Secondary Teachers' Attitudes Towards the Inclusion of Students with Special Needs in Mainstream Schools in Argolis

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Abstract

The aim of this study is to examine secondary teachers' attitudes towards the inclusion of students with special educational needs in mainstream schools conducted in Argolis district of Peloponnese. The sample consists of 143 secondary teachers who appeared to have a general positive attitude towards inclusion, closer to be "undecided" for the issue, after answering close-ended questionnaires. There was a significant relationship between the years of teaching experience and their attitudes, as well as the training on special needs education and their attitudes. The majority of the kinds of disabilities showed no difference in their attitude towards inclusion. Moreover, a correlation between their difficulty to handle students and their attitude was examined. After discussing the outcomes of the research, the possible limitations of the study reveal issues that should be considered in further research.
Dedication

To my parents, Aristidis & Ageliki, for their support not only throughout my studies, but also in life.
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1 Introduction

1.1 Preface on the Research Topic

The latest development of integration and inclusion programs in secondary education in many countries necessitates the investigation of teachers' (and students') attitudes of the secondary education, both worldwide and specifically in Greece, due to the prospect of new legislation for Special Needs Education (Law 3699/2008). Therefore, this paper aims to investigate secondary teachers' attitudes towards the inclusion of these children characterized as "with special needs" or "disabled" into mainstream settings, which means in a mainstream/general school. Are they ready to adapt the inclusive practices and welcome each and every student in their classroom, regardless any differences? Even though the research topic is specific, predominantly pertinent to the attitudes of secondary teachers, it is reasonable that these studies reveal so many interesting issues; not only through the results, but also through the review of literature and the discussion, considering the fact that the researcher has one main target, that is, to completely accomplish the research, but also needs to collect information relevant to the topic and be able to present the most representative. According to the above-mentioned, this section will include all the necessary clarifications concerning the terms that are fundamental for this research project in the way they were presented to the teachers, briefly, in order to be able to understand and answer the questionnaire it was given to them. A further insight to the terms will be presented in the following chapters, in that sequence that helps the reader understand and assimilate what is needed in order to follow the work, the process and the final results of my research.

To start with, and since the research topic is "attitudes of secondary teachers' towards the inclusion of students with special needs in mainstream schools", I believe it is essential to clarify the term "attitude". As I have already mentioned, in this section, the definitions given are the same with those given to the teachers, translated in the Greek language. "An attitude is the general tendency of an individual to act in a certain way under specific conditions. Attitudes, may be viewed as a positive or negative emotional reaction to a person or object accompanied by specific beliefs that tend to cause its holder to behave in specific ways toward its object" (Baglieri, S. & Shapiro, A., 2012). The next term defined was "inclusion", a term that usually refers to integrating students with disabilities into general education settings
(Baglieri, S. & Shapiro, A., 2012). "Inclusive education means the removal of barriers to learning for all children and must attend to increasing participation not just for disabled students, but for all those experiencing disadvantage, whether this results from poverty, sexuality, minority ethnic status, or other characteristics assigned significance by the dominant culture in their society" (Ballard, 1999, as cited in Baglieri, S. & Shapiro, A., 2012).

When it comes to the terms characterizing the children as "special needs children" or "with special educational needs", or "disabled" and the classification of disabilities used both in the questionnaire and in the rest of the paper, they are based on the Greek Law (3699/2008) and the way they were mentioned in the literature, for the sake of the research process and the convenience of secondary teachers to understand and complete the questionnaire. According to several studies both worldwide and in Greece, (e.g Hegarty & Pocklington, 1981; Zafiropoulou, 1995), children with special educational needs are not part of a group with a complete special identity (Zafiropoulou - Piperaki, 1998). Instead, in this group are included both children that special treatment is provided to them, and a great amount of children of general schools who appear to have learning and behavioral difficulties (Zafiropoulou - Piperaki, 1998). Specifically, "children have special educational needs if they have a learning difficulty which calls for special educational provision to be made for them; and special educational provision means provision which is additional to or different from the educational provision made generally for children of their age in schools maintained by the Local Education Agency (LEA), other than special schools, in an area" (Special Educational Needs Code Practice, DfES 2001b, as cited in Dyson, D. & Millward, A., 2002). In the Greek Law (3699/2008) special needs are defined as follows: "The difficulties in learning, due to sensory, intellectual, cognitive, developmental, mental and neuropsychiatric disorders which are localized after scientific and pedagogical evaluation. These difficulties influence the process of learning and school adjustment. Pupils who have disabilities in motion, vision, hearing, who suffer from chronic diseases, disorders in speech, attention deficit, and all pervasive developmental disorders are considered as having special educational needs. As special needs are also considered behaviors due to complex factors, i.e. cognitive, sentimental, mental and social disadvantages deriving from the family and social environment. Difficulties in learning that derive from the social and economical background of the learner as well as low achievers are not considered as pupils with special needs."
All the above-mentioned were taken into account in order to start my research, always having in mind the definitions of the terms that play a critical role in this process.

1.2 Research Problem

As I have mentioned before, the purpose of this study is to investigate secondary teachers' attitudes towards the inclusion of students with special needs in mainstream schools. In order to investigate their attitudes I chose Argolis region in Peloponnese, where I easily had access to collect my sample. By handing out questionnaires to the teachers of secondary-mainstream schools, I am aiming to identify what are their attitudes and what affects these attitudes towards the inclusion of students with special needs. According to the previous literature on the same topic, which will be presented in a following chapter, the years of experience teachers have, their training on special education, their previous experience with students with special needs, the kind of disability, and the difficulty in handling students with special needs, appear to be factors that influence their attitudes. Hence, the present research study aims to answer to the following research questions concerning the attitudes based on the hypotheses that will be presented below:

- Do years of experience as a secondary teacher influence their attitude towards inclusion?
- Does training on special education influence teachers' attitude towards inclusion?
- Does their previous experience with students with special needs influence their attitude towards inclusion?
- Does the kind of disability influence their attitude towards inclusion?
- Does the degree of difficulty in handling students with special needs in class influence their attitude towards inclusion?

Hypotheses:

- More years of teaching experience - more positive attitude towards inclusion.
- Teachers with training or further education on special needs are expected to have positive attitude towards inclusion.
- Teachers with previous experience with students with special needs are expected to have positive attitude towards inclusion.
• The kind of disability leads to either positive or negative attitudes depending on the disability.

• It is expected that more difficulty to handle students with special educational needs lead to negative attitudes.

1.3 Significance of the study

If we want an integrated society in which all people, including those labeled disabled or having learning differences, are considered to have equal worth and equal rights, we need to reevaluate how we operate our schools, and if we truly want integration in our community, segregation in our schools cannot be justified (Stainback, S.B., 2000). But how easy is it to achieve integration and inclusion? Martin (1974 as cited in Papanis, E. et al, 2007) states that the failure of integration can be attributed to attitudes, fears, worries and possible rejection that children with special needs face in school settings, not only by their classmates, but also from adults. Specifically, educators play a significant role in inclusive programs, due to the fact that they are bodies of socialization acting in a redeeming and supportive way (Kousoulakou, 1995 as cited in Papanis, E. et al, 2007). Those who work in schools are citizens of their society with the same range of both beliefs and attitudes as any other group of people (Mittler, P., 2000), and it is reasonable that these attitudes replicate and expand within the classroom environment. Therefore, I believe, it is significant to examine teachers' attitudes towards inclusion of students with disabilities; because, naturally, students' attitudes will also reflect their teachers' behavior. What is more, children's development of positive attitudes toward persons with disabilities may be influenced by having many and varied experiences with diverse peers, while their attitudes are also influenced by the broader culture (Baglieri, S. & Shapiro, A., 2012). Children who are victims of prejudice experience permanent damage to his/her confidence and the sense of self-worth (Brodkin & Coleman, 1993 as cited in Baglieri, S. & Shapiro, A., 2012). According to Baglieri & Shapiro (2012), self-concept refers to the way in which people perceive themselves and plays a critical role in the development of personality. One's self-concept is both learned and changeable with each new experience. Thus, children are influenced by their interactions and encounters with others, especially "significant others" (parents, classmates, teachers etc). Since the attitudes of these groups affect the development of the disabled child's self-concept, and the socialization of that youngster into typical community activities (Baglieri, S. & Shapiro, A., 2012), it is of a great
interest and necessity to focus on attitudes of a group that interacts mostly with children, teachers. They have a double role, not only to teach children, but also to help them socialize and develop skills needed in their entire life as a part of society.

John o Brien and his colleagues (1989 as cited in Vlachou - Balafouti, A., 2000) referred to a series of educators' attitudes towards children with special needs. They stated, for example, that students with special needs:

- learn only a few things even if they receive special assistance
- require a lot of individual attention against the rest of the students
- deplete teachers’ energy
- need special educational approach
- will be rejected by their classmates if they attend a general school
- their dissimilarity and needs cannot be handled by general educators

According to the author, which coincides with my beliefs, these statements concerning students with special needs are mostly improper, but when they are expressed it is essential to intervene in order to eliminate them and this is one of the reasons of the importance of investigating their attitudes. A more detailed reference to previous studies will be presented in a following chapter, but taking a look at teachers' general assumptions towards children with special needs, also necessitates the investigation of educators' attitudes. A series of general assumptions retrieved from studies concerning teachers' attitudes towards children with special needs are the following as presented in Papanis, E. et al (2007):

- Most studies show that teachers tend to have negative attitudes towards students with special needs and their integration (Alexander & Strain, 1978; Hannah & Pliner, 1983).

- There seems to be a relation between some elements of teachers' character and some characteristics of their attitudes towards the children of special needs.

- Teachers with high self-esteem tend to be more willing to teach children with disabilities.

- Age and gender does not seem to influence directly any of the characteristics of teachers' attitudes.
• Classrooms size, presence of assistance and teachers' training on Special Education seem to be related with teachers' attitudes towards children with special needs (Hannah & Pilner, 1983; Home, 1980).

• Lack of experience and contact with disabled students, as long as insufficient education concerning their teaching-learning strategies appear to be important factors towards negative attitudes.

Eventually what is so significant about measuring teachers' attitudes? Antonak & Livneh (1988) report that attitudes are of great importance in attempting to predict future behaviors, a cornerstone of psychological research, so finding out what a person's attitudes are (toward a given object, individual, group of people or event), in conjunction with knowledge of various situational and other personality variables, may aid the researcher in better understanding, explaining, and ultimately predicting behavior toward the referent. Taking all the above-mentioned into account, the fact that inclusion has been introduced in Greece the latest years with difficulties on implementing it due to the economic crisis, and the fact that attitudes change over the time, it is essential to conduct a research on this specific topic.

1.4 Structure of the Thesis

The present paper consists of 7 main chapters which will be briefly presented for the readers' convenience.

Chapter 1, "Introduction": As the title reveals it is an introductory chapter with all the information the reader should be aware of in order to follow up with the rest of the paper. The research topic with further brief clarifications of terms, the research problems and the significance of the study are presented here.

Chapter 2, "Towards Inclusion": A presentation and definition of terms existed before inclusion, the term "inclusion" and the history behind it along with the policies not only worldwide, but also in Greece are parts of this chapter, concluding with what finally leads to a successful implementation of inclusion.
Chapter 3, "Teachers' Attitudes": Starting with the definition of "attitudes", a review of previous studies is presented along with the factors that influence teachers' attitudes towards inclusion, according to these studies.

Chapter 4, "Methodology": The methods that were used in order to conduct the research are presented in this chapter. From research design to the validity and reliability issues as long as ethical issues, this chapter allows the reader to understand how the study was undertaken.

Chapter 5, "Presentation of Data & Analysis": As the title reveals in this chapter the results of the study are presented.

Chapter 6, "Discussion of Results & Limitations of the Study": The results of this study and previous studies are summed up in this chapter, along with limitations that can enlighten readers for further research on the topic.

Chapter 7, "Conclusion": A sum up of the whole paper completes the thesis.

The reference list and appendices are presented at the end.
2 Towards Inclusion

2.1 Introduction

This chapter aims to lead the reader into the path towards inclusion, starting with the definitions of "mainstreaming" and "integration", terms that were widely used before "inclusion" was introduced. Inclusion's definition follows, and consequently a presentation of how students can benefit of inclusion and in what way is following. After the clarification of what is what concerning the terms, a presentation of the history of inclusion is essential; starting with the situation worldwide and referring to the different reports, declarations, actions and policy, my discussion moves to the situation in Greece by presenting the beginning of inclusion through the laws and continuing with the latest updates concerning the inclusive practices. But inclusion cannot just happen like that, out of nowhere; a series of requirements are necessary in order for inclusion to become true and succeed in the settings of mainstream schools. School changes, society's support, collaboration and teaming, and of course, the educators' role along with their attitudes are significant factors that affect the implementation of inclusion, and therefore are being discussed in that part of this chapter.

2.2 Mainstreaming, Integration, Inclusion: Defining the terms

Concepts such as integration, mainstreaming and inclusion have been developed over the years in an attempt to address issues such as "exclusion" and "stigma" of people with disabilities, aiming to support the human rights of these people (McLeskey, J. et al, 2014). Even though these terms appear to be similar and most people believe they are synonyms, they refer to different practices and approaches of the education of individuals with special abilities and each of them took place in different periods in an attempt to control the segregation of students with special needs in the school environment. Since, these terms refer to how exclusion and segregation will be eliminated, it is natural to expect that they were made to meet what the "least restrictive environment" introduces for the students with special needs. Winzer, M.A. (2000) mentions that the concept of "least restrictive environment"
refers to placing students in settings that are the most normal and where students can have an optimal interaction with their normally developing peers. Gena, A. (1998) explains that the least restrictive environment promotes the better development of children with special needs by providing minimal support; it is simply the environment of a general class or other support school groups similar to the general classes. In addition to the above mentioned approaches on the "least restrictive environment", Winnick and Stein & Paciorek (1987; 1994, as cited in Papadopoulos, D. et al, 2004) refer to the term as "a continuum of alternative environments that is used for the education of an individual with disabilities, ranging from segregated formats to fully integrated placements without modifications that reflect the nature and severity of the disability, and the ability of the individual to perform in related sports", which in my opinion reflects best as an explanation of the term and leads to a better understanding of inclusion.

