο ή τον συμμαθητή σου;
13. Θέλεις να αλλάξει κάτι στον τρόπο που έγινε η διδασκαλία έτσι ώστε να είναι καλύτερη για εσένα;
14. Ήταν εύκολο για σένα στην αρχή να συνεργαστείς με τον συμμαθητή σου;
15. Πόσο χρόνο σου πήρε για να νιώσεις άνετα με τον συμμαθητή σου;
16. Πώς ένιωσες που αντί να σε διδάσκει ο δάσκαλος σε δίδασκε ο συμμαθητής σου;
17. Τι πιστεύεις πως κέρδισες από τη διδασκαλία ομηλίκων;
18. Πώς ένιωσες όταν κλήθηκες να αξιολογήσεις τις απαντήσεις του συμμαθητή σου;
19. Πιστεύεις πως βοηθήθηκε ο συμμαθητή σου;
20. Σου αρέσει που πέρασες χρόνο με τον συμμαθητή σου; Γιατί;
21. Χρησιμοποίησε μία λέξη για να περιγράψεις την εμπειρία σου.
22. Τι σου άρεσε περισσότερο;
23. Τι σου άρεσε λιγότερο;
24. Έμαθες κάτι για σένα μέσα από αυτό;
25. Πιστεύεις πως μετά από αυτό θα μπορείς να βοηθάς και άλλους συμμαθητές σου;
26. Έμαθες κάτι από τον συμμαθητή σου;
27. Έκανε κάτι ο συμμαθητής σου που σε έκανε να νιώσεις άβολα;
28. Άλλαξαν τα συναισθήματά σου απέναντι στους συμμαθητές σου που αντιμετωπίζουν κάποιες δυσκολίες στα μαθήματα;
29. Πόσο δύσκολο ήταν να είσαι διδάσκοντας-μαθητής;

30. Σε βοήθησε κάποιος να είσαι διδάσκοντας-μαθητής;

31. Ανησύχησες ότι θα έχανες τα μαθήματά σου όσο καιρό ήσουν διδάσκοντας-μαθητής;

32. Πόσο καιρό θα μπορούσες να είσαι διδάσκοντας-μαθητής;

## References

- Ahmed, M., Sharma, U., & Deppeler, J. (2012). Variables affecting teachers' attitudes towards inclusive education in Bangladesh. *Journal of Research in Special Educational Needs, 12*(3), 132-140.
- Ainscow, M. (2010). Achieving excellence and equity: reflections on the development of practices in one local district over 10 years. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice, 21*(1), 75-92.
- Ainscow, M., Booth, T., & Dyson, A. (2006). Inclusion and the standards agenda: negotiating policy pressures in England. *International Journal of Inclusive Education, 10*(4-5), 295-308.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organisational Behavior and Human Decision Processes, 50*(2), 179-211.
- Al Otaiba, S., Schatschneider, C., & Silverman, E. (2005). Tutor-assisted intensive learning strategies in kindergarten: How much is enough?. *Exceptionality, 13*(4), 195-208.
- Alghazo, E.M., & Naggar Gaad, E.E. (2004). General education teachers in the United Arab Emirates and their acceptance of the inclusion of students with disabilities. *British Journal of Special Education, 31*(2), 94-99.
- Algozzine, B., Marr, M. B., Kavel, R. L., & Dugan, K. K. (2009). Using peer coaches to build oral reading fluency. *Journal of Education for Students Placed at Risk, 14*(3), 256-270.
- Allan, J., & Brown, S. (2001). Special Schools and Inclusion. *Educational Review, 53*(2), 199-207.

- Allor, J. H., Fuchs, D., & Mathes, P. G. (2001). Do students with and without lexical retrieval weaknesses respond differently to instruction?. *Journal of Learning Disabilities, 34*(3), 264-275.
- Amr, M., Al-Natour, M., Al-Abdallat, B., & Alkhamra, H. (2016). Primary school teachers' knowledge, attitudes and views on barriers to inclusion in Jordan. *International Journal of Special Education, 31*(1), 67-77.
- Andres, L. (2012). *Designing and Doing Survey Research*. London: Sage.
- Armstrong, A.C., Armstrong, D., & Spandagou, I. (2010). *Inclusive Education: International Policy and Practice*. London: Sage Publications Ltd.
- Asaro-Saddler, K., & Bak, N. (2014). Persuasive writing and self-regulation training for writers with autism spectrum disorders. *The Journal of Special Education, 48*(2), 92-105.
- Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational psychology, 20*(2), 191-211.
- Avramidis, E., & Kalyva, E. (2007). The influence of teaching experience and professional development on Greek teachers' attitudes towards inclusion. *European Journal of Special Needs Education, 22*(4), 367-389.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: a review of the literature. *European journal of special needs education, 17*(2), 129-147.
- Avramidis, E., & Norwich, B. (2016). Special Educational Needs: The State of Research from Methodological Pluralism to Pluralistic Research Progress. In Peer, L., & Reid, G. (Eds.) *Special Educational Needs. A Guide for Inclusive Practice* (pp.29-46). London: Sage.

- Ayvazo, S., & Aljadeff-Abergel, E. (2014). Classwide peer tutoring for elementary and high school students at risk: listening to students' voices. *Support for Learning, 29*(1), 76-92.
- Bandura, A. (1977). Self- efficacy: Towards a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bar-Eli, N., Bar-Eli, M., Tenenbaum, G., & Forlin, C. (1998). The tutoring process and its manifestation in the classroom behaviour of tutors and tutees. *British Educational Research Journal, 24*(3), 283-300.
- Barbas, G., Birbili, M., Stagiopoulos, P., & Tzivinikou, S. (2006). A pilot study of factors affecting the process of integration in Greek nursery schools. *European Journal of Special Needs Education, 21*(2), 217-226.
- Barton-Arwood, S. M., Wehby, J. H., & Falk, K. B. (2005). Reading instruction for elementary-age students with emotional and behavioral disorders: Academic and behavioral outcomes. *Exceptional Children, 72*(1), 7-27.
- Batsiou, S., Bebetsos, E., Panteli, P., & Antoniou, P. (2008). Attitudes and intention of Greek and Cypriot primary education teachers towards teaching pupils with special educational needs in mainstream schools. *International Journal of Inclusive Education, 12*(2), 201–219.
- Beirne-Smith, M. (1991). Peer tutoring in arithmetic for children with learning disabilities. *Exceptional children, 57*(4), 330-337.
- Bell, J., & Opie, C. (2002). *Learning from Research: Getting more from your data*. Buckingham: Open University Press.
- BERA. (2011). *Ethical Guidelines for Educational Research*. London: British Educational Research Association.