2.2.1 Mainstreaming

Starting with the meaning of the word "mainstreaming", Perles (2012) mentions that it comes from the concept that students with disabilities can be incorporated into the "mainstream" of education, instead of placing them in separate classrooms and giving them completely separate instruction. It is a term usually used interchangeably with the term inclusion even though, in practice, it is different. Mainstreaming means providing every student who is exceptional, regardless of type and severity of disability, with an appropriate education, as much as possible, alongside normally developing peers (Winzer, M.A. 2000). Snow, K. (n.d.) argues that according to a review of history in the public school arena, mainstreaming was first attempted in the late '70s, and simply meant "placing students with disabilities into general education classrooms with no supports or accommodations". Since no special support is provided, Rogers (1993) states that proponents of mainstreaming assume that the student must "earn" his/her opportunity to be mainstreamed through the ability to "keep up" with the work assigned by the general teacher to the other students in class, which is more linked to traditional forms of special education service. Therefore, students who are mainstreamed need to be able to handle the adjustment to a general education classroom on their own, in contrast to students in inclusive settings who often have support groups, in addition to expectations and assessments that are tailored to their own development (Perles, K., 2012).
2.2.2 Integration

Integration is the exact opposite of segregation, offered as a concept to challenge the provision of separate schools, classes, or services for students with disabilities (Albright, Brown, Vandeventer & Jorgensen, 1989 as cited in Baglieri, S. & Shapiro, A., 2012). It is natural to be seen similar to the concept of inclusion, but Ainscow (1997) underlines a worth mentioned difference. Inclusion, as it will be mentioned later on, starts from the assumption that all children have the right to attend their neighborhood school, while the idea of integration was mostly seen as preparing children perceived as being special to fit into a school that remained largely unchanged (Ainscow, M., 1997). Snow, K. (n.d.) contributes to the definition of integration by stating that in comparison to "mainstreaming", during the '80s, more supports and accommodations were provided, and surely a lot of progress was seen, but something was still missing only because physical integration did not necessarily ensure social integration. As with a lot of terms in the field of education, integration has been difficult to be defined and can always be misunderstood as mainstreaming or inclusion. In 1978, the Warnock Report suggested three main kinds of integration: locational, social and functional (DES 1978, as cited in Farrel, P. & Ainscow, M., 2002). "Locational integration" was seen as being where pupils with special needs were placed in special classes/units located within a mainstream campus, without necessarily being in contact with their mainstream peers, while "social integration" was seen to involve pupils interacting for social activities (meal times, school visits etc), but for the rest of the time the categorized pupils were segregated from the mainstream peers (Farrel, P. & Ainscow, M., 2002). Lastly, "functional integration" was where all pupils, no matter their difficulties or disabilities, were placed in their local mainstream school, in a regular classroom setting alongside their same - age peers (Farrel, P. & Ainscow, M., 2002). Obviously, as Farrel and Ainscow (2002) add, a definition in terms of provision (the setting in which a pupil is placed) is problematic since it tells us nothing about the quality of the education received in this provision and this statement. This, along with the definitions in the Warnock report meet Snow's statement that physical integration is not necessarily social. This means that physical appearance in a mainstream school does not mean the full integration of pupils with special needs, since they can easily be isolated from the rest of the class.
2.2.3 Inclusion

Unlike integration, which does not specify what exactly should be done, inclusion - which is more focused to the school now and not to the child - is used to describe the extent to which a child with special needs is involved as a full member of the school community with the full access to and participation in all aspects of education (NSCE, 2010). In contrast to integration, inclusion is about the pupil's right to participate fully in school life and the school's duty to welcome and accept them (British Psychological Society, 2002 as cited in NSCE, 2010). Inclusion goes beyond the integrative idea of assimilating children with disabilities into the existing ordinary school system, but it requires instead, changes to the school system itself; alteration in educationalists' perceptions of children's being, some rethinking of the purposes of education and a reforming of the system generally (OECD, 1999). To compare it with integration, Blamires (1999) refers to integration as the action that involves preparing pupils for placement in ordinary schools, which also implies a concept of educational or social "readiness" for the transfer from special to ordinary school (Blamires, 1999 as cited in Mittler, P., 2000). It is about making schools special by transplanting the best special school practices, teachers or equipment into regular settings, even if not necessary (Mittler, P., 2000). Inclusion, on the other hand, implies a radical reform of the school in terms of curriculum, assessment, pedagogy and grouping of pupils. It is based on a value system that welcomes and celebrates diversity arising from gender, nationality, race, language of origin, social background, level of educational achievement or disability (Mittler, P., 2000). According to the UNESCO documents, inclusive education challenges all exclusionary policies and practices in education, is based on a growing international consensus of the right of all children to a common education in their locality regardless of their background, attainment or disability and aims at providing good quality education for learners and a community-based education for all (Vislie, L., 2003). Rogers (1993) refers to inclusion as the commitment to educate each child, to the maximum extent appropriate, in the school and classroom he/she would otherwise attend, by bringing the support services to the child, rather than moving the child to where the support services are. It is a term defined in many different ways in the special needs education literature and Ainscow and his colleagues (2006 as cited in NSCE, 2010) underline exactly that different groups in different contexts think of the term differently and no single, consensual definition exists. Thus, Snow, K. (n.d.) presents inclusion as the situation in which "children with disabilities are educated in schools they would attend if they didn't have disabilities, in age - appropriate regular education classrooms,
where services and supports are provided in those classrooms for both students and their teachers, and where students with disabilities are fully participating members of their school communities in academic and extracurricular activities”. The list of definitions that have been published over the years can be characterized endless, but for sure these definitions are, in my opinion, more concrete than those given on "integration" for example, describing finally what takes place within inclusive education. In her article about teaching approaches which support inclusive education, Corbett (2001) discusses if there is a pedagogy for inclusion, referring to Lewis & Norwich (2000, as cited in Corbett, 2001) who argued that there is a combination of pedagogic responses which have value, after investigating the commonality and differentiation of pedagogy of children with learning difficulties. They divided the pedagogic responses into those which recognize individual needs, termed "unique differences" and those which offer more intensive and explicit teaching for pupils with different patterns and degrees of learning difficulties, concluding that what works with most pupils, would also work for all pupils (Lewis & Norwich, 2000 as cited in Corbett, 2001). Consequently, Corbett (2001) confirms that it is quite possible for general schools to show both these responses where there is a will to learn and to develop new skills, based on her observation in a mainstream school. According to these findings inclusion is not far from being real despite the kind of disability as long as there is will for learning and development. Inclusive education is theorized as a broad, boundary-blurring agenda across multiple perspectives that enrich learning, such as culture, language, migration, experience, ability, and religion for all students (Artiles et al, 2006). To summarize, it is a concept that focuses on the transformation of school cultures in order to increase access/presence of all students, enhance the school personnel's and students' acceptance of all students, maximize student participation in various domains of activity and increase the achievement of all students (Booth; Ainscow; Black-Hawkins; Vaughan & Shaw, 2000; Kalambouka, Farrell, Dyson & Kaplan, 2005 as cited in Artiles et al, 2006).

But why is inclusion so significant to be implemented? Having in mind that inclusion is a concept that aims to eliminate discriminations, it is natural to assume that it benefits not only the individual, but also the school community. Benefits are not only related to special needs students' socializing which, indeed, is fundamental for their social integration out of school, but also concern their academic achievements, learning development and make it possible to spread the idea that we are all equal. From my point of view, theory is easy to be expressed, but is there any proof that inclusion is indispensable? Blackorby et al (2005, as cited in Artiles et al, 2006) refer to a study of 11,000 students in the United States, the findings of which
show that students with disabilities who spend more time in general education classrooms are absent less, perform closer to grade level than their peers in pull-out settings\(^1\), and have higher achievement test scores. Even if the findings of this study appeared to be controversial, Artiles and his colleagues (2006) underline that the study overall confirmed that students with disabilities in general education settings academically outperformed their peers in separate settings when standards-based assessments were used. Ainscow M. (1998) provides us with another essential statement referring to the necessity of the participation of students with special needs in a mainstream class. He claims that these students should be considered as useful, rather than a problem, by providing their valuable information for the assessment of activities taking place in the classroom and that there is no reason to believe that they should be placed in a different environment in order to receive special care (Ainscow M., 1998). In my opinion, this is a great argument that there is no difference between "normal" students who whether or not attend a general class and students with special needs. And there is more on this, given by Deering, P.D. (1998) who states that "the kinds and degree of physical, emotional and academic diversity among students in the various special education categories are often not that different from what is found in the mainstream young adolescent population, and therefore, it makes sense for all inclusive educational contexts to be the norm". Additionally, he continues, "all young adolescents need to broaden social horizons as part of their development of identity and social skills, and inclusion can support this development by providing to students opportunities to interact with others different from themselves and to see others who are just as "different" as they are" (Deering, P.D., 1998), which refers to what we started with, social integration. Stainback, S.B. (2000) also refers to diversity among students, claiming that if they are properly organized, they can promote rather than impede learning for all class members. Differences among students can be an asset: they can constitute positive learning capital that can enhance opportunities for learning in classrooms (Stainback, S.B., 2000). "Differences hold great opportunities for learning. Differences offer a free, abundant and renewable resource... What is important about people - and about schools - is what is different, not what is the same" (Robert Barth, 1990 as cited in

\(^1\)Pull-out settings or programs: A program that takes a student out of the regular classroom during the typical school day and places them in alternative programming. They intend to provide the student with instruction in smaller class settings and with more individualized instruction, aiming to give the student a better chance of success. Retrieved from: http://www.ehow.com/facts_5872343_definition-special-education-pull_out-program_.html
Stainback, S.B., 2000). According to me, all the above-mentioned briefly present the main points of why inclusion is essential in the school settings, avoiding to only focus on the social integration of the students which is the first thing to consider when we hear the word "inclusion". Lastly, the best way to conclude this section is probably a reference to what most declarations and reports (i.e. Warnock Report) mention: "Separate is not equal. All children should be provided rather than denied the opportunity to grow and learn with and from their peers regardless of any individual differences they may have. All children should have an equal right to be a part of the education and community mainstream" (Stainback, S.B., 2000).

2.3 The History of Inclusion: Worldwide Situation & a View in the Greek Context through policy

In its early years, special education was provided in self-contained classrooms and separate schools (Artiles, A.J., 2009). While integration was the main issue on the agenda when the international community and national governments discussed how to promote the right of disabled persons to an appropriate education until the end of the 1980s, inclusion has captured the field during the 1990s (Vislie, L., 2003). First of all, education has been seen as a fundamental human right through the Universal Declaration of the Human Rights (United Nations, 1948 as cited in NSCE, 2010), while in the 1960s and 1970s, pressures for inclusion affected school systems in several industrialized countries (e.g. France, USA, UK) that had long-established special education systems (much of it separate from general education) (Braswell, 1999; Woll, 1999 as cited in Artiles et al, 2006). For some countries (e.g. Italy) there is some disagreement about the extent of policy support for inclusion since the ’70s (Cocchi, Larocca, & Crivelli, 1999 as cited in Artiles et al, 2006), while for other countries with mature systems, the earlier wave of inclusion left them unaffected (e.g. Netherlands, Hungary, the former Soviet Union, Brazil, Hong Kong, Taiwan, and Japan) (Abe, 1998; Csainyi, 2001; Egikr Mantoan & Valente, 1998; Shipitsina & Wallenberg, 1999 as cited in Artiles et al, 2006). Starting from the 1970’s and during the 1980’s the least restrictive environment requirement allowed schools to mainstream students with disabilities in general education classrooms for a portion of the day, though this was done in a voluntary basis (Brantlinger, 1997 as cited in Artiles, A.J., 2009). In the late 1980s, parents, researchers, students, educators and advocates for children with the most severe intellectual disabilities argued that any separation from a general education classroom was inappropriate, and they
began to argue for the full inclusion of all students with disabilities in classrooms with nondisabled peers (e.g., Lipsky & Gartner, 1996; Stainback & Stainback, 1996 as cited in Artiles et al, 2006). In addition, the United Nations Convention on the Rights of the Child support the statement that children with or without disabilities have the same rights to educational opportunities (United Nations, 1989 as cited in NSCE, 2010), while the Warnock Report (1978), the Jomtien Declaration on Education for All (1990), the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993), the Salamanca Statement and Framework for Action (1994) enshrine the right of all children to inclusive education and have played a critical role in highlighting the issue of exclusion from education (Miles, S., 2002).

In an attempt to follow the flow of inclusion through the above-mentioned movements (Warnock Report etc), Greece established the law 1566/85 which referred to the effective development and utilization of capacities and abilities of people with disabilities. It also determined which people are considered as disabled, diagnostic methods and educational programs suitable for students with special needs with a focus on their integration in general classes (Zoniou - Sideri, 1998). However, as Zoniou - Sideri (2000) reports, even if the law existed, it was never activated in practice. It was considered as a great educational change and both the state and society were not prepared for such a movement. What is more, the educational system in Greece adapt services according to the market's needs and it is also characterized by individualism, competition, non-differentiated teaching and assessment, as well as rigid educational programs (Zoniou - Sideri, 2000). Furthermore, the institutionalization of integration was not followed by the design of a new social policy which aims to a mutual acceptance of new educational policies involving teacher training on integration, curricula design, and layout of the school premises (Zoniou - Sideri, 2000). Therefore, it was considered as an unsuccessful attempt by the government to introduce the new policy and promote the implementation of newcomer programs.

In 1995, the government made an attempt to eliminate the weaknesses of the articles of 1566/85 on special education with a draft law entitled as "Special Education. Education of People with Special Needs". The draft law was published on March 14, 2000 (Law 2817/2000) and included essential regulations concerning the inclusion of children with and without disabilities (Patsidou - Iliadou, M., 2011). Patsidou - Iliadou (2011) refers to the main significant parts of this law: 1) it was the first time that it was given less focus on the reason
of disability, 2) the principle of inclusion of students with disabilities in general education schools is promoted, while special education schools undertake children with very severe disabilities, 3) individualized programs for each child are proposed, 4) centers of diagnosis, evaluation and support for all students with special educational needs are established under the name "Diagnostic Evaluation and Support" (ΚΔΑΥ)², 5) services, such as educational and psychological support, physiotherapy, music therapy with the support by new established specialized staff for special education (music therapists, physical therapists, sign language specialists, mobility instructors for blind people etc) are provided 6) special teaching tools (multimedia, hearing aid systems, Braille machines, sign language dictionaries, etc.) are provided 7) focus on research regarding the special education issues and teachers' training in Special Education by establishing a department of Special Education at the Pedagogical Institute. Despite the positive points and insight of the law, implementation was difficult to be achieved and there was criticism on how the law was presenting special education as separated from general education overall (Patsidou - Iliadou, M., 2011).

In October 2008, there was a new legislative effort in Special Education with the enactment of Law 3699/2008 which finally special education becomes a part of general education (article 2, par. 1) and Greece follows what international conventions on the human rights had introduced (Patsidou - Iliadou, M., 2011). Specifically, it introduces the inclusion of all students with mild learning disabilities and other special educational needs with parallel support from a special educator in the general school. As for the students who are not able to be self-serviced, they have the possibility of attendance in general schools with the presence of a special assistant, according to their needs. At the same time, however, special schools and integration classes exist (article 6). Moreover, the institution of the support of students with physical or sensory disabilities without mental retardation is introduced in order to attend to mainstream schools by the support of special education teachers (article 6 & article 18). It also recognizes for the first time the pupils with complex emotional, social and cognitive difficulties or delinquent behavior due to parental neglect or violence as people with special educational needs. Under the new law all children with intellectual disabilities, without discrimination, have the right to equal opportunities in the development of their personality and social and/or professional skills according to their potential for educational and social inclusion through the services of special education and training. (Article 2) (Patsidou - Iliadou, M., 2011). After the

² Κέντρα Διάγνωσης Αξιολόγησης και Υποστήριξης
enactment of this law, inclusion is considered as a part of the Greek educational system, however the implementation is cumbersome, not only due to the economic crisis, but in my opinion, due to the Greek mindset which is also difficult to change.

The last attempt on the steps towards inclusion was the article 39 in the law 4115/2013 where the differentiation in teaching was introduced. It is a term that refers to the need for systematic organization of educational practice according to the variables of each student. For a proper teaching design, they give emphasis on two parts: the student and the curriculum. The first one considers factors such as the students' interests, his learning readiness, the environment the student comes from and his/her experiences. Similarly, concerning the curriculum part we examine three dimensions: content, editing content and the final product (Patsidou - Iliadou et al, n.d.). "In another way, the concept of differentiated teaching ensures that what the student learns, how he learns and how he shows that he learned should match the level and learning readiness of the student" (Panteliadou, 2008 as cited in Patsidou - Iliadou et al, n.d). According to Patsidou - Iliadou et al, (n.d) this movement will be piloted in order to indicate whether it is possible to import structures of other educational systems to the Greek reality, having in mind the huge differences between urban and rural areas.

2.4 Inclusion's Prerequisites: What leads to successful inclusion?

As significant defining of inclusion is, the same is to underline what leads to a successful implementation of inclusion, since the movement has been spread around the world and many developing countries seem to deal with implementing the inclusion of students with special needs in the settings of a mainstream school. Inclusion is not a place that students with disabilities receive services, but mostly a way to deliver services effectively. The critical issue is not where children sit, but where they can receive the most effective education (Winzer, M.A., 2000). Generally, as stated in Lipsky & Gartner (1996), parents, staff, and state officials perceive that the success of inclusive programs depends on the attention being paid to creating and maintaining several key conditions such as: collaborative learning environment, natural proportions of disabled students in their local education setting, adequate support (including large numbers of aides and training) for classroom teachers, and a philosophic reorientation defining special education as a service, rather than a place. In
addition, the development of inclusive practice also involves social learning processes within a given workplace that influences peoples' actions and the thinking that informs these actions and therefore may contribute in the successful implementation of inclusion (Ainscow, M., 2005). Also, as Stainback (2000) conveys, a premise or perspective of inclusive education is that, to be successfully included and for positive learning opportunities to occur, each student must be viewed as an equally worthy and welcomed member of the class, not different, devalued, or somehow apart from other members. And concludes that every student, as a member of the group, may need some support to be successful in the classroom, but every student has something to offer and can be a provider of support to other class members (Stainback, S.B., 2000). Therefore, it is important for each and every student to be viewed separately as an individual and then as a member of the whole class in order for the inclusive practices to succeed.

Brown and Shearer (2004, as cited in Patsidou - Iliadou, M., 2011) claim that the implementation of inclusive education can be effective when the whole society supports educational practices, along with the financing of the special treatment which European Agency for Development in Special Needs Education mentions as one of the most important factors that determine the success of inclusion (Patsidou - Iliadou, M., 2011). In addition, a necessary prerequisite for the promotion of inclusive education is to transform schools into institutions, ready and willing to accommodate changes in terms of infrastructure, in order to make the natural environment of the school accessible to students with disabilities and place special needs educators in general schools for all students regardless their needs (Barton, 2004 as cited in Patsidou - Iliadou, M., 2011). Apart from the practical changes in the school environment, Ainscow (as cited in Patsidou - Iliadou, M., 2011) refers to a series of changes in the school policy which are crucial in order for inclusion to be achieved. The active participation of all those who are involved in the process of inclusive education (students, teachers, parents, community members) in decision making and development of the general school policy; the effective leadership by the school principal and the cooperation of all teaching staff in order to solve problems collectively; the participation of all teaching staff in the design of school planning and the commitment of all for its observance; are some of the steps need to be taken towards a successful inclusion. What is more, planning appears to be very important in order to create common goals for resolving conflicts and promoting individual action and initiatives; coordinating and developing of forms of communication between school staff in a way that both self-motivation and improvisation needed during the
teaching process are not limited, as well as a focus on continuous investigation and reflection of the practices applied in order to identify the benefits or any problems of their application can contribute to the achievement of inclusion (Ainscow 1997; Ainscow 2004; as cited in Patsidou - Iliadou, M., 2011).

Lovey (1998, as cited in Patsidou - Iliadou, M., 2011) maintains that one of the necessary things that lead to the successful implementation of inclusive education is to design and implement the curriculum in that way that is flexible and includes individual goals for each student. In that way, the teacher have the chance to adapt and implement the curriculum in that way that meets the needs of the students participating in the teaching process. Of course, the goals of school are not only related to the curriculum and the knowledge we gain, but school also works as a mechanism of socialization since developing social skills is part of the teaching process. Students learn their rights and obligations towards others and learn how to take responsibilities; The goal of inclusive education is to prepare future citizens who will actively intervene in social life (Patsidou - Iliadou, M., 2011). In order for these goals to be achieved in inclusive classes, it is necessary for students to learn how to shape their daily program, plan, organize and implement school activities, cooperate and operate within the group in a democratic way while they are able to assess their activities, others and themselves (Soulis, 2002). If the child fails to obtain new skills and ways of communication, not only he is not being improved, but also it is often to resort into disruptive behaviors in order to meet these needs that cannot be expressed in a socially acceptable way (Gena, A., 1996).

In inclusive schools the teaching tools and process should be tailored according to the educational needs of the students. Hence, the main objective is the development of such educational methods that will leverage different opportunities and the inherent inclinations and talents of each student (Patsidou - Iliadou, M., 2011). According to the European Agency for the Development of Special Education (2003) a series of educational approaches/methods appear to be effective within inclusive education:

1. co-operative teaching: teachers working together with other teachers (a specialist teacher or colleague), the head teacher and other professionals for the curriculum, individualized programs and organization of teaching process

2. co-operative learning: learners that help each other, especially when they have unequal levels of ability, benefit from learning together
3. collaborative problem solving: for all teachers, clear class rules and a set of borders - agreed with all the learners - alongside appropriate (dis)incentives have proved particularly effective in decreasing the amount and intensity of disturbances during lessons.

4. heterogeneous grouping: mixed ability level groups and a more differentiated approach to teaching are necessary when dealing with a diversity of learners in the classroom.

5. effective teaching and individual planning: all learners, including those with special needs, achieve more when systematic monitoring, assessment, planning and evaluation is applied to their work. The curriculum can be geared to their needs and additional support can be introduced effectively through an Individual Educational Program (IEP) that fits within the normal curriculum.

It is referred in the European Agency for Development in Special Needs Education (2010) that many researchers (e.g. Snell & Jenney, 2000; Carroll et al., 2003, Griffin et al., 2006; Hajkova, 2007) have emphasized the importance of developing skills in collaboration and negotiation. Smith & Leonard (2005, as cited in the European Agency for Development in Special Needs Education, 2010) also stress the importance of collaborative skills for successful inclusion. In many inclusive schools in which a solid foundation of support has been laid, effective collaborators report that the "secret" to success is ongoing teamwork focused on instructional planning. Therefore, collaboration appears to be a significant factor that promotes successful inclusive practices through collaborative planning. Collaboration is an interactive and ongoing process where educators with diverse expertise, knowledge and experiences work together to create solutions to problems that are impeding students' success, as well as to carefully monitor and refine those solutions when students with disabilities are included in content classrooms (Lenz, Deshler & Kissam, 2004 as cited in Ehren, B.J. & Little, M.E., 2014). However, collaboration in a school environment and especially in inclusive settings involves more peers than the educational staff, such as the principal and the parents of the students.

To start with, principals' relationship with teachers were identified as a factor in successful change efforts (Billingsley, B.S. & McLeskey, J., 2014) and they also play critical roles in setting the tone for inclusion and developing a collaborative culture in their schools (Tindall, E., 1996 as cited in Walther - Thomas, C. et al, 2000). If the principal is positive, supportive of staff and committed to inclusion at all levels, it is reflected in beliefs, attitudes and
practices of the teaching faculty (Van Dyke et al, 1995; Walther - Thoma, 1997a as in Walther - Thomas, C. et al, 2000). Tindall, E. (1996) presents a series of actions that foster collaboration that every principal should meet to achieve successful inclusion. A principal should:

- "Express a philosophical commitment to teacher collaboration and put words into action.
- Encourage shared decision making among faculty, staff, students and families.
- Provide clear, written expectations and constructive feedback for all staff members.
- Recognize and acknowledge individual and group efforts and accomplishments.
- Trust professionals to be responsible decision makers.
- Be willing and ready to provide needed assistance.
- Attend and participate actively in professional development sessions.
- Listen, brainstorm and problem-solve regularly with staff members.
- Ensure that staff members have essential materials, skills and other resources.
- Demonstrate flexibility, positive mental attitude and creative problem solving.
- Provide scheduled time for co-planning and preparation.
- Develop an array of collaborative support structures (e.g. teacher assistant teams).
- Seek volunteers for new initiatives that include students, families, community members and businesses.
- Provide opportunities for continuous professional growth.
- Spend time in classrooms observing, co-teaching and teaching while others plan.
- Encourage staff attendance at the meetings on collaborative projects.
Monitor students' academic and social growth on a variety of formal and informal measures" (Tindall, E., 1996 as cited in Walther - Thomas, C. et al, 2000).

Apart from the principal's actions towards the successful collaboration, it is essential that the rest of the education team members are willing to collaborate. If the school professionals have only few opportunities to plan together and problem solve in a collegial mode, it is unlikely that they will suddenly collaborate effectively to teach students with disabilities or those at risk (Walther - Thomas, C. et al, 2000). It is through collaborative teaming processes focused on designing, implementing and evaluating the effectiveness of supports and services for students with disabilities in inclusive contexts, that team members have extended their collaboration to meet the needs of all students in those contexts (Ryndak, D. et al, 2014) and this is what, in my opinion, ensures a solid ground for successful inclusion. It is critical that general teachers and special education teachers collaborate together and Patsidou - Iliadou (2011) denotes that research data show that teachers of general education find the support from special educators very comforting and they expect a lot from their collaboration with them. Hence, their collaboration seems to be a significant factor towards successful implementation of inclusion.

On the other hand, not only the educational team must cooperate together effectively, but also parents of students with special needs need to be in contact with them. As Forlin states (2001 as cited in Patsidou - Iliadou, M., 2011) when teachers and parents have regular meetings, allowing parents to participate in the educational process, then their relationship is one of the less stressful factors affecting the process. Powerful relationships allow teacher and parents to welcome knowledge of each other while emphasizing their common goal, the well-being and education of the child (Gilman, S., 2007). On the other hand, even if IDEA (2004) mandates parental involvement, and research has indicated that is a predictor of post-school success (Kraemer, McIntyre & Blacher, 2003 as cited in Test, D.W., et al, 2014), families are not well represented in the school as they have the right to do because they usually feel their role and contribution is not important. However, parents' participation can encompass daily interactions in the classroom, volunteering in the work of the school's special events and participating as board members (Gandini, 1997 as cited in Gilman, S., 2007). To conclude, the frequent contact and meetings between parents and educational staff is as significant as the collaboration between the teachers, due to the fact that parents are aware of their child's progress and situation, and they can support teachers' work.
From my point of view, all the above-mentioned play a critical role in the development of successful inclusive practices, but there is an additional factor that I believe is on the top of the others, and this is the teachers’ role. Although teachers in inclusive schools are both general and special, their role is common and contributes to successful inclusion due to the fact that it does not matter whether they have to deal with students classified as special education students or not; all children are equal and should be treated as equal. Moreover, social problems which have an impact on the children are mostly common according to the age regardless the disability or not, so both special and general teachers must be prepared to deal with each situation that occurs in the classroom. A series of studies reveal that the comments and feedback that a student gets from a teacher and generally the interaction they have, constitutes the psychological support that the student needs (Papanis, E. et al, 2007). Both general and special educators must be leaders for inclusive education and since they work mostly with students and their families, they have the most direct influence on the education program, and therefore the successful implementation of inclusion (Walther-Thomas, C. et al, 2000).

Although acceptance of all students is the responsibility of every teacher, not all have the skills needed for successful inclusion nor are all receptive to the principles and demands of inclusion (Winzer 1998, as cited in Winzer, M.A., 2000). According to the Conclusions of the European Council on improving the quality of teacher education (15/11/2007), ministers responsible for education agreed amongst other things, that teachers should:

- "Possess pedagogical skills as well as specialist knowledge of their subjects.

- Have access to effective early career support programs at the start of their career.

- Have sufficient incentives throughout their careers to review their learning needs and to acquire new knowledge, skills and competence.

- Be able to teach key competences and to teach effectively in heterogeneous classes;

- Engage in reflective practice and research.

- Be autonomous learners in their own career-long professional development"

(European Agency for Development in Special Needs Education, 2010).
It has already been mentioned how important it is for students to develop their social skills in school, and teachers play a critical role on this. They are responsible of preparing students to take their place in society and in the world and, in order to achieve this, a series of skills are required (as mentioned in European Agency for Development in Special Needs Education, 2010). Teachers need to:

- "Identify the specific needs of each individual learner, and respond to them by deploying a wide range of teaching strategies;
- Support the development of young people into fully autonomous lifelong learners;
- Work in multicultural settings (including an understanding of the value of diversity and respect for difference);
- Work in close collaboration with colleagues, parents and the wider community".

Rogers (1993) also refers to the elements of the best teacher, meaning what constitutes a good educator in inclusive settings. First of all, as it has been mentioned earlier, the best teachers teach each individual student rather than try to gear instruction to the average of the group, while at the same time, are highly aware of the dynamics of their classrooms. Furthermore, they are versatile by being comfortable to use many different teaching techniques and shift among them as needed (Rogers, J., 1993). What is more, inclusion requires that educators use "bifocal lenses" in order to see both the immediate and broader implications of their practices (Deering, P.D., 1998). In that way, will classroom and institutional practices be coordinated to consistently scaffold the academic and social functioning of special needs and mainstream students and only then both teachers and students will reap the full benefits of inclusion (Deering, P.D., 1998).

According to a series of studies on teachers' attitudes towards inclusion, that will be presented in the next chapter, attitudes play a significant role in the implementation of inclusion. It has been observed that more positive attitudes lead to successful inclusive programs. As Lindsay (2007) states, successful inclusion is affected by teachers' attitudes not only towards the inclusion itself, but also towards individuals with disabilities.

All in all, what contributes to the successful implementation of inclusion is based on the idea that students should be treated equally and individually, both these with special needs and
these with no special needs. Another significant point is the support from society, not only financial, but also general support to the movement of inclusion, while school changes appear to be crucial as well. Practical changes that will allow students with special needs to be part of the mainstream school and changes related to the curriculum and teaching methods can highly contribute to a better implementation of inclusive practices. Lastly, the relationship among the educational staff, collaboration between them - including the principal - and the parents of the students are also noteworthy in the process of implementation of inclusion, while at the same time the role of the teachers along with their attitudes towards inclusion and persons with disabilities appear to be one of the most significant factors towards successful inclusion.

2.5 Conclusion

This chapter intended to present the movement towards inclusion, starting with the definitions of the terms "mainstreaming", "integration" and "inclusion", in order to make the reader familiar with the terms that have been used through the years and concern the acceptance of students with special needs in mainstream settings. Inclusion as the latest years' trend can benefit students with special needs and this is the reason of presenting why schools should adopt the inclusive practices. Consequently, the worldwide movement towards inclusion is presented through policies and declarations in that way that situation in Greece can be referred next, through laws and practices. Lastly, inclusion's prerequisites are, in my opinion, necessary to be mentioned due to the fact that being aware of them we, as educators, can make a step further for a successful implementation of inclusion.
3 Teachers' Attitudes

3.1 Introduction

What is defined as an "attitude"? How wide is the field of research on teachers' attitudes towards inclusion and what are the factors affecting these attitudes? These questions are to be answered in this chapter, starting with the definition of the term "attitudes", retrieved from the field of social psychology where psychologists and attitudes' investigators proposed their explanations to clarify the meaning. Consequently, a presentation of previous studies on the same topic follows, including researches that have been conducted the latest 50 years worldwide which reveals a great interest on the topic. At this point it is substantial to mention that the older studies use the term "mainstreaming" instead of "inclusion", which is a more recent term, but there is not an extended reference to these specific studies in the present chapter. What is more, all these studies include teachers' attitudes coming from different educational levels, including also secondary teachers which is the group of teachers I am studying. Lastly, a series of factors that influence teachers' attitudes will be investigated by presenting factors that have been mentioned in previous literature and by underlining and further explained those that coincide with the factors I am planning to investigate in my personal research according to my research questions.