- Berghmans, I., Michiels, L., Salmon, S., Dochy, F., & Struyven, K. (2014). Directive versus facilitative peer tutoring? A view on students' appraisal, reported learning gains and experiences within two differently-tutored learning environments. *Learning Environments Research*, 17(3), 437-459.
- Blamires, M., & Moore, J. (2004). *Support services and Mainstream Schools: A guide for working together*. London: David Fulton Publishers.
- Bond, R., & Castagnera, E. (2006). Peer supports and inclusive education: An underutilized resource. *Theory into Practice*, 45(3), 224-229.
- Borisov, C., & Reid, G. (2010). Students with intellectual disabilities acting as tutors: an interpretative phenomenological analysis. *European Journal of Special Needs Education*, 25(3), 295-309.
- Bouzakis, S., & Berdousi, E. (2008). The educational argumentation of the Hellenic political forces on special education in the 1913, 1929, 1964, and 1985 reforms. *Educational Research and Reviews*, 3(2), 94-100.
- Bowman-Perrott, L. (2009). Classwide peer tutoring: An effective strategy for students with emotional and behavioral disorders. *Intervention in School and Clinic*, 44(5), 259-267.
- Bowman-Perrott, L., Burke, M. D., Zhang, N., & Zaini, S. (2014). Direct and collateral effects of peer tutoring on social and behavioral outcomes: A meta-analysis of single-case research. *School Psychology Review*, 43(3), 260-285.
- Bowman-Perrott, L., Davis, H., Vannest, K., Williams, L., Greenwood, C., & Parker, R. (2013). Academic benefits of peer tutoring: A meta-analytic review of single-case research. *School psychology review*, 42(1), 39-55.
- Bowman-Perrott, L. J., Greenwood, C. R., & Tapia, Y. (2007). The efficacy of CWPT used in secondary alternative school classrooms with small teacher/pupil ratios and

- students with emotional and behavioral disorders. *Education and Treatment of Children*, 30(3), 65-87.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. London: Sage.
- Bradshaw, K. (2009). Teachers' attitudes and concerns towards integrating students with special needs in regular classrooms: A United Arab Emirates perspective. *The Journal of the International Association of Special Education*, 10(1), 49-55.
- Braine, M. E., & Parnell, J. (2011). Exploring student's perceptions and experience of personal tutors. *Nurse education today*, 31(8), 904-910.
- Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children*, 71(2), 195-207.
- Brewer, R. D., Reid, M. S., & Rhine, B. G. (2003). Peer coaching: Students teaching to learn. *Intervention in School and Clinic*, 39(2), 113-126.
- Brigham, F. J., Scruggs, T. E., & Mastropieri, M. A. (2011). Science education and students with learning disabilities. *Learning Disabilities Research & Practice*, 26(4), 223-232.
- Burgess, A., Dornan, T., Clarke, A. J., Menezes, A., & Mellis, C. (2016). Peer tutoring in a medical school: perceptions of tutors and tutees. *BMC medical education*, 16(1), 85-92.
- Burks, M. (2004). Effects of classwide peer tutoring on the number of words spelled correctly by students with LD. *Intervention in School and Clinic*, 39(5), 301-304.
- Burns, E. (2006). Pause, prompt and praise—peer tutored reading for pupils with learning difficulties. *British Journal of Special Education*, 33(2), 62-67.
- Burton, N., Brundrett, M., & Jones, M. (2008). *Doing Your Education Research Project*. London: Sage.

- Cagran, B., & Schmidt, M. (2011). Attitudes of Slovene teachers towards the inclusion of pupils with different types of special needs in primary school. *Educational Studies*, 37(2), 171-195.
- Calhoon, M. B. (2005). Effects of a peer-mediated phonological skill and reading comprehension program on reading skill acquisition for middle school students with reading disabilities. *Journal of learning disabilities*, 38(5), 424-433.
- Calhoon, M. B., & Fuchs, L. S. (2003). The effects of peer-assisted learning strategies and curriculum-based measurement on the mathematics performance of secondary students with disabilities. *Remedial and Special Education*, 24(4), 235-245.
- Carter, E. W., Moss, C. K., Asmus, J., Fesperman, E., Cooney, M., Brock, M. E., Lyons, G., Huber, H.B., & Vincent, L. B. (2015). Promoting inclusion, social connections, and learning through peer support arrangements. *Teaching Exceptional Children*, 48(1), 9-18.
- Cervantes, C. M., Lieberman, L. J., Magnessio, B., & Wood, J. (2013). Peer tutoring: Meeting the demands of inclusion in physical education today. *Journal of Physical Education, Recreation & Dance*, 84(3), 43-48.
- Cheng, P. W., Luk, S. S., & Pang, Y. S. (2009). Literacy Enhancement and Peer Support (LEAPS): Prevention and Intervention of Reading Difficulties. *Journal of Youth Studies*, 12(2), 87-100.
- Cheng, Y. C., & Ku, H. Y. (2009). An investigation of the effects of reciprocal peer tutoring. *Computers in Human Behavior*, 25(1), 40-49.
- Clemenz, S. E. (2002). The Effects of Peer Tutoring on the Attitudes of Nondisabled Peers, *ERIC Document 309 123*, 1-39.
- Clough, P. (1998). *Managing Inclusive Education: From Policy to Experience*. London: Paul Chapman Publishing Ltd.

- Clough, P., & Lindsay, G. (1991). *Integration and the Support Service*. Slough: NFER.
- Cohen, J. (1986). Theoretical considerations of peer tutoring. *Psychology in the Schools*, 23(2), 175-186.
- Cohen, L., & Manion, L. (1994). *Surveys: Improving Educational Management through Research and Consultancy*. London: Paul Chapman Publishing.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education*. Abingdon: Routledge.
- Creswell, J. W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: University of Nebraska–Lincoln.
- CSIE. Booth, T., & Ainscow, M. (2002). *Index for Inclusion: developing learning and participation in schools*. Bristol: CSIE.
- De Backer, L., Van Keer, H., & Valcke, M. (2012). Exploring the potential impact of reciprocal peer tutoring on higher education students' metacognitive knowledge and regulation. *Instructional science*, 40(3), 559-588.
- De Backer, L., Van Keer, H., & Valcke, M. (2014). Socially shared metacognitive regulation during reciprocal peer tutoring: identifying its relationship with students' content processing and transactive discussions. *Instructional Science*, 43(3), 323-344.
- De Boer, A., Pijl, J., & Minnaert, A. (2011). Regular primary schoolteachers' attitudes towards inclusive education: a review of the literature. *International Journal of Inclusive Education*, 15(3), 331-353.
- Delquadri, J., Greenwood, C. R., Whorton, D., Carta, J. J., & Hall, R. V. (1986). Classwide peer tutoring. *Exceptional children*, 52(6), 535-542.
- Denscombe, M. (2010). *The Good Research Guide: For small-scale social research projects*. Berkshire: Open University Press.

- Department for Education and Employment. (DfEE). (2001). *Inclusive Schooling: Children with Special Educational Needs*. [online]. Available from: [https://www.education.gov.uk/consultations/downloadableDocs/45\\_1.pdf](https://www.education.gov.uk/consultations/downloadableDocs/45_1.pdf) [Accessed on 29 September, 2019].
- Donohue, D.K., & Bornman, J. (2015). South African teachers' attitudes toward the inclusion of learners with different abilities in mainstream classrooms. *International Journal of Disability, Development and Education*, 62(1), 42-59.
- Dufrene, B. A., Noell, G. H., Gilbertson, D. N., & Duhon, G. J. (2005). Monitoring implementation of reciprocal peer tutoring: Identifying and intervening with students who do not maintain accurate implementation. *School Psychology Review*, 34(1), 74-86.
- Dufrene, B. A., Reisener, C. D., Olmi, D. J., Zoder-Martell, K., McNutt, M. R., & Horn, D. R. (2010). Peer tutoring for reading fluency as a feasible and effective alternative in response to intervention systems. *Journal of Behavioral Education*, 19(3), 239-256.
- DuPaul, G. J., Ervin, R. A., Hook, C. L., & McGoey, K. E. (1998). Peer tutoring for children with attention deficit hyperactivity disorder: Effects on classroom behavior and academic performance. *Journal of applied behavior analysis*, 31(4), 579-592.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.
- Elbaum, B., Vaughn, S., Hughes, M., & Moody, S. W. (1999). Grouping practices and reading outcomes for students with disabilities. *Exceptional children*, 65(3), 399-415.
- Emanuelsson, I., Haug, P., & Persson, B. (2005). *Inclusive education in some Western European Countries*. In: Mitchell, D. (Eds.) *Contextualising Inclusive Education: Evaluating Old and New International Perspectives*. London: Routledge.

- Engelbrecht, P., & Savolainen, H. (2018). A mixed-methods approach to developing an understanding of teachers' attitudes and their enactment of inclusive education. *European Journal of Special Needs Education*, 33(5), 660-676.
- Engelbrecht, P., Savolainen, H., Nel, M., & Malinen, O. (2013). How cultural histories shape South African and Finnish teachers' attitudes towards inclusive education: a comparative analysis. *European Journal of Special Needs Education*, 28(3), 305-318.
- European Agency (2003). European Agency for development in special needs education – special needs education in Europe: Greece (online). Available from: <http://www.european-agency.org>. (Accessed on 22 March, 2018).
- Evans, M. J., & Moore, J. S. (2013). Peer tutoring with the aid of the Internet. *British Journal of Educational Technology*, 44(1), 144-155.
- Ezzamel, N., & Bond, C. (2016). How have target pupil, peer and school level outcomes related to peer-mediated interventions for pupils with ASD been evaluated?. *European Journal of Special Needs Education*, 31(4), 440-457.
- Falchikov, N. (2001). *Learning together: Peer tutoring in higher education*. London: RoutledgeFalmer.
- Falk, K. B., & Wehby, J. H. (2001). The effects of peer-assisted learning strategies on the beginning reading skills of young children with emotional or behavioral disorders. *Behavioral Disorders*, 26(4), 344-359.
- Farrell, M. (2004). *Inclusion at the Crossroads: Special Education--Concepts and Values*. London: David Fulton.
- Ferguson, D. L. (2008). International trends in inclusive education: The continuing challenge to teach each one and everyone. *European Journal of special needs education*, 23(2), 109-120.

- Flavell, L. (2014). *Preparing to include special children in mainstream schools: A practical guide*. Routledge: London.
- Fougner, A. (2013). Peer tutoring in social work education: A study of changes in the authority of knowledge and relationships between students and teachers in Norway. *Social Work Education, 32*(4), 493-505.
- Franca, V. M., Kerr, M. M., Reitz, A. L., & Lambert, D. (1990). Peer tutoring among behaviorally disordered students: Academic and social benefits to tutor and tutee. *Education and Treatment of Children, 13*(2), 109-128.
- Freebody, P. (2003). *Qualitative research in education: Interaction and practice*. London: Sage.
- Fuchs, D., & Fuchs, L. S. (2005). Peer-assisted learning strategies: Promoting word recognition, fluency, and reading comprehension in young children. *The Journal of Special Education, 39*(1), 34-44.
- Fuchs, L. S., Fuchs, D., & Karns, K. (2001). Enhancing kindergartners' mathematical development: Effects of peer-assisted learning strategies. *The Elementary School Journal, 101*(5), 495-510.
- Fuchs, L. S., Fuchs, D., & Kazdan, S. (1999). Effects of peer-assisted learning strategies on high school students with serious reading problems. *Remedial and Special Education, 20*(5), 309-318.
- Fuchs, D., Fuchs, L. S., Mathes, P. G., & Simmons, D. C. (1997). Peer-assisted learning strategies: Making classrooms more responsive to diversity. *American Educational Research Journal, 34*(1), 174-206.
- Fuchs, D., Fuchs, L. S., & Stecker, P. M. (2010). The “blurring” of special education in a new continuum of general education placements and services. *Exceptional children, 76*(3), 301-323.

- Fuchs, L. S., Fuchs, D., Yazdian, L., & Powell, S. R. (2002). Enhancing first-grade children's mathematical development with peer-assisted learning strategies. *School Psychology Review, 31*(4), 569-583.
- Galbraith, J., & Winterbottom, M. (2011). Peer-tutoring: what's in it for the tutor?. *Educational Studies, 37*(3), 321-332.
- Galović, D., Brojčin, B., & Glumbić, N. (2014). The attitudes of teachers towards inclusive education in Vojvodina. *International Journal of Inclusive Education, 18*(12), 1262-1282.
- García-Vázquez, E., & Ehly, S. W. (1992). Peer tutoring effects on students who are perceived as not socially accepted. *Psychology in the Schools, 29*(3), 256-266.
- Gardner III, R., Nobel, M. M., Hessler, T., Yawn, C. D., & Heron, T. E. (2007). Tutoring system innovations: Past practice to future prototypes. *Intervention in School and Clinic, 43*(2), 71-81.
- Gilbertson, D., Witt, J. C., Singletary, L. L., & VanDerHeyden, A. (2007). Supporting teacher use of interventions: Effects of response dependent performance feedback on teacher implementation of a math intervention. *Journal of Behavioral Education, 16*(4), 311-326.
- Gisbert, D. D., & Font, C. M. (2008). The impact of peer tutoring on the improvement of linguistic competence, self-concept as a writer and pedagogical satisfaction. *School Psychology International, 29*(4), 481-499.
- Greek Government. (1985). *Official Journal, No 1566/1985, FEK. 167/30-9- 1985*. Athens: Ethniko Typografeio.
- Greek Government. (2000). *Official Journal, No 2817/2000, FEK. 78/14-3- 2000*. Athens: Ethniko Typografeio.