3.2 An introduction to the term "attitude"

A research concerning attitudes requires a clarification of the term which will be presented according to the definitions that have been proposed over the years, selected in that way that they, in my opinion, describe the term better in the framework of education where I conduct my research. From my point of view, multiple definitions are essential to be mentioned for the favor of readers' facilitation to follow the progress of the present study.

Starting with Gordon Allport (1935), one of the founders of attitudes research, “the concept of attitude is probably the most distinctive and indispensable concept in contemporary American social psychology" (Allport, G., as cited in Maio, G.R. & Haddock, G., 2010). He also referred to the term as "a mental and neural state of readiness, organized through experience,
exerting a directive and dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, G., 1935). Consequently, he explains that "attitudes" determine for each individual what he will see or hear, what he will think and what he will do, and also describes them as our methods for finding our way about in an ambiguous universe. These approaches on the term appear to be the very first, while in 1981 Petty and Cacioppo (as cited in Maio, G.R. & Haddock, G., 2010) define an attitude as “a general and enduring positive or negative feeling about some person, object, or issue”; a definition which simply describes the term. In the field of social psychology, Eagly and Chaiken (1993) proposed a definition which have been very popular, and refer to an attitude as a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor". Their reference to attitudes as "tendencies", interprets the term as internal states that last for at least a short time (Eagly, A.H. & Chaiken, S. 1993) which in other words means that they can change over the time as they get influenced by factors such as stimuli from our environment, for example. Other researchers refer to attitudes as constructs with affective, cognitive, and behavioral components. The cognitive component has been noticed as an individual’s ideas, thoughts, perceptions, beliefs, opinions, or mental conceptualization of the referent (Findler, L. et al, 2007). The affective component is said to reflect the emotional underpinnings of an attitude (Antonak & Livneh, 1988 as cited in Findler, L. et al, 2007), which can be explained as the amount of positive or negative feelings toward the referent. Lastly, the behavioral component generally relates to the individual’s intent or willingness to behave in a certain manner toward the referent, or the actual behavioral response (Cook, 1992 as cited in Findler, L. et al, 2007).

### 3.3 Teachers' Attitudes Towards Inclusion: A review of previous studies

A series of studies investigating teachers’ attitudes towards inclusion has been conducted worldwide, but results are not always clear and attitudes appear to be not only positive or negative, but controversial. Lindsay claims that even though there is a positive inclination towards inclusion theoretically, studies' findings do not confirm a total acceptance of the concept of inclusion and refers to teachers' attitudes as one of the most significant factors that lead to a successful inclusion (Lindsay, G., 2007).
It was Scruggs and Mastropieri (1996) who conducted a research synthesis including findings of almost 40 year studies concerning teachers' perceptions of mainstreaming and inclusion (10,560 teachers participated). Findings of 28 survey reports were examined in order to present what has been the perspective towards inclusion over the period 1958 - 1995 and findings show a positive inclination of teachers towards integration (in older studies) and consequently inclusion (in the recent studies). It is noteworthy that positive attitudes were not influenced by the differences among methodology, sample, chronological period and geographical area of each study (Patsidou - Iliadou, M., 2011). According to Scruggs and Mastropieri's findings (1996), even though teachers' attitudes towards inclusion were positive, a minority of teachers believed that placing students with disabilities in a general class would hinder the teaching - learning process mostly because these students would require more attention. All in all in this study, even though on average, 65% of teachers surveyed supported the general concept of inclusion, only one - third or less believed they had sufficient time, skills, training and resources necessary for implementing inclusive programs (Avramidis, E. & Kalyva, E., 2007).

Later on, more researchers published literature reviews concerning the same topic. Avramidis & Norwich (2002) included in their review teachers' attitudes for both integration and inclusion; here only the results concerning inclusion will be presented. Starting with early studies in USA, Avramidis & Norwich (2002) refer to studies that according to their findings, teachers were not supportive of a full placement of pupils with special needs in a mainstream school, while also referring to their stance about pullout programs. Firstly, a study carried out by Coates (1989, as cited in Avramidis & Norwich, 2002) reported that general education teachers in Iowa did not have a negative view of pullout programs, but they were not supportive of inclusion either. Another study by Vaughn et al (1996, as cited in Avramidis & Norwich, 2002) examined both general and special teachers’ perceptions through the use of focus group interviews and findings showed that a great majority of these teachers, who were or currently participating in inclusive programs, had strong negative feelings about inclusion, arguing that "decision makers were out of touch with classroom realities" (Avramidis , E. & Norwich, B., 2002). Participants in this study identified a number of factors that would affect the success of inclusive programs, starting with class size, inadequate resources, the extent to which all students would benefit from inclusion and, lastly, the lack of adequate teacher preparation (Avramidis , E. & Norwich, B., 2002). Subsequently, Avramidis & Norwich (2002) refer to a series of studies with contradictory findings, where teachers had active
experience of inclusion. A study conducted by Villa et al (1996, as cited in Avramidis & Norwich, 2002) reveals that teachers support the inclusion of students with special needs in ordinary schools. The researchers noted that educators' commitment to the concept of inclusion emerges after they have gained mastery of the professional expertise needed to implement inclusive programs and this is a finding also reflected in Sebastian and Mathot-Buckner's (1998, as cited in Avramidis & Norwich, 2002) case study at schools in Utah, where students with learning difficulties had been integrated. Participants were 20 teachers who were interviewed both at the beginning of school year and at the end in order to determine attitudes about inclusion. Results showed that teachers felt that inclusion was working well, even if more support was needed. Similar findings were reported by LeRoy and Simpson (1996, as cited in Avramidis & Norwich, 2002) who investigated the impact of inclusion over a three-year period, showing that as teachers' experience with students with special needs increased, their confidence to teach these children also increased. The investigators comment at this point that this seems to indicate that teachers' negative or neutral attitudes at the beginning of an innovation such as inclusion may change over time experience is gained and levels of expertise develop through the process of implementation (Avramidis, E. & Norwich, B., 2002).

According to Zoniou-Sideri and Vlachou (2006) who conducted a study using 641 teachers of all educational levels, teachers' positive attitudes towards inclusion is highly connected with self-efficacy and it has been noticed that when they manage to use the appropriate educational methods in a general classroom with students with special needs, they automatically gain self-efficacy (Zoniou-Sideri & Vlachou, 2006). The teachers who participated in this study did not have any experience with students with special needs and their knowledge concerning inclusion was poor. In this study findings show that teachers in Greece have contradictory beliefs towards the inclusion of students with special educational needs. Specifically, they tend to believe that inclusion is not only a way of improving schools' system, but also contribute to the limitation of segregation of students with disabilities. On the other hand, they also believed that inclusion is unfortunately not attainable in all cases of students with special needs, that the implementation is difficult, and that it will negatively affect the whole class and other students' academic performance. However, another point deriving from this study is very important; even if the academic performance will be negatively affected, teachers' claim that social relationship among all students, with and without disabilities, will be benefited (Zoniou-Sideri & Vlachou, 2006).
Avramidis and his colleagues have conducted several researches two of which are relative to teachers' attitudes towards inclusion, both carried out in England. Starting with the research published in 2000, 81 primary and secondary teachers were surveyed and results revealed that teachers who have been implementing inclusive programs and have active experience of inclusion, tend to have more positive attitudes (Avramidis, E., et al, 2000). Findings also showed the importance of professional development in the formation of positive attitudes, since teachers with substantial training in special education held significantly higher positive attitudes than those with little or no training about inclusion. Their confidence on meeting the IEP requirements was also examined, showing that those who had been trained on special needs demonstrated more confidence than those who hadn't (Avramidis, E., et al, 2000). Consequently, their research at a secondary school in England, which was identified as inclusive by the local education authority, using utilized ethnographic research methods, aimed to investigate inclusion in a holistic way, at the school level (Avramidis, E. et al, 2002). Findings of this study show that teachers expressed positive attitudes in the sense that inclusion respects children’s right to be with the friends, family and within the community and it benefits them both socially and academically (Avramidis, E. et al, 2002). What is more, teachers claimed that as their experience with children with SEN increased, their confidence to teach them increased. However, they also indicated the need of more training and knowledge concerning special education, especially when it comes to specific types of disabilities (for example, severe behavior problems) (Avramidis, E. et al, 2002).

Another study by Karakoidas and Dimas (1998) showed that general teachers held mostly negative attitudes towards the inclusion of children with specific kinds of disabilities such as: deafness, blindness, behavioral problems and mild mental retardation, even though they acknowledged that inclusion could benefit children on social skills. Furthermore, they expressed their disagreement with the implementation of such a policy until sufficient resources and teachers' training will be provided (Karakoidas & Dimas, 1998).

In the study of Avramidis and Kalyva (2007) concerning teachers' attitudes towards inclusion, 155 general education primary teachers participated, coming from one region of Northern Greece; 25% of the participants were teaching in schools identified as actively implementing inclusive programs (however in Greece it is most common to use the term "integration", since there were no inclusive programs), while 75% of them were teaching in schools that were randomly selected. Findings revealed positive attitudes towards inclusion, especially from
these teachers who had been actively involved in teaching pupils with special needs. They claimed that children with special needs have a right to be educated alongside with mainstream peers and that inclusion in a mainstream environment would also bring benefits to these children in terms of their cognitive and social development (Avramidis, E. & Kalyva, E., 2007). On the other side, this study reveals negative responses concerning practical difficulties in classrooms if the number of students with special needs increases in a classroom. According to this, the researchers refer to the fact that responsibility for implementing inclusion in Greece has fallen on "expert" professionals such as special education teachers and related professionals, as first stated by Zoniou - Sideri & Vlachou, (2006). This statement can be confirmed by the negative attitude of the respondents in this study when the questions were related with their full responsibility to implement inclusion in their own classroom (Avramidis, E. & Kalyva, E., 2007). Only those with previous experience in inclusive settings felt more prepared to teach children with different types of needs in inclusive settings. Lastly, teachers with further training on special needs expressed more positive attitudes than those with little or no training at all concerning inclusion. All in all, this study's findings indicate that the more inclusion becomes a part of the landscape, the more inclusive attitudes and practices will follow (Avramidis, E. & Kalyva, E., 2007).

It was Koutrouba and her colleagues (2008) who conducted a research on secondary teachers' attitudes towards inclusion as well as the factors that enhance either positive or negative attitudes. The sample was 365, both lower and upper, secondary education teachers out of which the 52.9% favored the inclusion of students in regular schools. Out of these teachers with positive attitudes, 26.4% believed that inclusion prepares students for future embodiment in society; 14.5% stated that it applies equal rights in a democratic society, while 8.3% stated that it helps the overcoming of prejudice and reservations towards disabled people, and 0.5% that it neither negatively affects the teaching process nor diminishes the academic performance of the students as a whole. Furthermore, 50.3% of those who were supportive of inclusion selected all the above mentioned reasons. On the other hand, the rest of the teachers (47.1%) expressed a negative attitude of inclusion in regular schools, justifying their negative stance by referring to the following factors: a) lack of infrastructural equipment and inflexibility of curricula (29.6%), b) considerable effort by the educator to diversity teaching and evaluating methods in mixed - ability classes (8.1%), c) a decline in "regular" students' academic performance (2.3%). A high percentage, 60% of the negatively disposed teachers
selected all the above mentioned reasons (Koutrouba, K., Vamvakari, M. & Theodoropoulos, E., 2008).

Patsidou - Iliadou (2011) in her interdisciplinary approach investigates teachers' and students' attitudes towards people with special needs and their inclusion with other peers without special needs in mainstream schools. Concerning teachers' attitudes, the research included 293 secondary teachers of general schools in Northern Greece, while 78 of the sample's questionnaires were not included in the analysis due to the fact that they were not correctly filled, as mentioned by Patsidou - Iliadou. Findings showed positive attitudes, but results can be characterized as contradictory. Specifically, those who expressed positive attitudes and had been previously trained on special needs, were negative to involve in practical issues concerning the implementation of inclusion (for example, changes in the school environment/classroom that would made the access of students with disabilities more convenient). On the other hand, teachers with more years of teaching experience and previous experiences with students with disabilities tend to have more positive attitudes than these teachers with less experience. Another interesting result is that teachers with previous experience reported that they feel more capable and ready of meeting special students' needs, having the feeling that they have the skills to do so due to their previous experiences. Therefore, teaching experience overall and experience with students with disabilities seem to lead to positive attitudes of the participants of the study (Patsidou - Iliadou, M. 2011). On the contrary, training or further education on special needs did not affect their attitudes. The secondary teachers who had been trained on special needs expressed less positive attitudes than those who did not have similar training. Specifically, teachers who had been trained were less positive concerning the benefits of inclusion and their professional competence, compared to those who hadn't been trained. This finding opposes to the hypotheses of the study that "training on special needs education is expected to positively affect teachers' attitudes towards inclusion" (Patsidou - Iliadou, M. 2011). Based on this finding, Patsidou - Iliadou comments that is it advisable to investigate to what extend training on special needs education is sufficient, in order to provide teachers with not only theoretical knowledge, but also the necessary skills in that way that they can support the implementation of inclusive programs.

Kimbrough and Mellen (2012) present a series of results on studies concerning teachers' attitudes towards inclusion. Santoli, Sachs, Romey, and McClurg (2008, as cited in
Kimbrough and Mellen, 2012) found that despite the fact that almost all teachers interviewed (98.2%) were willing to make necessary accommodations for students with disabilities, the majority of those teachers (76.8%) felt that students with disabilities should not be educated in general classrooms no matter what the simplicity or severity of the disability, especially students with behavioral disorders and/or mental retardation (Kimbrough and Mellen, 2012). However, a great majority of teachers expressed a positive attitude toward inclusion. They also believed that enough training and administrative support are factors that will benefit the burden of the adaptations and the extra classroom time needed for special education students. What is more, research revealed that some teachers in inclusive classrooms recognized the positive social benefits for both special and general education students (Downing & Peckham-Hardin, 2007; Fisher & Meyer, 2002; Matzen et al., 2010 as cited in Kimbrough and Mellen, 2012). However, general education teachers expressed their concern over the limited amount of time students with disabilities spend in the general classroom due to issues such as aggressive behaviors which consequently led to their removal from the classroom. In that way exposure and opportunity to be engaged in the curriculum faded out (Downing & Peckham - Hardin, 2007 as cited in Kimbrough and Mellen, 2012). Hence, general educators felt unsure about the amount of core curriculum students with disabilities were actually mastering and how to assess what students with disabilities are learning (Kimbrough and Mellen, 2012).

Positive attitudes, highly influenced by their previous experience as well as their self-identity, were also expressed by educators who participated at a research by Batsiou and her colleagues (2008), both in Greece and Cyprus. 87 Greek teachers and 92 Cypriot teachers constitute the sample of this study, with Cypriot teachers showing more positive attitudes towards inclusion and feeling ready to correspond to the requirements of inclusion, comparing to the Greek teachers.