- Greek Government. (2008). *Official Journal, No 3699/2008, FEK. 199/2-10- 2008*. Athens: Ethniko Typografeio.
- Gros, B. (2001). Instructional design for computer supported collaborative learning in primary and secondary school. *Computers in Human Behavior, 17*, 439–451.
- Grosvenor, I., & Rose, R. (2001). *Doing Research in Special Education – Ideas into Practice*. London: David Fulton Publishers.
- Grünke, M., Janning, A. M., & Sperling, M. (2016). The Effects of a Peer-Tutoring Intervention on the Text Production of Students with Learning and Speech Problems: A Case Report. *Learning Disabilities: A Contemporary Journal, 14*(2), 225-235.
- Grünke, M., Wilbert, J., Tsiriotakis, I. K., & Agirregoikoa, A. L. (2017). Improving the Length and Quality of Texts Written by Fourth Graders with Learning Disabilities through a Peer-Tutoring Graphic Organizing Strategy. *Insights into Learning Disabilities, 14*(2), 167-188.
- Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions. *American educational research journal, 31*(3), 627-643.
- Harper, G. F., Mallette, B., Maheady, L., Parkes, V., & Moore, J. (1993). Retention and generalization of spelling words acquired using a peer-mediated instructional procedure by children with mild handicapping conditions. *Journal of Behavioral Education, 3*(1), 25-38.
- Hawkins, R. O., Musti-Rao, S., Hughes, C., Berry, L., & McGuire, S. (2009). Applying a randomized interdependent group contingency component to classwide peer tutoring for multiplication fact fluency. *Journal of Behavioral Education, 18*(4), 300.
- Herring-Harrison, T. J., Gardner, R. III., & Lovelace, T. S. (2007). Adapting peer tutoring for learners who are deaf or hard of hearing. *Intervention in School and Clinic, 43*(2), 82-87.

- Herrmann, K. J. (2013). The impact of cooperative learning on student engagement: Results from an intervention. *Active learning in higher education, 14*(3), 175-187.
- Hesse-Biber, S. N. (2010). *Mixed methods research: Merging theory with practice*. New York: Guilford Press.
- Hofstadter-Duke, K. L., & Daly, E. J. (2011). Improving oral reading fluency with a peer-mediated intervention. *Journal of applied behavior analysis, 44*(3), 641-646.
- Horneffer, A., Fassnacht, U., Oechsner, W., Huber-Lang, M., Boeckers, T. M., & Boeckers, A. (2016). Effect of didactically qualified student tutors on their tutees' academic performance and tutor evaluation in the gross anatomy course. *Annals of Anatomy-Anatomischer Anzeiger, 208*, 170-178.
- Hott, B. L., Alresheed, F. M., & Henry, H. R. (2014). Peer tutoring interventions for student with Autism Spectrum Disorders: A Meta-Synthesis. *Journal of Special Education and Rehabilitation, 15*(1-2), 109-121.
- Hott, B. L., Evmenova, A., & Brigham, F. J. (2014). Effects of Peer Tutoring and Academic Self-Monitoring on the Mathematics Vocabulary Performance of Secondary Students with Emotional or Behavioral Disorders. *Journal of the American Academy of Special Education Professionals, 113-132*.
- House, E.R., & Howe, K.R. (1999). *Values in evaluation and social research*. Thousand Oaks, CA: Sage.
- Hsien, M., Brown, P. M., & Bortoli, A. (2009). Teacher qualifications and attitudes toward inclusion. *Australasian Journal of Special Education, 33*(1), 26-41.
- Huber, G. L., & Huber, A. A. (2007). Structuring group interaction to promote thinking and learning during small group learning in high school settings. In: Gillies, R. M., Ashman, A. F., and Terwel, J. (Eds). *The teacher's role in implementing cooperative learning in the classroom* (pp. 110-131). New York: Springer.

- Hughes, T. A., & Fredrick, L. D. (2006). Teaching vocabulary with students with learning disabilities using classwide peer tutoring and constant time delay. *Journal of Behavioral Education, 15*(1), 1-23.
- Iserbyt, P., Elen, J., & Behets, D. (2010). Instructional guidance in reciprocal peer tutoring with task cards. *Journal of Teaching in Physical Education, 29*(1), 38-53.
- Jones, V. (2007). 'I felt like I did something good'—the impact on mainstream pupils of a peer tutoring programme for children with autism. *British Journal of Special Education, 34*(1), 3-9.
- Josephs, N. L., & Jolivette, K. (2016). Effects of Peer Mediated Instruction on the Oral Reading Fluency Skills of High School Aged Struggling Readers. *Insights into Learning Disabilities, 13*(1), 39-59.
- Kamps, D. M., Barbetta, P. M., Leonard, B. R., & Delquadri, J. (1994). Classwide peer tutoring: An integration strategy to improve reading skills and promote peer interactions among students with autism and general education peers. *Journal of applied behavior analysis, 27*(1), 49-61.
- Kamps, D., Locke, P., Delquadri, J., & Hall, R. V. (1989). Increasing academic skills of students with autism using fifth grade peers as tutors. *Education and Treatment of Children, 12*(1), 38-51.
- King, A. (1997). ASK to THINK-TEL WHY: A model of transactive peer tutoring for scaffolding higher level complex learning. *Educational Psychologist, 32*(4), 221-235.
- King-Sears, M. E., & Cummings, C. S. (1996). Inclusive practices of classroom teachers. *Remedial and Special Education, 17*(4), 217-225.
- Klavina, A. (2008). Using peer-mediated instructions for students with severe and multiple disabilities in inclusive physical education: A multiple case study. *European Journal of Adapted Physical Activity, 1*(2), 7-19.

- Klavina, A., & Block, M. E. (2008). The effect of peer tutoring on interaction behaviors in inclusive physical education. *Adapted Physical Activity Quarterly*, 25(2), 132-158.
- Klavina, A., & Block, M. E. (2013). Training Peer Tutors to Support Children with Severe, Multiple Disabilities in General Physical Education. *Palaestra*, 27(2), 26-32.
- Klavina, A., Jerlinder, K., Kristén, L., Hammar, L., & Soulie, T. (2014). Cooperative oriented learning in inclusive physical education. *European Journal of Special Needs Education*, 29(2), 119-134.
- Kochnar, C.A., West, L.L., & Taymans, J.M. (2000). *Successful Inclusion: Practical Strategies for a Shared Responsibility*. New Jersey: Prentice-Hall.
- Kohler, F. W., & Greenwood, C. R. (1990). Effects of collateral peer supportive behaviors within the classwide peer tutoring program. *Journal of applied behavior analysis*, 23(3), 307-322.
- Kourea, L., Cartledge, G., & Musti-Rao, S. (2007). Improving the reading skills of urban elementary students through total class peer tutoring. *Remedial and Special Education*, 28(2), 95-107.
- Koutroumba, K., Vamvakari, M., & Theodoropoulos, H. (2008). SEN students' inclusion in Greece: factors influencing Greek teachers' stance. *European Journal of Special Needs Education*, 23(4), 413-421.
- Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- Kumar, A. (2016). Exploring the teachers' attitudes towards inclusive education system: A study of Indian teachers. *Journal of Education and Practice*, 7(34), 1-4.
- Kunsch, C. A., Jitendra, A. K., & Sood, S. (2007). The effects of peer-mediated instruction in mathematics for students with learning problems: A research synthesis. *Learning Disabilities Research & Practice*, 22(1), 1-12.