The latest study concerning teachers' attitudes towards inclusion in Greek context was held by Tsakiridou & Polyzopoulou (2014) with a sample comprised of 416 teachers of different educational levels (preschool, primary, secondary education). The results of this study revealed that teachers tend to develop positive attitudes towards the students with social difficulties, while they are less concerned about students with behavioral and academic difficulties, but they perceive students with physical disabilities as less confronting in the general school education school (Tsakiridou, H. & Polyzopoulou K., 2014). Tsakiridou &
Polyzopoulou (2014) refer to these findings as similar with three previous studies by Bornman, J. & Donohue, D.K. (2013), Sharma, U., Ee, J. & Desai, I. (2003) and Wilczenski, F.L. (1992). What is more, there was a difference between teachers' attitudes according to the subject that they teach; pedagogy science teachers were more positive with respect to the inclusion of students with special educational needs (Tsakiridou, H. & Polyzopoulou K., 2014). This derives from the fact that in the Greek educational system during the studies in pedagogical sciences, teachers take courses with subjects related to special education and schoolchildren characteristics, in contrast to those teachers who studied natural sciences, who were not obliged to take similar courses (Tsakiridou, H. & Polyzopoulou K., 2014). A very affective variable of teachers' attitudes appeared to be the teaching experience as well as the fact that a teacher has the option to seek help from a specialist on schoolchildren with mild or severe behavioral problems; this leaded to more positive attitudes (Tsakiridou, H. & Polyzopoulou K., 2014). Those teachers who own a master degree or a phd are less concerned about the inclusion of students with disabilities, as other studies have indicated. Findings in total showed generally neutral attitudes towards inclusion, with the exception of secondary education teachers who developed negative attitudes (Tsakiridou, H. & Polyzopoulou K., 2014).

3.4 Factors that influence teachers' attitudes towards inclusion

A series of factors that affect teachers' attitudes towards inclusion of students with special needs appear to be similar in different studies over the years, as the review of previous studies on this topic reveal. As I have already mentioned, Avramidis and Norwich (2002) conducted a literature review on teachers' attitudes and specified a number of factors influencing them. The kind/nature of disability, their teaching experience as well as their previous experience with students with special needs, their training or further education on special needs, their position and educational level, the availability of support services and the cooperation with other peers mentioned as factors that can affect what teachers state about the inclusion of students with special needs in general schools.
3.4.1 The kind/nature of disability

According to Lifshitz and his colleagues (2004), teachers' attitudes towards inclusion cannot be dissociated from the nature of disability because they indicate the kind of educational support the student needs in the classroom. This coincides also with the findings of Scruggs and Mastropieri's reviews (1996) who claimed that there is a significant correlation between the kind of disability and the teachers' attitudes towards inclusion.

As shown in Arvramidis and Norwich (2002) review of literature, teachers' perceptions could be differentiated on the basis of three dimensions of disabilities: physical and sensory, cognitive and behavioral. Educators in a study by Forlin (1995 as cited in Avramidis & Norwich, 2002) were cautiously accepting of including a child with cognitive disability, and were generally more accepting of children with physical disabilities, while in a study by Ward et al (1994 as cited in Avramidis & Norwich, 2002), results are very revealing. In this study, Ward and colleagues produced a list of 30 disabling conditions which they defined behaviorally. Findings showed that teachers expressed little disagreement about the inclusion of children with mild difficulties (mild physical and visual disabilities and mild hearing loss), since they were not likely to require extra instructional or management skills from the teacher. Teachers though appeared to be uncertain about the suitability of including children with disabling conditions (mild intellectual disability, moderate hearing loss, visual disability and hyperactivity) that in various ways posed additional problems and demanded extra teaching skills from teachers. What is more, teachers were unanimous in their rejection of the inclusion of children with severe disabilities (profound visual and hearing impairment and moderate intellectual disability) as they regarded a challenging group and as they normally study - at least at the time of the study- in special schools. Lastly, children with profound sensory disabilities and low cognitive ability were also considered to have a relatively poor chance of being successfully included in a general school (Avramidis, E. & Norwich, B., 2002).

On the other hand, in the Clough and Lindsay study (1991, as cited in Avramidis & Norwich, 2002), the majority of teachers referred to emotional and behavioral difficulties of the children as the most difficult needs to be met. Visual and hearing impairments follow, while sensory and physical impairments appear to be the least difficult with the explanation by the researchers that at that time these children who faced this kind of disability were mostly placed in special schools.
In the abovementioned study by Koutrouba et al (2008) on secondary education teachers’
attitudes, findings demonstrated that teachers indicated specific kinds of disabilities that are
not difficult to handle in the classroom and therefore, the attendance of these students in a
mainstream class is acceptable. According to the results, 39.2% of teachers participated
expressed that the inclusion of students with motor problems can be normally implemented in
contrast with a high percentage of teachers (71.2%) who expressed the exact opposite about
students with mental retardation, meaning that inclusion is not "normal and uneventful" in
that case. In the case of students with visual disorders or hearing impairments, 34.5% and
42% respectively appeared to be skeptical of their inclusion in mainstream classes, while only
0.3% agreed on the inclusion of students who present behavioral problems. Lastly, a different
attitude was expressed towards the inclusion of students with learning difficulties (e.g.
dyslexia); 62.7% of the teachers (20.5% "strongly agreed", 42.2% "fairly agreed"), expressed
their agreement that the inclusion of these students can be "normal and uneventful"

When it comes to the study of Avramidis and Kalyva (2007), teachers' variable responses to
the difficulty of accommodating children with different types of special needs also reveal
their attitudes towards inclusion. Learning difficulties were viewed as unproblematic, while
severe and complex needs (brain/neurological disorders), autism or sensory impairments were
regarded as major challenge to accommodate (Avramidis, E. & Kalyva, E., 2007).

Similar findings retrieved from the study by Zoniou-Sideri and Vlachou (2006), where
teachers appeared to believe that inclusion of students with motor disabilities and visual
problems is more attainable than those with intellectual disorder and hearing impairment and
showed a negative attitude towards the inclusion of students with multiple disabilities (Zoniou
- Sideri & Vlachou, 2006).

3.4.2 Teaching Experience

According to the literature review teachers with more years of teaching experience tend to
trust themselves more on the teaching process and have more positive attitudes towards the
inclusion of students with special needs in mainstream classes (Wilkins, T. & Nietfeld, J. L.,
2004). In the study by Koutrouba et al (2008) the majority of respondents had a teaching
experience of over 16 years (52.9%) and findings showed that the longer the experience was, the more positive the attitude towards inclusion was.

However, other studies have shown the exact opposite; more years of teaching experience lead to negative attitudes towards inclusion, or that there is no significance at all between the variable of the amount of teaching experience and teachers' attitudes. Forlin's study (1995 as cited in Avramidis & Norwich, 2002) showed that the acceptance of a child with physical disability was highest among educators with less than six years of teaching experience and declined with experience for those with six to ten years of teaching. The most experienced educators (<11 years of teaching) were the least accepting (Avramidis, E. & Norwich, B., 2002). Similar results retrieved by Harvey's study (1985 as cited in Avramidis & Norwich, 2002) where more experienced teachers expressed a clear reluctance to include a child with special needs in their class in comparison to teacher trainees who appeared to be more positive, as well as in the study of Center and Ward (1987) where teachers with less teaching experience (0-2 years) appeared to be more supportive towards inclusion.

On the other side, in many studies results reveal that there is no influence on teachers' attitudes according to their years of experience. For example, in the study of Patsidou - Iliadou (2011) there is no difference in teachers' attitudes and the years of teaching experience, as well as in the studies of Avramidis, E. et al, 2000; Batsiou, S. et al, 2008.

### 3.4.3 Previous teaching experience with students with special needs

According to the European Agency for Development in Special Needs Education positive attitudes towards the inclusion of students with and without disabilities can be grown by the direct practical teaching experience in successful inclusive programs (Patsidou - Iliadou, M., 2011). Therefore, teaching experience with students with special needs constitutes a significant factor towards the formation of teachers' attitudes towards the concept of inclusion.

As mentioned before in the study of Avramidis and his colleagues (2002) teachers claimed that as their experience with children with SEN increased, their confidence to teach them increased and their perception towards inclusion also changed in a positive way. In the study of Batsiou et al (2008), teachers' attitudes were highly influenced from their previous experience as well as their self-identity. One more time, the role of teachers' experience in
teaching individuals with special needs influenced the shaping of positive attitudes with regard to the process of inclusion (Batsiou, S., et al, 2008). Similar findings are given by the study of Avramidis and Kalyva (2007) where teachers' responses were significantly related to the existence of prior teaching experience with disabled pupils, with those possessing such experience reporting more positive attitudes towards inclusion than their counterparts (Avramidis, E. & Kalyva, E., 2007). According to the findings of the study by Avramidis et al (2000), data indicated that teaching students with significant disabilities in mainstream settings results in positive changes in educators' attitudes.

On the contrary, other studies indicate that teaching children with special needs in mainstream settings does not always lead to the formation of positive attitudes (Patsidou - Iliadou, 2011). Forlin (2001, as cited in Patsidou - Iliadou, 2011) detected that a high percentage of teachers participated in his study (66%) who also participated in inclusive programs at schools, reported their experience and the concept of inclusion as a very stressful process. Furthermore, a similar amount of teachers agreed that the presence of a student with special needs in their class hinders the teaching process as well as the control of the students in total, which is also a stressful condition. Therefore, it is advisable that teachers gain positive experiences in order to develop the proper positive attitudes towards the inclusion of special needs in mainstream classes (Watkins, 2007 as cited in Patsidou - Iliadou, 2011).

3.4.4 Training / Further education on Special Needs

Teachers' training on special needs or further education on this field has been identified as a factor related to their attitudes towards inclusion. Avramidis and Kalyva (2007) point out that if teachers are guided and supported through careful and well - planned training courses, then it can be anticipated that considerable attitude change can be obtained. Ainscow (1998, as cited in Patsidou - Iliadou, 2011) points out that teachers' training is necessary in order for a teacher to be capable to run individual educational programs that meet their students' needs and also be able to develop practices which contribute to the limitation of the idea of "deficiency" and generally the elimination of prejudices. The influence that training has on formation of positive attitudes towards inclusion has been revealed through a series of studies (Bowman, 1986; Center & Ward, 1987; Leyser et al., 1994; Beh-Pajooh, 1992; Shimman, 1990 as cited in Avramidis et al, 2000). Also in the study of Avramidis et al (2000) results revealed that teachers with substantial training in special education had a significantly higher
positive attitude than those with little or no training and which also indicated teachers' confidence in meeting IEP requirements. Similar results reported by Koutrouba et al, 2008 and Avramidis & Kalyva, 2007. From the literature review it was only the study of Patsidou - Iliadou (2011) which results showed that teachers' who had been trained in special needs had negative attitudes towards inclusion in comparison with those who hadn't been trained. This considered as a paradox, since teachers' positive attitudes towards inclusion must be followed by constant training in order to lead to positive result in the inclusion field (Clough & Lindsay, 1991 as cited in Patsidou - Iliadou, 2011).

3.4.5 Educational level

Patsidou - Iliadou (2011) points out that the educational level in which educators teach plays a significant role to the formation of their attitudes towards inclusion. Since my research concerns only the attitudes by secondary teachers, this factor will be presented in comparison to primary school teachers' attitudes, according to the literature review.

According to Clough and Lindsay (1991, as cited in Patsidou - Iliadou, 2011) secondary education teachers appear to be the first to express positive attitudes towards inclusion, since they were the first to gain positive experiences in inclusive settings with disabled students and confirm the fact that students with special needs can be included in a mainstream classroom. Consequently, Patsidou - Iliadou (2011) refers to Leyser and colleagues' study (1994) which conducted in six different countries and indicated that secondary education teachers held more positive attitudes towards inclusion than primary school teachers.

In the already mentioned study of Zoniou - Sideri & Vlachou (2006) with 641 teachers of all educational levels (21.2% preschool, 42.5% primary school and 36.4% secondary education teachers) as participants, results revealed that the educational level consists a significant factor of their attitude towards inclusion; Secondary education teachers appeared to be more supportive to inclusion in comparison with primary school teachers who justified this statement according to the claim that inclusion will not benefit pupils in their cognitive, social and emotional development (Zoniou - Sideri & Vlachou, 2006).

Of course not all studies indicated similar findings as the abovementioned. In the Chalmers' study (1991, as cited in Avramidis, E. & Norwich, B., 2002), elementary school teachers displayed more positive attitudes towards inclusion comparing to their secondary
counterparts. This finding is also supported by Salvia and Munson (1986, as cited in Avramidis, E. & Norwich, B., 2002) who concluded that as children's age increased, teachers' attitudes became less positive to their inclusion in mainstream settings, and also attributed that to the fact that teachers of older children tend to be concerned more about subject-matter and less about individual children differences.

Lastly, in the study of Avramidis and his colleagues (2000) where both primary and secondary teachers participated, there was no difference in their attitudes according to their educational level.

All the above mentioned factors have been underlined in studies, derived from the systematic review, as those who mostly influence teachers' attitudes towards inclusion, even though a few studies don't support this statement according to the findings.

### 3.5 Conclusion

This chapter intended to clarify the meaning of the term "attitudes" in that way that readers can understand and follow the concept of the present study. What is more, it is also essential that a comprehensive review of previous studies and commentary of the findings are presented. From my point of view, this gives a meaning to the present research and allows the researcher to rely on a background and compare the final results of this present study with those of previous, later on, after the data have been analyzed. According to the previous studies concerning this topic, teachers' attitudes vary from study to study, affected by a series of factors that are also presented based on the review of literature. Attitudes appear to be positive, negative or neutral towards inclusion, but the important part, in accordance with the previous studies, is the factors that influence them.
4 Methodology

4.1 Introduction

As it has already been mentioned one of the factors that influence the success of inclusion is the existence of teachers' positive attitudes towards the inclusion of students with special needs. The recent development of integration and inclusion programs in secondary education in many countries makes the investigation of secondary teachers' attitudes necessary, and especially in Greece given the prospect of the new legislation for Special Education (Law 3699/2008 as mentioned in Patsidou - Iliadou, M., 2011). Therefore, this study aims to investigate secondary teachers' attitudes towards the inclusion of special needs school in a general school in Argolis region of Peloponnese. This chapter includes a presentation of the research design for this study, the research site along with the population and sampling that was used, the instruments, the data collection and data analysis procedure along with validity & reliability and lastly, ethical issues that could arise.

4.2 Research Design

Quantitative approaches are the usual method for studying attitudes by using measurement scales. The scales vary depending on the components of attitudes that they measure and the theory on which their constructor is based on. They consist of a set of statements or words referring to the subject of attitude. According to the responses of the individual, he/she determines his/her attitude at a point of a graded scale, consisting of positive to negative feelings toward the attitude object in question (Antonak, R. F. & Livneh, H., 1988). Since this study is using the quantitative approach, the survey research design was chosen as the most suitable for measuring the attitudes of a large population. Gathering large-scale data in order to make generalizations, generating statistically manipulable data and gathering context-free data are the basic purposes of a survey according to Cohen, L. et al (2007), using mostly questionnaires or interviews. Opinion surveys ask respondents to express their attitudes by responding to a list of questions about the referent. A structured (closed) opinion survey asks the respondents to select one among a small set of responses, or all of those that they agree with, or those that they endorse (Antonak, R. F. & Livneh, H., 2000).
The research design for investigating teachers’ attitudes was chosen taking into account various factors. First of all, a relevant questionnaire by Cochran (1997) that would help me answer the research questions in a limited time was considered as appropriate since most teachers appear to be busy and questionnaires as described above are considered less time consuming than other methods as interviews. Secondly, a questionnaire filled in under anonymity, could give more honest answers/results than interviews or even observation that involve a face to face interaction which may affect the participants responses. Additionally, in order to generalize data that are relevant to attitudes, a large sample size was necessary which means that any other method than questionnaires would not be applicable.