- Lee, J., Dineen, F., McKendree, J., & Mayes, T. (1999). *Vicarious Learning: Cognitive and Linguistic Effects of Observing Peer Discussion: Canada, 1999* (Report No.143). Retrieved from ERIC: Institution of Education Sciences website: <https://eric.ed.gov/>.
- Lewin, K. (1946). Action research and minority problems. *Journal of social issues*, 2(4), 34-46.
- Lewis, A., & Norwich, B. (2005). *Special teaching for special children? Pedagogies for inclusion*. Berkshire: Open University Press.
- Lewis, A., & Silver, C. (2007). *Using Software in Qualitative Research: A Step-by-Step Guide*. London: Sage.
- Lieberman, L. J., Dunn, J. M., Van der Mars, H., & McCubbin, J. (2000). Peer tutors' effects on activity levels of deaf students in inclusive elementary physical education. *Adapted Physical Activity Quarterly*, 17(1), 20-39.
- Lingo, A. S. (2014). Tutoring middle school students with disabilities by high school students: Effects on oral reading fluency. *Education and treatment of children*, 37(1), 53-76.
- Loreman, T., Deppeler, J., & Harvey, D. (2010). *Inclusive education: supporting diversity in the classroom*. London: Routledge.
- Lubke, L., Piquart, M., & Schwinger, M. (2018). How to measure teachers' attitudes towards inclusion: evaluation and validation of the Differentiated Attitudes Towards Inclusion Scale (DATIS). *European Journal of Special Needs Education*, DOI: 10.1080/08856257.2018.1479953.
- Luca, J., & Clarkson, B. (2002). Promoting students learning through peer tutoring—A case study. Paper presented at the ED-MEDIA World Conference on Educational Multimedia, Hypermedia and Telecommunications, Denver, CO. (ERIC Document Reproduction Service No. ED477058).

- Mackiewicz, S. M., Wood, C. L., Cooke, N. L., & Mazzotti, V. L. (2011). Effects of peer tutoring with audio prompting on vocabulary acquisition for struggling readers. *Remedial and Special Education, 32*(4), 345-354.
- Maheady, L., & Gard, J. (2010). Classwide peer tutoring: Practice, theory, research, and personal narrative. *Intervention in School and Clinic, 46*(2), 71-78.
- Maheady, L., Harper, G. F., & Mallette, B. (2001). Peer-mediated instruction and interventions and students with mild disabilities. *Remedial and Special Education, 22*(1), 4-14.
- Male, D.B. (2011). The impact of a professional development programme on teachers' attitudes towards inclusion. *Support for Learning, 26*(4), 182-186.
- Malinen, O. P., Savolainen, H., & Xu, J. (2012). Beijing in-service teachers' self-efficacy and attitudes towards inclusive education. *Teaching and Teacher Education, 28*(4), 526-534.
- Marchand-Martella, N., Martella, R. C., Orlob, M., & Ebey, T. (2000). Conducting action research in a rural high school setting using peers as corrective reading instructors for students with disabilities. *Rural Special Education Quarterly, 19*(2), 20-30.
- Marr, M. B., Algozzine, B., Nicholson, K., & Keller Dugan, K. (2011). Building oral reading fluency with peer coaching. *Remedial and Special Education, 32*(3), 256-264.
- Marshak, L., Mastropieri, M. A., & Scruggs, T. E. (2011). Curriculum enhancements in inclusive secondary social studies classrooms. *Exceptionality, 19*(2), 61-74.
- Mastropieri, M.A., Scruggs, T.E., & Berkeley, S.L. (2007). Peers Helping. *Educational Leadership, 64*(5), 54-58.
- Mastropieri, M. A., Scruggs, T. E., & Marshak, L. (2008). Training teachers, parents, and peers to implement effective teaching strategies for content area learning. In *Personnel Preparation* (pp. 309-327). Emerald Group Publishing Limited.

- Mastropieri, M. A., Scruggs, T., Mohler, L., Beranek, M., Spencer, V., Boon, R. T., & Talbott, E. (2001). Can middle school students with serious reading difficulties help each other and learn anything?. *Learning disabilities research & Practice, 16*(1), 18-27.
- Mastropieri, M. A., Scruggs, T. E., Spencer, V., & Fontana, J. (2003). Promoting success in high school world history: Peer tutoring versus guided notes. *Learning Disabilities Research & Practice, 18*(1), 52-65.
- Mathes, P. G., & Babyak, A. E. (2001). The effects of peer-assisted literacy strategies for first-grade readers with and without additional mini-skills lessons. *Learning Disabilities Research & Practice, 16*(1), 28-44.
- Mathes, P. G., Torgesen, J. K., Clancy-Menchetti, J., Santi, K., Nicholas, K., Robinson, C., & Grek, M. (2003). A comparison of teacher-directed versus peer-assisted instruction to struggling first-grade readers. *The Elementary School Journal, 103*(5), 459-479.
- Mattatall, C. A. (2017). Using Peer Assisted Learning Strategies for Boys, Aboriginal Learners, and At-Risk Populations. *Reading & Writing Quarterly, 33*(2), 155-170.
- McDonnell, J., Mathot-Buckner, C., Thorson, N., & Fister, S. (2001). Supporting the inclusion of students with moderate and severe disabilities in junior high school general education classes: The effects of classwide peer tutoring, multi-element curriculum, and accommodations. *Education & Treatment of Children, 24*(2), 141-160.
- McDuffie, K. A., Mastropieri, M. A., & Scruggs, T. E. (2009). Differential effects of peer tutoring in co-taught and non-co-taught classes: Results for content learning and student-teacher interactions. *Exceptional children, 75*(4), 493-510.
- McFarlane, K., & Woolfson, L.M. (2013). Teacher attitudes and behavior toward the inclusion of children with social, emotional and behavioral difficulties in mainstream

- schools: An application of the theory of planned behavior. *Teaching and Teacher Education*, 29, 46-52.
- McMaster, K. L., Fuchs, D., & Fuchs, L. S. (2006). Research on peer-assisted learning strategies: The promise and limitations of peer-mediated instruction. *Reading & Writing Quarterly*, 22, 5-25.
- McMaster, K. L., Fuchs, D., Fuchs, L. S., & Compton, D. L. (2005). Responding to nonresponders: An experimental field trial of identification and intervention methods. *Exceptional children*, 71(4), 445-463.
- McNiff, J., & Whitehead, J. (2007). *Action Research: Principles and Practice*. New York: RoutledgeFalmer.
- McNiff, J., & Whitehead, J. (2010). *You and Your Action Research Project*. London: Routledge.
- Meijer, C. J. W., & Foster, S. F. (1988). The effect of teacher self-efficacy on referral chance. *The Journal of Special Education*, 22(3), 378-85.
- Menesses, K. F., & Gresham, F. M. (2009). Relative efficacy of reciprocal and nonreciprocal peer tutoring for students at-risk for academic failure. *School Psychology Quarterly*, 24(4), 266-275.
- Meng, D. (2008). The attitudes of primary school teachers toward inclusive education in rural and urban China. *Frontiers of Education in China*, 3(4), 473-492.
- Mertens, D.M. (2005). *Research and Evaluation in Education and Psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. Thousand Oaks – London – New Delhi: Sage.
- Mertens, D. M. (2009). *Transformative research and evaluation*. New York: Guilford press.
- Mertens, D.M., & McLaughlin, J.A. (2004). *Research and Evaluation Methods in Special Education*. Thousand Oaks, California: Sage.



- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- Miller, M. A. (2005). Using Peer Tutoring in the Classroom: Applications for Students with Emotional/Behavioral Disorders. *Beyond Behavior, 15*(1), 25-30.
- Moberg, S. (2003). Education for all in the North and the South: Teachers' attitudes towards inclusive education in Finland and Zambia. *Education and Training in Developmental Disabilities, 38*(4), 417-428.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Prisma Group. (2009). Reprint—preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Physical therapy, 89*(9), 873-880.
- Montgomery, A., & Mirenda, P. (2014). Teachers' self-efficacy, sentiments, attitudes and concerns about the inclusion of students with developmental disabilities. *Exceptionality Education International, 24*(1), 18-32.
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of mixed methods research, 1* (1), 48-76.
- Mortweet, S. L., Utley, C. A., Walker, D., Dawson, H. L., Delquadri, J. C., Reddy, S. S., Greenwood, C.R., Hamilton, S., & Ledford, D. (1999). Classwide peer tutoring: Teaching students with mild mental retardation in inclusive classrooms. *Exceptional Children, 65*(4), 524-536.
- Neddenriep, C. E., Skinner, C. H., Wallace, M. A., & McCallum, E. (2009). Classwide peer tutoring: Two experiments investigating the generalized relationship between increased oral reading fluency and reading comprehension. *Journal of applied school psychology, 25*(3), 244-269.

- Nel, N., Muller, H., Hugo, A., Helldin, R., Backmann, O., Dwyer, H., & Skarlind, A. (2011). A comparative perspective on teacher attitude-constructs that impact on inclusive education in South Africa and Sweden. *South African Journal of Education, 31*(1), 74-90.
- Nelson, J. R., Johnson, A., & Marchand-Martella, N. (1996). Effects of direct instruction, cooperative learning, and independent learning practices on the classroom behaviour of students with behavioural disorders: A comparative analysis. *Journal of Emotional and Behavioral Disorders, 4*(1), 53–62.
- Noell, G. H., Witt, J. C., LaFleur, L. H., Mortenson, B. P., Ranier, D. D., & LeVelle, J. (2000). Increasing intervention implementation in general education following consultation: A comparison of two follow-up strategies. *Journal of Applied Behavior Analysis, 33*(3), 271-284.
- Norwich, B. (1994). The relationship between attitudes to the integration of children with special educational needs and wider socio-political views: a US-English comparison. *European Journal of Special Needs Education, 9*(1), 91-106.
- O'Hanlon, C. (2003). Inclusive education in Spain and Greece. In: Potts, P., Armstrong, F. & Masterton, M. *Equality and Diversity in Education: National and International Contexts*. London: Routledge.
- Oddo, M., Barnett, D. W., Hawkins, R. O., & Musti-Rao, S. (2010). Reciprocal peer tutoring and repeated reading: Increasing practicality using student groups. *Psychology in the Schools, 47*(8), 842-858.
- Okilwa, N. S., & Shelby, L. (2010). The effects of peer tutoring on academic performance of students with disabilities in grades 6 through 12: A synthesis of the literature. *Remedial and Special Education, 31*(6), 450-463.

- Olson, J.M. (2003). *Special Education and General Education Teacher Attitudes toward Inclusion*. MSc. University of Wisconsin-Stout.
- Pearson, V., Eva, L., Ernest, C., & Donna, W. (2003). A heart to learn and care? Teachers' responses toward special needs children in mainstream schools in Hong Kong. *Disability and Society, 18*(4), 489–508.
- Petty, R. E., & Cacioppo, J. T. (1981). *Attitudes and persuasion: classic and contemporary approaches*. Dubuque, IA: Wm. C. Brown.
- Piaget, J. (1989). *The language and thought of the child*. London: Routledge.
- Plumer, P. J., & Stoner, G. (2005). The relative effects of classwide peer tutoring and peer coaching on the positive social behaviors of children with ADHD. *Journal of Attention Disorders, 9*(1), 290-300.
- Polychronopoulou, S. (2008). *Paidia kai Efivoi me Eidikes Anagkes kai Dynatotites*. Athens: Atrapos. [Children and Young People with Special Educational Needs and Abilities].
- Pring, R. (2000). *Philosophy of Educational Research*. London, New York: Continuum.
- Punch, K. (2000). *Developing effective research proposals*. London: Sage.
- Punch, K.F. (2014). *Introduction to Social Research: Quantitative and Qualitative Approaches*. London: Sage.
- Rakap, S., & Kaczmarek, L. (2010). Teachers' attitudes towards inclusion in Turkey. *European Journal of Special Needs Education, 25*(1), 59-75.
- Reason, P., & Bradbury, H. (Eds.) (2006). *Handbook of Action Research*. London: Sage.
- Rhymer, K. N., Dittmer, K. I., Skinner, C. H., & Jackson, B. (2000). Effectiveness of a multi-component treatment for improving mathematics fluency. *School Psychology Quarterly, 15*(1), 40-51.
- Robson, C. (2011). *Real World Research*. Chichester: John Wiley & Sons.
- Robson, C., & McCartan, K. (2016). *Real world research*. Chichester: John Wiley & Sons.