4.3 Research Site, Population & Sampling

This study was conducted in Greece, by investigating secondary teachers’ attitudes in the district of Argolis in Peloponnese. In this region there are 23 secondary schools with an average of 20 secondary teachers each (11 schools are located in urban areas and 12 schools in rural). For my study 10 secondary schools were selected proportionally according to the population using a simple random sampling. According to Gall et al (2007) a simple random sampling is a sample in which all members of the accessible population have an equal chance of being selected. The secondary teachers may or may not have experience with students with special needs in mainstream settings, however what we are interested to investigate is their attitudes. This is also why the study is conducted anonymously; we are not interested who is who, but in the attitude the teachers will express through their answers.

A number of at least 100 participants was required for this study chosen randomly from the population. De Vaus (2002) denotes that a fundamental goal of research is to be able to generalize, that is, to say something reliable about a wider population on the basis of the findings in a particular study. What is more a sample is obtained by collecting information about only some members of the population while a representative sample is one in which the profile of the sample is the same as that of the population and properly mirrors the population it is designed to represent (e.g. gender) (De Vaus, D.A, 2002). According to Gall et al (2007) all members of a real or hypothetical set of people, events, or objects to which researcher wants to generalize the results of the research are parts of the target population in a quantitative research. In the present study the population is secondary teachers of mainstream schools in Argolis selected randomly. 221 secondary teachers were asked to participate,
though 143 of them completed the questionnaires which were finally included in the study. All 143 questionnaires were correctly completed, since a personal thorough examination contributed to this.

4.4 Instruments

Questionnaires are the most common method of collecting survey data (De Vaus, D.A, 2002), having of course both advantages and disadvantages for the researcher. First of all, they are less cost effective than other methods used, while they secure anonymity. Additionally, it is less time consuming to collect the data, especially in close-ended questions. On the other hand, questions should be kept brief, while after distributing it there is no way to modify the items included, even if they are unclear to some respondents (Gall et al, 2007). In this case the presence of the researcher is necessary for further explanations, which is also a disadvantage when the researcher is not available or conducting a mail survey, for example. When constructing a questionnaire we have to keep in mind that the larger the size of the sample, the more structured, closed and numerical the questionnaire may have to be (Cohen, L. et al, 2007).

Rating scales represent a ubiquitous attitude measurement method. A probabilistic rating scale assumes that the response to any item on the scale is not determined by the respondent’s latent attitude, but rather the respondent’s attitude is assumed to increase the probability that a particular response will be selected. The most widely known rating scale is the summated rating scale method developed by Likert (Likert R. A, as cited in Antonak, R. F. & Livneh, H., 2000). The likert scale is constructed by compiling a number of topical statements that are equally divided among those items that express a clearly favorable attitude and those items that are clearly unfavorable. Respondents are asked to indicate for each topic whether they strongly agree, agree, are undecided, disagree, or strongly disagree (Ary, Jacobs, & Razavieh, 2002).

In the present study the questionnaire was constructed based on the Scale of Teachers' Attitudes Toward Inclusion (STATIC) which was constructed by Cochran (1997) aiming to assess the attitudes of teachers towards inclusion. The questionnaire modulated and divided into 3 parts:
1. Background, which included demographical characteristics;
2. Experience, which refers to relevant experience with students with special needs and only those with experience were asked to fill in. Respondents were asked to chose among statements in a 5-point scale ranging from "A great deal (0), Much (1), Somewhat (2), Little (3), Not at all (4)";
3. Attitudes, of which the attitude scale was constructed. The respondents were asked to express their agreement on statements in a 5-point scale ranging from "Strongly Agree (0), Agree (1), Undecided (2), Disagree (3), Strongly Disagree (4)".

The answers were coded from 0 to 4 in order to facilitate the data analysis process. A small introduction was also included aiming to inform the participants the purpose of the study, who the researcher is, and that their participation is voluntary and anonymous.

As long as the questionnaire was completed, it was personally translated in the Greek language and consequently reviewed by two native Greek speakers who were also fluent in English and at the same time relevant to the field of education. After completing the questionnaire it was handed out to five secondary teachers in order to ensure any ambiguities and check the average time of filling it in. After their feedback we agreed that a definition of inclusion should be given to the participants, preferably orally by me before handing out the questionnaires. What is more, the average time of filling the questionnaire was approximately 10 minutes, which was very convenient for teachers that are usually busy.

### 4.5 Data collection

As I have referred, 10 secondary schools in the area of Argolis participated in my study. Before starting the data collection and before contacting any schools I had taken permission and authorization by the Norwegian Social Science Data Services, which is called "Norsk Samfunnsvitenskapelig Datatjeneste" (NSD) and is in charge of controlling all researches that take place in the country. The above-mentioned teachers who assessed my questionnaire helped me contacting the school they were teaching to, and in that way I arranged the meetings where I could hand out the questionnaires. Moreover, I had to contact some schools on my own. All principals agreed that their teachers should participate in my study and expressed their interest. Personal contact when completing the questionnaires was chosen in order to give explanations which is a method applied in other investigations as well (Janney et
al, 1995). However, of each school one teacher was in charge of giving explanations, collecting the questionnaires and make sure they are fully completed in case of my absence. Fortunately, I was able to attend all the meetings I had arranged. Meetings took part during school breaks, while I had to visit some school units more than once. After handing out questionnaires I always started with a brief definition of the terms "attitude" and "inclusion" and then I was available to answer any possible questions the participants had. Finally, I took some time to check every questionnaire when it was returned in order to ensure that it is correctly completed. In cases that a questionnaire was not correctly completed, or not fully completed, I kindly asked the participant to spend some more time on it and whenever he/she was ready they could return it to the teacher in charge or me if possible. I even let participants take the questionnaire at home and return it between an agreed deadline. In that way, all the questionnaires were successfully completed and 143 questionnaires consisted my sample. As it has been mentioned earlier, the total amount of teachers being asked was 221; However, only 2 teachers were clearly not interested, while the others did not participate due to random reasons (eg. they were on leave), or did not bring back the questionnaires that had taken at home.

4.6 Data Analysis / Validity & Reliability

First of all, the Statistical Package for Social Sciences (SPSS 22) was used to analyze the data of the questionnaire with the assistance of my supervisor, Peer Møller Sørensen. Since, the SPSS program requires numerical data, the answers were converted into numbers during the process of constructing the questionnaire. This process of converting the answers into numbers and classifying answers is, according to De Vaus (2002), called "coding". Some of the codes need to be reversed in order for variables to be coded in the same direction (De Vaus, D.A, 2002). This was used for a number of answers, while some new variables were created as well during the process.

Validity is concerned with the extent to which a particular instrument measures what its developer intends for it to measure (Antonak, R. F. & Livneh, H., 1988). Specifically, content validity refers to the extent to which the scale items may be considered to be adequate, appropriate, complete and representative sample of the domain that is being measured (Antonak, R. F. & Livneh, H., 1988). Therefore, in order to ensure the validity, the terms "attitude" and "inclusion" were explained to the participants. Moreover, the definition of
people with special needs provided by the Greek law for special education was used when constructing the questionnaire, and lastly, the items included reported as clear and concrete.

Reliability concerns the extent to which measurements are repeatable - by the same individual using different measures of the same attribute or by different persons using the same measure to attribute (Nunnally, 1978 as cited in Antonak, R. F. & Livneh, H., 1988). It is concerned whether a respondent's score on an attitude scale is a consistent and precise measure of his/her attitude (Antonak, R. F. & Livneh, H., 1988). Cronbach's alpha coefficient is usually used to check the reliability of a scale and it should be at least 0.7 (De Vaus, D.A, 2002). In the presence study, Cronbach's alpha was 0.709 which is satisfactory, indicating the reliability of the attitude scale.

Frequencies and means were extracted for each item of the questionnaire; t-tests, Pearson's correlation, Spearman's correlation and analysis of variance (ANOVA) were used for data analysis in order to answer the research questions.

### 4.7 Ethical Issues

A researcher wishing to conduct a study asking participants to contribute should be aware of a series of ethical issues concerning the participants, the harm they could suffer and the privacy that should be respected (De Vaus, D.A., 2002; Bryman A., 2012). Typically, survey participants are assured that their answers will be either anonymous or confidential, therefore, it should be clear to respondents how their responses will be treated (De Vaus, D.A, 2002). According to De Vaus (2002), anonymity means that the researcher will not and cannot identify the respondent, while confidentiality simply means that the researcher can match names with responses but ensures that no one else will have access to them. Voluntary participation is another principle which is underlined by De Vaus (2002) as one of the ethical responsibilities towards the participants. While the principles of both voluntary participation and confidentiality are partly based on the principle of a person’s right to privacy, this right extends beyond these matters (Bryman A., 2012). Privacy can also mean that people can expect to be free from "intrusion", that is, they do not want neither companies or survey researchers contacting them, unless permission for such contacts has been given (De Vaus, D.A, 2002).
In the present research in order to ensure the above-mentioned ethical issues, an application was sent to the Norwegian Social Science Data Services (NSD), which authorized my research study. Additionally, even though the NSD confirmed that I am not using sensitive data, the introduction written on the questionnaire was mentioning the aim of the study (meaning that it is a part of a master thesis and therefore privacy will be respected), that participation was voluntary and anonymous (anonymous means that is also confidential), while I also affirmed these information personally to the participants before they completed the questionnaires. Therefore, all the ethical principles were retained in this research study.

4.8 Conclusion

This chapter aimed to introduce the reader to the methods that have been followed in order for the research study to be accomplished. Starting with the clarification of the research design that was followed, a description of the research site, population and sampling were essential to be mentioned. Consequently, the instruments that were used and the process of data collection were presented along with the process of data analysis, focusing on the validity and reliability of the instruments. Lastly, possible ethical issues discussed, ending up that the present study complies with the ethical principles.
5  Presentation of Data & Analysis

5.1  Introduction

As previous studies' findings have been presented along with the goal of the present study and the methods that have been used to extract the results, this chapter includes the data presentation and the findings of the study. Starting with the demographic data that will provide information about the participants, answers on the research questions will be presented revealing the attitude of the secondary teachers towards the inclusion of students with special needs in the mainstream schools.

5.2  Demographic Data

First of all the participants of the present study were chosen from both rural and urban areas. In the region of Argolis, Argos and Nafplio are considered cities (urban), while all the other areas are rural. The frequencies and percentage of participants in each area are presented in Appendix 2, Table 1, showing that the majority of teachers are currently teaching in urban areas (71.3%).

Concerning teachers' teaching experience in years, a high percentage of 82.5% have been teaching more than 10 years (118 of 143 participants) as shown in Appendix 2, Table 2.

Consequently, as teachers had been asked whether they have further education or training on Special Education or not, a high percentage of 89.5% replied that they don't have any (Appendix 2, Table 3). By "further education/training" I mean if they hold a certificate that proves their skills on this field, a statement that was given orally to the participants before filling the questionnaires, in order to avoid any misunderstanding.

As far as the participants' previous experience on Special Education is concerned, Appendix 2, Table 4 reveals that 98 out of 143 participants had previously worked with students with special educational needs (68.5%). The amount of teachers who had relevant previous experience were also asked to name the kind of disability their students had (one, or more than one). Therefore, 75 out of 98 teachers (76.5%) had taught students with learning difficulties, setting learning difficulties as the most frequent disability. Consequently, 39.8%
of the teachers had students with behavioral problems and 35.7% had taught children with motion disabilities (Appendix 2, Tables 5, 6, 7). As for vision disabilities, hearing disabilities, speech disorder and pervasive developmental disorders, the amount of teachers having experience with them appears to be very low.

5.3 The Attitude Scale and The Difficulty Scale

As it has already been mentioned, in order to check and ensure the reliability of the attitude scale, Cronbach's Alpha coefficient was extracted by the 17 items of the 3rd part of my questionnaire which intended to reveal the attitude of the teachers. Cronbach's alpha is 0.709 which is satisfactory, indicating the reliability of the attitude scale (Appendix 2, Table 8).

A factor analysis was used in order to investigate if the items of the attitude scale were leading to more dimensions that one and could be analyzed separately. The result was "Only one component was extracted. The solution cannot be rotated." which means that all the 17 items that intend to show attitude - and were answered by all participants, both with and without experience with students with special needs- point to the same direction, and only one scale should be created.

Before creating the attitude scale, 2 out of 17 items were reversed, questions 6 and 7, due to the fact that they were the only questions being expressed negatively. The attitude scale as shown in the histogram below shows a normal distribution with the mean 27.8 and a minimum range of 0 which indicates extremely positive attitude to maximum 68 which indicates extremely negative attitude. By dividing the mean 27.8 with the 17 items, we get a mean of 1.63 which indicates that most of the participants' attitude is positive and close to "undecided".

Figure 1 The Attitude Scale
Apart from the attitude scale, a difficulty scale was created by the 8 items of the 2nd part of the questionnaire (questions 3 - 10) that intended to show how difficult it was for those teachers who had experiences with students with special needs to handle them, according to each type of disability. All of the variables were reversed and new variables created. These were added in order to create a sum of the variables that show difficulty which was named DIFFSUM. Cronbach's alpha is 0.812 indicating the reliability of the scale (Appendix 2, Table 9). The higher score shows more difficulty. This scale will be used in order to answer the last research question, if their difficulty to handle students with special needs influences their attitude towards inclusion.

5.4 Attitudes: Outcome of the Research Questions

1st Research Question: Do years of experience as a secondary teacher influence their attitude towards inclusion?

Hypothesis: More years of teaching experience lead to more positive attitude towards inclusion.

According to the hypothesis above it is expected that those with more years of experience as a secondary teacher will have a more positive attitude towards the inclusion of students with special needs. Results were extracted by the answers of the participants in the 2nd question of the 1st part of the questionnaire "years of experience as a secondary teachers". An ANOVA was used for all the groups of teachers.

In Table 1 the means are presented for each group of teachers indicating that those with less years of experience appear to be more positive towards inclusion in comparison to the other groups of teachers with more experience who appear to be positive, but closer to "undecided" which means that they are not sure about the issue. There is no great significance between the years of experience as secondary teachers and their attitudes, as the p value reveals (p = 0.062 > 0.05). Therefore, the years of experience as a secondary teacher does not influence teachers' attitude towards inclusion. What is more, this finding does not support the original hypothesis, as the participants with less years of experience as secondary teachers express more positive attitude towards inclusion than those who have more (Appendix 3, Tables 1 &2).
Taking this question a step further, I divided the group of teachers in two larger categories; those who have less experience (up to 6 years) and those who have more than 7 years of experience. By using an independent sample t-test the means reveal that teachers with less experience are more positive towards inclusion than those with more, with $p = 0.021 \ (< 0.05)$ showing that there is a great significance between the years of experience and their attitude towards the inclusion of students with special needs in mainstream classes (Table 2).