- Rohrbeck, C. A., Ginsburg-Block, M. D., Fantuzzo, J. W., & Miller, T. R. (2003). Peer-assisted learning interventions with elementary school students: A meta-analytic review. *Journal of Educational Psychology, 95*(2), 240-257.
- Rose, R., & Coles, C. (2002). Special and Mainstream school collaboration for the promotion of inclusion. *Journal of Research in Special Educational Needs, 2*(2), 1-22.
- Ross-Hill, R. (2009). Teacher attitude towards inclusion practices and special needs students. *Journal of Research in Special Educational Needs, 9*(3), 188-198.
- Runswick-Cole, K. (2011). Time to end bias towards inclusive education?. *British Journal of Special Education, 38*(3), 112-119.
- Ryan, J. B., Reid, R., & Epstein, M. H. (2004). Peer-mediated intervention studies on academic achievement for students with EBD: A review. *Remedial and Special Education, 25*(6), 330-341.
- Saddler, B., Asaro, K., & Behforooz, B. (2008). The Effects of Peer-Assisted Sentence-Combining Practice on Four Young Writers with Learning Disabilities. *Learning Disabilities: A Contemporary Journal, 6*(1), 17-31.
- Sáenz, L. M., Fuchs, L. S., & Fuchs, D. (2005). Peer-assisted learning strategies for English language learners with learning disabilities. *Exceptional children, 71*(3), 231-247.
- Savolainen, H., Engelbrecht, P., Nel, M., & Malinen, O. (2012). Understanding teachers' attitudes and self-efficacy in inclusive education: Implications for pre-service and in-service teacher education. *European Journal of Special Needs Education, 27*(1), 51-68.
- Schreier, M. (2014). Qualitative Content Analysis. In Flick, U. (Ed.) *The SAGE Handbook of Qualitative Data Analysis*. London: Sage.
- Schwab, S. (2018). *Attitudes towards inclusive schooling: A study on students', teachers' and parents' attitudes*. Münster: Waxmann.

- Scruggs, T. E., Mastropieri, M. A., & Marshak, L. (2012). Peer-mediated instruction in inclusive secondary social studies learning: Direct and indirect learning effects. *Learning Disabilities Research & Practice, 27*(1), 12-20.
- Scruggs, T. E., & Osguthorpe, R. T. (1986). Tutoring interventions within special education settings: A comparison of cross-age and peer tutoring. *Psychology in the Schools, 23*, 187-193.
- Shamir, A., & Tzuriel, D. (2004). Children's Mediation Teaching Style as a Function of Intervention for Cross-Age Peer-Mediation. *School Psychology International, 25*(1), 59-78.
- Shanahan, K., Topping, K., & Bamford, J. (1994). Cross-school reciprocal peer tutoring of mathematics and Makaton with children with severe learning difficulty. *British Journal of Learning Disabilities, 22*(3), 109-112.
- Sharma, U., Aellio, P., Pace, E. M., Round, P., & Subban, P. K. (2018). In-service teachers' attitudes, concerns, efficacy and intentions to teach in an inclusive classroom: An international comparison of Australian and Italian teachers. *European Journal of Special Needs Education, 33*(3), 437-446.
- Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs, 12*(1), 12-21.
- Shenderovich, Y., Thurston, A., & Miller, S. (2016). Cross-age tutoring in kindergarten and elementary school settings: A systematic review and meta-analysis. *International Journal of Educational Research, 76*, 190-210.
- Shiozawa, T., Hirt, B., & Lammerding-Koeppel, M. (2016). The influence of tutor training for peer tutors in the dissection course on the learning behavior of students. *Annals of Anatomy-Anatomischer Anzeiger, 208*, 212-216.

- Sideridis, G. D., Utley, C., Greenwood, C. R., Delquadri, J., Dawson, H., Palmer, P., & Reddy, S. (1997). Classwide peer tutoring: Effects on the spelling performance and social interactions of students with mild disabilities and their typical peers in an integrated instructional setting. *Journal of Behavioral Education*, 7(4), 435-462.
- Sinha, T., Zhao, R., & Cassell, J. (2015, November). Exploring socio-cognitive effects of conversational strategy congruence in peer tutoring. In *Proceedings of the 1st Workshop on Modeling INTERPERSONAL Synchrony And influence* (pp. 5-12). ACM.
- Slee, R. (2013). How do we make inclusive education happen when exclusion is a political predisposition?. *International Journal of Inclusive Education*, 17(8), 895-907.
- Sokal, L., & Sharma, U. (2014). Canadian in-service teachers' concerns, efficacy, and attitudes about inclusive teaching. *Exceptionality Education International* 23(1), 59-71.
- Spencer, V. G. (2006). Peer tutoring and students with emotional or behavioral disorders: A review of the literature. *Behavioral Disorders*, 31(2), 204-222.
- Spencer, V. G., Scruggs, T. E., & Mastropieri, M. A. (2003). Content area learning in middle school social studies classrooms and students with emotional or behavioral disorders: A comparison of strategies. *Behavioral Disorders*, 28(2), 77-93.
- Staubitz, J. E., Cartledge, G., Yurick, A. L., & Lo, Y. Y. (2005). Repeated reading for students with emotional or behavioral disorders: Peer-and trainer-mediated instruction. *Behavioral Disorders*, 31(1), 51-64.
- Stenhoff, D. M., & Lignugaris/Kraft, B. (2007). A review of the effects of peer tutoring on students with mild disabilities in secondary settings. *Exceptional children*, 74(1), 8-30.

- Stoiber, K. C., Gettinger, M., & Goetz, D. (1998). Exploring Factors Influencing Parents' and Early Childhood Practitioners' Beliefs About Inclusion. *Early Childhood Research Quarterly, 13*(1), 107-124.
- Stowitschek, C. E., Hecimovic, A., Stowitschek, J. J., & Shores, R. E. (1982). Behaviorally disordered adolescents as peer tutors: Immediate and generative effects on instructional performance and spelling achievement. *Behavioral Disorders, 7*(3), 136-148.
- Sutherland, K. S., & Snyder, A. (2007). Effects of reciprocal peer tutoring and self-graphing on reading fluency and classroom behavior of middle school students with emotional or behavioral disorders. *Journal of emotional and behavioral disorders, 15*(2), 103-118.
- Symeonidou, S., & Phtiaka, H. (2009). Using teachers' prior knowledge, attitudes and beliefs to develop in-service teacher education courses for inclusion. *Teaching and Teacher Education, 25*(4), 543-550.
- Talbott, E., Trzaska, A., & Zurheide, J. L. (2017). A systematic review of peer tutoring interventions for students with disabilities. In M. T. Hughes & E. Talbott (Eds.). *The Wiley handbook of diversity in special education*. (pp. 321-356). John Wiley & Sons.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed Methodology: Combining Qualitative and Quantitative Approaches*. Thousand Oaks, CA: Sage.
- Tashakkori, A., & Teddlie, C. (Eds.) (2003). *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: SAGE.
- Taylor, L. K., & Alber, S. R. (2003). The effects of classwide peer tutoring on the spelling achievement of first graders with learning disabilities. *The Behavior Analyst Today, 4*(2), 183-191.

- Temple, V. A., & Lynnes, M. D. (2008). Peer tutoring for inclusion. *ACHPER Australia Healthy Lifestyles Journal*, 55(2/3), 11-21.
- Thomas, G. (2013). *How to do your research project*. London: Sage.
- Thomas, G., & Loxley, A. (2007). *Deconstructing Special Education and Constructing Inclusion*. Berkshire: Open University Press.
- Topping, K. J. (1996). The effectiveness of peer tutoring in further and higher education: A typology and review of the literature. *Higher education*, 32(3), 321-345.
- Topping, K. J. (2003). Peer assisted learning for inclusion. *Literacy today*, 36, 22-23.
- Topping, K., Miller, D., Thurston, A., McGavock, K., & Conlin, N. (2011). Peer tutoring in reading in Scotland: thinking big. *Literacy*, 45(1), 3-9.
- Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W.K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68, 202-248.
- Tsuei, M. (2012). Using synchronous peer tutoring system to promote elementary students' learning in mathematics. *Computers & Education*, 58(4), 1171-1182.
- UNESCO. (1994). *The Salamanca Statement and Framework for Action on special needs education* [online]. Available from: <http://unesdoc.unesco.org/images/0009/000984/098427eo.pdf> [Accessed 29 August, 2017].
- Utley, C. A., Mortweet, S. L., & Greenwood, C. R. (1997). Peer-mediated instruction and interventions. *Focus on Exceptional Children*, 29(5), 1-23.
- Van Keer, H., & Vanderlinde, R. (2013). A book for two: Explicitly taught reading comprehension strategies paired with peer tutoring can boost reading skills for elementary school students. *Phi Delta Kappan*, 94(8), 54-58.



- Van Keer, H., & Verhaeghe, J. P. (2005). Effects of explicit reading strategies instruction and peer tutoring on second and fifth graders' reading comprehension and self-efficacy perceptions. *The Journal of Experimental Education*, 73(4), 291-329.
- Van Norman, R. K., & Wood, C. L. (2007). Innovations in peer tutoring: Introduction to the special issue. *Intervention in School and Clinic*, 43(2), 69-70.
- Vaughn, S., Chard, D. J., Bryant, D. P., Coleman, M., Tyler, B. J., Linan-Thompson, S., & Kouzekanani, K. (2000). Fluency and comprehension interventions for third-grade students. *Remedial and Special Education*, 21(6), 325-335.
- Veerkamp, M. B., Kamps, D. M., & Cooper, L. (2007). The effects of classwide peer tutoring on the reading achievement of urban middle school students. *Education and Treatment of Children*, 21-51.
- Villa, R., Thousand, J., Meyers, H., & Nevin, A. (1996). Teacher and administrator perceptions of heterogeneous education. *Exceptional Children*, 63(1), 29-45.
- Villa, R. A., Thousand, J. S., & Nevin, A. I. (2010). *Collaborating with students in instruction and decision making: The untapped resource*. Thousand Oaks, CA: Corwin Press.
- Vlachou-Balafouti, A., & Zoniou-Sideris, A. (2000). *Greek policy, practices in the area of special/inclusive education*. In: Armstrong, F., Armstrong, D. and Barton, L. (Eds.) (2000) *Inclusive Education: Policy, Contexts and Comparative Perspectives*. London: David Fulton Publishers.
- Vlachou, A. (1997). *Struggles for Inclusive Education*. Buckingham: Open University Press.
- Vlachou, A. (2004). Education and inclusive policy-making: Implications for research and practice. *International Journal of Inclusive Education*, 8(1), 3-21.

- Vogel, G., Fresko, B., & Wertheim, C. (2007). Peer tutoring for college students with learning disabilities: Perceptions of tutors and tutees. *Journal of learning disabilities*, 40(6), 485-493.
- Volpe, R. J., Young, G. I., Piana, M. G., & Zaslofsky, A. F. (2012). Integrating classwide early literacy intervention and behavioral supports: A pilot investigation. *Journal of Positive Behavior Interventions*, 14(1), 56-64.
- Vygotsky, L. (1978). Interaction between learning and development. *Readings of the development of children*, 23(3), 34-41.
- Wade, B., & Moore, M. (1993). *Experiencing special education: what people with special educational needs can tell us*. Buckingham: Open University.
- Wang, J., Bettini E., & Cheyney, K. (2013). Students with emotional and behavioral disorders as peer tutors: A valued role. *Beyond Behavior*, 23(1), 12-22.
- Wearmouth, J. (2001). *Special educational provision in the context of inclusion: policy and practice in schools*. London: David Fulton Publishers.
- Wehby, J. H., Falk, K. B., Barton-Arwood, S., Lane, K. L., & Cooley, C. (2003). The impact of comprehensive reading instruction on the academic and social behavior of students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 11(4), 225-238.
- Weisel, A., & Dror, O. (2006). School climate, sense of efficacy and Israeli teachers' attitudes toward inclusion of students with special needs. *Education, Citizenship and Social Justice*, 1(2), 157-174.
- Wellington, J. (2000). *Educational Research: Contemporary Issues and Practical Approaches*. London: Continuum.

- Wexler, J., Reed, D. K., Pyle, N., Mitchell, M., & Barton, E. E. (2015). A synthesis of peer-mediated academic interventions for secondary struggling learners. *Journal of Learning Disabilities, 48*(5), 451-470.
- Wilkins, T., & Nietfeld, J.L. (2004). The effect of a school-wide inclusion training program upon teachers' attitudes about inclusion. *Journal of Research in Special Educational Needs, 4*(3), 115–121.
- Willig, C. (2008). *Introducing qualitative research in psychology*. Berkshire: Open University Press.
- Winzer, M. A., & Mazurek, K. (Eds.) (2000). *Special education in the 21st century: Issues of inclusion and reform*. Washington: Gallaudet University Press.
- Wood, C. L., Mustian, A. L., & Lo, Y. Y. (2013). Effects of supplemental computer-assisted reciprocal peer tutoring on kindergarteners' phoneme segmentation fluency. *Education and Treatment of Children, 36*(1), 33-48.
- Wright, J., & Cleary, K. S. (2006). Kids in the tutor seat: Building schools' capacity to help struggling readers through a cross-age peer-tutoring program. *Psychology in the Schools, 43*(1), 99-107.
- Yada, A., & Savolainen, H. (2017). Japanese in-service teachers' attitudes toward inclusive education and self-efficacy for inclusive practices. *Teaching and Teacher Education, 64*, 222-229.
- Yawn, C. D. (2012). Effects of Gifted Peers Tutoring Struggling Reading Peers. *Journal of Special Education Apprenticeship, 1*(1), 1-11.
- Yurick, A. L., Robinson, P. D., Cartledge, G., Lo, Y. Y., & Evans, T. L. (2006). Using peer-mediated repeated readings as a fluency-building activity for urban learners. *Education and Treatment of Children, 46*(9), 469-506.

Zoniou-Sideri, A., Deropoulou-Derou, E., Karagianni, P., & Spandagou, I. (2006). Inclusive discourse in Greece: strong voices, weak policies. *International Journal of Inclusive Education*, 10(2-3), 279-291.

Zoniou-Sideri, A., & Vlachou, A. (2006). Greek teachers' belief systems about disability and inclusive education. *International Journal of Inclusive Education*, 10(4-5), 379-394