According to this, the years of experience as secondary teachers influence their attitude towards inclusion. However, the original hypothesis is not supported by the result as those with less years of experience as secondary teachers appear to be more positive towards inclusion, than those who have more (Appendix 3, Tables 3&4).

Table 1 Years of Experience and Attitude

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>N</th>
<th>Mean</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-6 years</td>
<td>8</td>
<td>22.25</td>
<td>.062</td>
</tr>
<tr>
<td>7 - 10 years</td>
<td>17</td>
<td>28.88</td>
<td></td>
</tr>
<tr>
<td>More than 10 years</td>
<td>118</td>
<td>28.03</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>27.80</td>
<td></td>
</tr>
</tbody>
</table>

2nd Research Question: Does training on special education influence teachers’ attitude towards inclusion?

Hypothesis: Teachers with training or further education on special needs are expected to have positive attitude towards inclusion.
According to the hypothesis above it is expected that secondary teachers with training or further education on special needs will have a positive attitude towards inclusion. Results were extracted by the answers of the participants in the 5th question of the 1st part of the questionnaire "Years of experience as a secondary teachers". An independent sample t-test was used in order to compare the two categories of teachers.

In Table 3 the means reveal that teachers with training or further education on special education are more positive towards inclusion and there is a great significance between the training or further education and their attitudes towards inclusion \((p = 0.02< 0.05)\). The fact that they have been previously trained on special education influence their attitude towards inclusion and therefore the hypothesis is supported by the results. (Appendix 4, Tables 1&2).

<table>
<thead>
<tr>
<th>Training /Further Education on SN</th>
<th>N</th>
<th>Mean</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>15</td>
<td>22.60</td>
<td>.002</td>
</tr>
<tr>
<td>No</td>
<td>128</td>
<td>28.41</td>
<td></td>
</tr>
</tbody>
</table>

3rd Research Question: Does their previous experience with students with special needs influence their attitude towards inclusion?

Hypothesis: Teachers with previous experience with students with special needs are expected to have positive attitude towards inclusion.

According to the hypothesis above it is expected that teachers with previous experience with students with special needs will have a positive attitude towards inclusion. Results were extracted by the answers of the participants in the 1st question of the 2nd part of the questionnaire "Do you have any experience of teaching a student or students with special needs in your classroom?". An independent sample t-test was used in order to compare the two categories of teachers (those who have previous experience and those who haven't). In Table 4 the means show that teachers with previous experience with students with special needs have a more positive attitude towards the inclusion, in comparison to those who haven't
relevant experience. However, the p value (p = 0.138 > 0.05) indicates that there is no great
significance between the previous experience with students with special needs and the attitude
of the secondary teachers. Therefore, the previous experience does not influence their attitude
towards the inclusion of these students in mainstream classes. However, we can argue that the
hypothesis is supported by the results, as those who have previous experience have a positive
attitude (Appendix 5, Tables 1&2).

Table 4 Experience on Special Education and Attitude

<table>
<thead>
<tr>
<th>Experience on SN</th>
<th>N</th>
<th>Mean</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>98</td>
<td>27.21</td>
<td>.138</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>29.09</td>
<td></td>
</tr>
</tbody>
</table>

4th Research Question: Does the kind of disability influence their attitude towards inclusion?
Hypothesis: The kind of disability leads to either positive or negative attitudes depending on
the disability.

In order to answer this research question I collected the answers of the participants in the 1st
question of the 2nd part of my questionnaire "Do you have any experience of teaching a
student or students with special needs in your classroom? (If “yes” choose one of the
following special needs, if “no” move to the 3rd part of the questionnaire: Attitudes)".
According to this question, the second part of the questionnaire is answered only by the
secondary teachers who have previous experience with students with special needs, and
specifically they were asked to name the kind of disability that their student(s) had, by
providing a list with disabilities. Each disability is a separate variable that was coded in order
to show if the respondent had experience with that kind of disability or not ("No" stands for
those who have not experience, "Yes" stands for those who have experience). Therefore, each
kind of disability is being analyzed separately by using independent sample t-test in order to
compare the results between the teachers who had taught student(s) with each one of the
disabilities and those who hadn't.

Learning Difficulties: According to the t-test results there is a great significance between this
kind of disability and the secondary teachers' attitudes (p = 0.033<0.05), which means that
learning difficulties as a kind of disability influence their attitudes towards inclusion.
Additionally, the means reveal that teachers with previous experience with students who had learning difficulties had a more positive attitude than those who didn't have relevant experience with this kind of disability (Table 5 & Appendix 6, Tables 1&2).

**Table 5 Learning Difficulties**

<table>
<thead>
<tr>
<th>Learning Difficulties</th>
<th>N</th>
<th>Mean</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>23</td>
<td>30.00</td>
<td>.033</td>
</tr>
<tr>
<td>Yes</td>
<td>75</td>
<td>26.36</td>
<td></td>
</tr>
</tbody>
</table>

**Motion Disabilities:** Concerning this kind of disability, the means reveal than teachers who had experience with student(s) who had motion disabilities are slightly more positive than those who had no relevant experience. However, the p value ($p = 0.274>0.05$) indicates that there is no significance between this kind of disability and the secondary teachers' attitudes towards inclusion (Table 6 & Appendix 6, Tables 3&4).

**Table 6 Motion Disabilities**

<table>
<thead>
<tr>
<th>Motion Disabilities</th>
<th>N</th>
<th>Mean</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>63</td>
<td>27.81</td>
<td>.274</td>
</tr>
<tr>
<td>Yes</td>
<td>35</td>
<td>26.14</td>
<td></td>
</tr>
</tbody>
</table>

**Vision Disabilities:** Since only 4 teachers had experience with students dealing with vision disabilities, the results extracted cannot be considered as representative. However, according to the mean value, these teachers have a positive attitude towards the inclusion in comparison to those who hadn't relevant experience with students with vision disabilities (Table 7 & Appendix 6, Tables 5&6).

**Table 7 Vision Disabilities**

<table>
<thead>
<tr>
<th>Vision Disabilities</th>
<th>N</th>
<th>Mean</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>94</td>
<td>27.49</td>
<td>.066</td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>20.75</td>
<td></td>
</tr>
</tbody>
</table>
**Hearing Disabilities:** According to the means, there is no difference in the attitude of the teachers who had experience with students with hearing disabilities and those who hadn't relevant experience, since both categories of teachers appear to be positive towards inclusion. However, there is no great significance between the kind of disability and their attitude, since \( p = 0.769 > 0.05 \) (Table 8 & Appendix 6, Tables 7&8).

<table>
<thead>
<tr>
<th>Hearing Disabilities</th>
<th>N</th>
<th>Mean</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>87</td>
<td>27.17</td>
<td>.769</td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>27.82</td>
<td></td>
</tr>
</tbody>
</table>

**Speech Disorder:** Concerning speech disorder, the means reveal that those who had experience on students with speech disorder have a more positive attitude towards inclusion, while those who hadn't appear to be also positive, but closer to "undecided". However, \( p = 0.329 > 0.05 \) which indicates that there is no great significance between the kind of disability and their attitude, which means that this kind of disability does not influence their attitude (Table 9 & Appendix 6, Tables 9&10).

<table>
<thead>
<tr>
<th>Speech Disorder</th>
<th>N</th>
<th>Mean</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>88</td>
<td>27.45</td>
<td>.329</td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>25.10</td>
<td></td>
</tr>
</tbody>
</table>

**Pervasive Developmental Disorders:** As for this kind of disability, teachers with and without experience on this appear to have a positive attitude towards inclusion. Again though, \( p = 0.661 > 0.05 \) revealing that there is no significance between this kind of disability and their attitude (Table 10 & Appendix 6, Tables 11&12).

<table>
<thead>
<tr>
<th>Pervasive Developmental Disorders</th>
<th>N</th>
<th>Means</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

58
Intellectual Disorders: This is another kind of disability that both groups of teachers (with and without experience with students who faced intellectual disorders) show a positive attitude towards inclusion. The p value ($p = 0.496 > 0.05$) though reveals that there is no significance between this kind of disability and their attitude, which means that it doesn't affect their attitude towards the inclusion of special education students in mainstream classes (Table 11 & Appendix 6, Tables 13&14).

Table 11 Intellectual Disorders

<table>
<thead>
<tr>
<th>Intellectual Disorders</th>
<th>N</th>
<th>Mean</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>71</td>
<td>27.52</td>
<td>.496</td>
</tr>
<tr>
<td>Yes</td>
<td>27</td>
<td>26.43</td>
<td></td>
</tr>
</tbody>
</table>

Behavioral Problems: Lastly, teachers who had students with behavioral problems appear to be more positive towards inclusion than those who hadn't relevant experience, according to the means. However, the p value reveals that there is no great significance between this kind of disability and their attitude ($p = 0.069 > 0.05$) (Table 12 & Appendix 6, Tables 15&16).

Table 12 Behavioral Problems

<table>
<thead>
<tr>
<th>Behavioral Problems</th>
<th>N</th>
<th>Means</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>59</td>
<td>28.29</td>
<td>.069</td>
</tr>
<tr>
<td>Yes</td>
<td>39</td>
<td>25.59</td>
<td></td>
</tr>
</tbody>
</table>

5th Research Question: Does the degree of difficulty in handling students with special needs in class influence their attitude towards inclusion?

Hypothesis: It is expected that more difficulty to handle students with special educational needs lead to negative attitudes.
In order to answer to this research question, a difficulty scale (DIFFSUM) was created as the variable that will be correlated with the attitude scale using Pearson's correlation. A Pearson Correlation of 0.521 (Table 17, Appendix 6) reveals that there is a moderate relationship between the difficulty and the attitude scale. Since Pearson's r is positive as the first variable increases, the second also increases, meaning that they have a positive attitude towards the inclusion of students with special needs, even though they admit it is difficult for them to handle. This statement does not support the hypothesis that most difficulty in handling students with special needs lead to negative attitudes towards inclusion.

In addition to this it was of great interest to investigate how much secondary teachers with previous experience trust themselves with students who face each one of the disabilities. Based on the questions 10-17 (I trust myself to teach a child with...) of the 3rd part of the questionnaire and the DIFFSUM (the scale that shows difficulty), a Spearman's Rho and non parametric correlation between each item and the DIFFSUM was used in order to answer this question. A high score between each item and the DIFFSUM means that the teachers don't trust themselves, while a low score means that they trust themselves teaching a child with each one of the disabilities.

Results that are also presented at Table 18, Appendix 6 reveal that secondary teachers with previous experience with students with special needs trust themselves to teach students with motion disabilities ($r = 0.276$) and students with behavioral problems ($r = 0.265$), while they don't feel confident of teaching students with hearing disabilities ($r = 0.514$).

In the following chapter, both results of the present study and results of previous studies will be discussed as well as the limitations of my study.
6 Discussion of Results & Limitations of the Study

6.1 Introduction

As it has been mentioned in a previous chapter results on this kind of study cannot just be positive or negative, but controversial. In my opinion, this makes total sense when we investigate attitudes, meaning that they might depend on several factors that influence the participant. From the time provided to fill in a questionnaire to the personal state someone is in, attitude may be influenced in any way. In this chapter the results of my study will be discussed and presented in comparison to results from previous studies that have been presented in the literature review. This section will therefore consist a sum up of the most important points that the reader should focus on and are related to the findings of both my study and previous relevant studies. In addition, limitations of the present study will close up the presentation of my research, as they consist a significant part of any kind of research.

6.2 Discussion

To start with, secondary teachers in Argolis generally expressed a positive attitude towards the inclusion of students with special needs in mainstream classes according to the score of the attitude scale and close to "undecided". The positive attitude concurs with results of a series of studies where teachers also expressed a positive attitude as presented by Scruggs and Mastropieri (1996). More studies with the same positive tendency conducted by Villa et al (1996), Avramidis et al (2002), Avramidis and Kalyva (2007), Koutrouba and her colleagues (2008), Patsidou - Iliadou (2011), Santoli, Sachs, Romey and McClurg (2008), Batsiou and her colleagues (2008), as mentioned in the literature review.

Concerning the years of teaching experience results showed that teachers' attitude does not get influenced. The hypothesis that more years of experience lead to positive attitudes was not supported by the results, since teachers with less teaching experience expressed more positive attitude. In addition, after further data processing and the dichotomy of the teachers into two
large groups (those with less experience, up to 6 years and those with more experience, more than 7 years), results revealed that teaching experience influence teachers' attitudes towards inclusion, but again those with less teaching experience appear to be more positive towards inclusion.

The above-mentioned findings contradict with results of previous studies which show that more years of experience lead to more positive attitudes (Koutrouba et al, 2008; Tsakiridou & Polyzopoulou, 2014). However, as mentioned in the literature review, there are studies showing a positive attitude among teachers with less years of teaching experience as in Forlin (1995) and Harvey (1985). According to the literature review and my personal opinion, each group of teachers showing positive attitude can be given an explanation. First, in a way that gaining experience can lead to self confidence in order to trust themselves to teach these students in inclusive settings, and second that those who have less experience have recently started their career as teachers and are optimistic and enthusiastic for what will follow.

Consequently, training or further education on special needs apparently lead to more positive attitudes according to the results. This supports the hypothesis, as it is a factor that influences teachers' attitude towards the inclusion of students with special needs, and also coincides with results of previous studies as Bowman (1986), Center & Ward (1987), Leyser et al.(1994), Beh-Pajooh (1992), Shimman (1990), Avramidis et al (2000), Koutrouba et al (2008), Avramidis & Kalyva (2007). It makes a total sense that those who are trained feel more confident and may have a positive attitude towards inclusion, but in Patsidou - Iliadou's (2011) study those trained were negative in the concept of inclusion revealing that maybe during their training they might realize the level of difficulty teaching students in special needs have, as Patsidou refers in her discussion.

Even though in most studies previous teaching experience with students with special needs lead to more positive attitudes, and therefore this consists a significant factor that influences teachers' attitudes, in my study the hypothesis was not supported by the results. Previous teaching experience appeared to have no effect on their attitudes in contrast with studies of Villa et al (1996), LeRoy and Simpson (1996), Avramidis and his colleagues (2002), Batsiou et al (2008), Avramidis & Kalyva (2007), Avramidis et al (2000). However, in Patsidou - Iliadou's study (2011) teacher's attitude towards inclusion in mainstream settings was not affected by the previous teaching experience with special needs students as well. What is more, Forlin's study (2001) revealed negative attitudes by these teachers with previous
experience, stating that it was a stressful process. In any case though, I personally believe that this kind of experience can lead to either negative or positive attitude depending on what the teacher have been through during the teaching process; the difficulties he/she have faced, the support they had been offered and the general environment in a class can make the teaching experience either easier or harder for them. In a mainstream class students with and without disabilities learn together and therefore, if there is a supportive sentiment towards the students with disabilities, teaching process can be easier and teachers' attitudes more positive. On the other hand, if teacher and students see that students with disabilities hinder the teaching process, negative attitudes towards inclusion are expected.

To continue with, the kind of disability appeared to be a major factor that influences teachers' attitudes through the literature review. In the present study, however, teachers' attitudes were influenced only by learning difficulties as a disability among those who had already experience with students with one or more of the disabilities presented in the questionnaire. That is, teachers with previous experience of teaching students with learning difficulties expressed a positive attitude towards inclusion. This coincides with results by Koutrouba, Vamvakari & Theodoropoulos (2008) and Avramidis & Kalyva (2007) where it was expressed that the inclusion of these students can be normally implemented or at least are unproblematic. Concerning the other kinds of disabilities, there was no significant correlation between them and the teachers' attitudes, even though according the means those who had previously taught students with each kind of disability appeared to be positive or uncertain.

Trying to investigate if there is a correlation between the degree of difficulty in handling students with special needs and teachers' attitudes towards inclusion, and while expecting that more difficulty in handling them lead to negative attitudes, secondary teachers still expressed a positive attitude. This paradox opposes to the hypothesis, but the positive attitude score was close to the uncertain in the attitude scale. It can, therefore, be explained in a way that teachers are not sure about the issue of including students with special needs in mainstream classes in correlation with the difficulty they faced.

Furthermore, by correlating the difficulty items and the items that show how much they trust themselves in teaching students with disabilities, results showed that secondary teachers felt less confident on teaching students with hearing disabilities, while motion disabilities and behavioral problems appear to be the disabilities that they trust themselves to handle more than the others. These findings are similar with previous studies where motor / physical
problems appear to be a kind of disability that is the least difficult to handle according to teachers (Forlin, 1995; Clough & Lindsay, 1991; Koutrouba et al, 2008; Zoniou - Sideri & Vlachou, 2006). What is more, there are similar findings concerning hearing disabilities which appear to make teachers feel less confident to handle in a mainstream classroom (Clough & Lindsay, 1991; Koutrouba et al, 2008; Zoniou - Sideri & Vlachou, 2006).

6.3 Limitations of the Study

The present study intended to investigate secondary teachers' attitudes towards the inclusion of students with special needs in mainstream settings since their positive attitudes lead to a successful implementation of inclusive programs. However, this study was conducted in a specific area, the region of Argolis, and therefore the sample cannot be sufficient to be generalized in a panhellenic scale. It draws a picture in a smaller scale, but a research in a panhellenic scale including every district could give more representative results that could be generalized.

Moreover, even though I personally handed out the questionnaires and was able to give instructions and clarifications where needed, most teachers were filling the questionnaire within a time limit during the school breaks which can have affected the accuracy of their answers. This can be considered as a limitation of the study, since they might have chosen random answers in the sake of the limited time. Only a few teachers that requested to fill their questionnaire at home brought it back in order to include it in the study. This is why I insisted on filling it while I was present and in order to double check whether it has been fully completed or not.

Of course another limitation could be the quantitative nature of the study, especially when investigating attitudes. It is more likely that a combination of both quantitative and qualitative research could have brought more concrete results and better explanations through interviews. However, as it had already been mentioned, a qualitative research was more difficult to be completed in the conditions of busy school hours, since it is time consuming and the teachers I contacted appeared to be more likely to fill in a questionnaire, than discuss or explain. And most importantly in order to generalize data relevant to attitudes a large sample size is required, which makes questionnaires and therefore quantitative method of data analysis necessary and more effective in this case.
6.4 Conclusion

In this last chapter a discussion of the present study's findings along with the results of previous studies are presented in order to find out whether and in what extend they coincide or not. What is more limitations of the study are discussed revealing what would be considered on further research on the same topic in the future. In summary, a general picture of secondary teachers' attitudes showed that they are mostly positive and close to "undecided" towards the inclusion of students with special needs in mainstream schools. Concerning the research questions, not all of the results supported the hypothesis. Only the training or further education variable appeared to influence their attitudes, revealing that those who had been trained were more positive towards inclusion. In addition, the difficulty scale in comparison to their attitudes showed that even though it was difficult for them to handle students with disabilities, they still expressed positive attitudes, which was considered as paradox. Lastly, secondary teachers appeared to trust themselves more in teaching students with motion disabilities and behavioral problems, than students with hearing disabilities. As far as the limitations of the study is concerned, a series of limitations are presented based on these of the quantitative nature of the study while intending to give suggestions for further research in the field of inclusion.
7 Conclusion

This study was set out in order to investigate secondary teachers' attitudes towards the inclusion of students with special needs in mainstream schools in Argolis district of Peloponnese. According to the literature review, teachers' attitudes influence the successful implementation of inclusion since they are the peers that interact with students in a daily basis and not only teach them, but also help them socialize, and eventually students' attitudes reflect the overall beliefs of the teacher in a class. As it has been noticed, teachers who express a positive attitude towards inclusion contribute to successful inclusive programs in mainstream schools. This, along with the fact that attitudes may change over the years, makes the need of exploring teachers' attitudes stronger, no matter how many studies have already been conducted on the topic.

As with every research problem, terms included in the title must be defined, so that the reader can easily follow the data analysis of the research questions. "Inclusion" that replaced "integration" and "mainstreaming" in the early 90's, as well as the term "attitude" are the key terms contributing to the understanding of the problem to be investigated. Furthermore, in the case of concepts as inclusion, a retrospect of the path towards inclusion through a series of actions, declarations and policy, is essential to connect the past and the present in a worldwide basis, but also in the research area, Greece. Of course, the awareness of the laws and policies arouses the interest to the requirements of successful inclusion. The way the school is organized, the cooperation through teaching stuff, principal and parents of students, and the role of teachers along with their attitudes can highly contribute to successful inclusion.

The present study was based on a series of previous studies over the past 50 years that point out several factors that affect teachers' attitudes towards inclusion. The years of teaching experience, training on special needs education, teachers' previous experience with students with special educational needs, the kind of disability and the difficulty to handle these students appear to influence teachers' attitudes either positively or negatively, while in many studies findings reveal that some of them do not have any influence. In this study, the main research questions intended to examine the relationship between these factors and the teachers' attitudes.
Due to the quantitative nature of the study and the large sample size, a survey was conducted anonymously using close-ended questionnaires where participants were asked to choose statements in 5-point scale ranging expressing their agreement or disagreement. 10 secondary schools out of 23 in Argolis region were included in my study, while 143 secondary teachers consisted the sample size, randomly selected. As with all the quantitative studies, data were analyzed using the SPSS program, while the final results coincide with previous studies' results reported in literature review and discussed right after the presentation.

Specifically, even though the general attitude of secondary teachers was positive and close to "undecided" about the concept of inclusion in mainstream settings, training on special needs education, learning difficulties as a kind of disability and years of experience as dichotomized in two large groups (less/more experience) appear to influence teachers attitudes. On the other hand, years of teaching experience - including all groups given in the questionnaire, previous teaching experience with students with special educational needs and all the kind of disabilities remained, had no influence according to the analysis of the data. Moreover, the paradox that even though the teachers had difficulties handling these students, they expressed positive attitudes, and the additional finding that they mostly trust themselves teaching students with motion disabilities and behavioral problems than students with any other kind of disability, complete the research part of this attempt.

This study's presentation comes to a closure with the possible limitations that may occur in any kind of research, taking into account the circumstances the study was conducted under and the nature of the study, aiming to give a direction to those interested on undertaking similar studies in the same field.
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Appendices

Appendix 1

Questionnaire in English

The following questionnaire is the instrument of a study carried out by a master student at the University of Oslo, which aims to investigate secondary teachers’ experiences with special education children and their attitudes towards inclusion of these children into mainstream schools in Argolis district of Peloponnese. You are asked to fill this questionnaire under anonymity. Participation is voluntary. Mark your answer by putting one of these numbers next to the choices into a circle. For each question you must give one answer, unless you are asked to give more than one.

1st Part: Background

1. In what kind of area are you currently teaching?

Rural 0

Urban 1

2. Years of experience as a secondary teacher.

Less than 3 years 0

4 – 6 years 1

7 – 10 years 2

More than 10 years 3

3. How many students on average are part of a classroom that you usually teach?

1 – 10 students 0

10 – 20 students 1

20 – 30 students 2

30 – 40 students 3
4. Mark the higher education degree that you own.

Ptychion TEI 0
Ptychion AEI 1
Metaptychiakon (Master Degree) 2
Didaktorikon (PHD) 3

5. Do you have further education / training on Special Needs?

Yes 0
No 1

6. What kind of secondary teacher are you according to the subject that you teach?

Literature/ History teacher 0
Mathematician 1
Natural Sciences and Chemistry teacher 2
Biologist 3
Religion teacher 4
Music teacher 5
Trainer 6
Computer Science teacher 7
Foreign Language teacher 8
Other .......................... 9
2nd Part: Experience

1. Do you have any experience of teaching a student or students with special needs in your classroom? (If “yes” choose one of the following special needs, if “no” move to the 3rd part of the questionnaire: Attitudes).

   Yes 0  No 1

   Learning Difficulties 0

   Motion Disabilities 1

   Vision Disabilities 2

   Hearing Disabilities 3

   Speech Disorder 4

   Pervasive Developmental Disorders 5

   Intellectual Disorders 6

   Behavioral Problems deriving from family and social environment 7

   Other………………………………………… 8

2. To what extend do you think you can recognize a student who possibly needs special help in class according to your knowledge?

   A great deal 0

   Much 1

   Somewhat 2

   Little 3

   Not at all 4

3. If you have a student with learning difficulties, it is difficult for you to handle him in class.

   A great deal 0
4. If you have a student with motion disabilities, it is difficult for you to handle him in class.

A great deal 0
Much 1
Somewhat 2
Little 3
Not at all 4

5. If you have a student with vision disabilities, it is difficult for you to handle him in class.

A great deal 0
Much 1
Somewhat 2
Little 3
Not at all 4

6. If you have a student with hearing disabilities, it is difficult for you to handle him in class.

A great deal 0
Much 1
Somewhat 2
Little 3
Not at all 4

7. If you have a student with speech disorder, it is difficult for you to handle him in class.
8. If you have a student with pervasive developmental disorders, it is difficult for you to handle him in class.

A great deal 0
Much 1
Somewhat 2
Little 3
Not at all 4

9. If you have a student with intellectual disorder, it is difficult for you to handle him in class.

A great deal 0
Much 1
Somewhat 2
Little 3
Not at all 4

10. If you have a student with behavioral problems deriving from family and social environment, it is difficult for you to handle him in class.

A great deal 0
Much 1
Somewhat 2
11. I felt confident to teach a child with special needs.

A great deal 0

Much 1

Somewhat 2

Little 3

Not at all 4

12. Did your student have help from a special educator or assistant in class?

Yes 0

No 1

13. Did your student with special needs participate in all subjects along with the rest of the children in class?

Yes 0

No 1

14. Which method did you use to help your student with special needs in class?

Help from a special needs educator 0

Help from a special needs assistant 1

Co – teaching 2

Encouragement of cooperation and help from the rest of the students 3

I used no methods 4
3rd Part: Attitudes

1. I believe that special education children should be in special education classes.
   Strongly Agree 0
   Agree 1
   Undecided 2
   Disagree 3
   Strongly Disagree 4

2. I believe that special education children should be in mainstream classes.
   Strongly Agree 0
   Agree 1
   Undecided 2
   Disagree 3
   Strongly Disagree 4

3. Special education children learn social skills from regular education children.
   Strongly Agree 0
   Agree 1
   Undecided 2
   Disagree 3
   Strongly Disagree 4

4. Special education children have higher academic achievements when included.
   Strongly Agree 0
   Agree 1
   Undecided 2
5. Special education children have higher self–esteem when included.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4


Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4

7. Achievement is difficult for special education children when included.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4

8. In my opinion all children are able to learn.

Strongly Agree 0
Agree 1

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9. I believe that special training is required for regular teachers in order to teach a child with special needs.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4

10. I trust myself to teach a child with learning difficulties.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4

11. I trust myself to teach a child with motion disabilities.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4

12. I trust myself to teach a child with vision disabilities.
13. I trust myself to teach a child with hearing disabilities.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4

14. I trust myself to teach a child with speech disorder.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4

15. I trust myself to teach a child with pervasive developmental disorders.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4

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16. I trust myself to teach a child with intellectual disorder.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
Strongly Disagree 4

17. I trust myself to teach a child with behavioral problems deriving from family and social environment.

Strongly Agree 0
Agree 1
Undecided 2
Disagree 3
StronglyDisagree 4

Questionnaire in Greek

Το παρακάτω ερωτηματολόγιο είναι το εργαλείο για την έρευνα που πραγματοποιείται από μεταπτυχιακή φοιτήτρια του Πανεπιστημίου του Όσλο, η οποία έχει σκοπό να ερευνήσει τις εμπειρίες των καθηγητών δευτεροβάθμιας εκπαίδευσης στην περιοχή της Αργολίδας Πελοπονήσου με μαθητές ειδικών αναγκών και τις απόψεις τους σχετικά με την συνεκπαίδευση των μαθητών αυτών σε “κανονικά” σχολεία. Σας ζητείται να συμπληρώσετε αυτό το ερωτηματολόγιο ανώνυμα. Η συμμετοχή είναι προαιρετική. Σημειώστε την απάντησή σας κυκλώνοντας έναν από τους αριθμούς δίπλα στις επιλογές που σας δίνονται. Για κάθε ερώτηση πρέπει να δώσετε μια απάντηση, εκτός αν σας ζητείται να δώσετε πάνω από μια.
1ο μέρος: Υπόβαθρο

1. Σε τι είδους περιοχή διδάσκετε τώρα;
   Αγροτική 0
   Αστική 1

2. Χρόνια εμπειρίας ως καθηγητής δευτεροβάθμιας εκπαίδευσης.
   Λιγότερα από 3 χρόνια 0
   4 – 6 χρόνια 1
   7 – 10 χρόνια 2
   Περισσότερα από 10 χρόνια 3

3. Πόσοι μαθητές κατά μέσο όρο βρίσκονται στην τάξη στην οποία διδάσκετε συνήθως;
   1 – 10 μαθητές 0
   10 – 20 μαθητές 1
   20 – 30 μαθητές 2
   30 – 40 μαθητές 3

4. Σημειώστε το είδος εκπαιδευτικού διπλώματος που κατέχετε.
   Πτυχίο ΤΕΙ 0
   Πτυχίο ΑΕΙ 1
   Μεταπτυχιακό 2
   Διδακτορικό 3

5. Έχετε εκπαιδευτεί στην Ειδική Αγωγή.
   Ναι 0
   Όχι 1

6. Ποια είναι η ειδικότητά σας ως καθηγητής δευτεροβάθμιας εκπαίδευσης;
Φιλόλογος 0
Μαθηματικός 1
Φυσικός / Χημικός 2
Βιολόγος 3
Καθηγητής/τρια Θρησκευτικών 4
Καθηγητής/τρια Μουσικής 5
Γυμναστής/τρια 6
Καθηγητής/τρια Πληροφορικής 7
Καθηγητής/τρια Ξένης Γλώσσας 8
Άλλο……………………………… 9

2ο μέρος: Εμπειρία

1. Έχετε διδάξει πολύ μαθητ/ές με ειδικές ανάγκες σε σχολική τάξη; (Αν «ναι», επιλέξτε από τα παρακάτω το είδος που περιγράφει καλύτερα την ειδική ανάγκη, αν «όχι», προκειόμενο στο 3ο μέρος του ερωτηματολογίου: «Στάσεις»).

Ναι 0 Όχι 1

Μαθησιακές Δυσκολίες 0
Κινητικά Προβλήματα 1
Προβλήματα στην όραση 2
Προβλήματα στην ακοή 3
Διαταραχή του λόγου 4
Διάχυτες αναπτυξιακές διαταραχές 5
Νοητική Υστέρηση 6
Προβλήματα συμπεριφοράς προερχόμενα από το οικογενειακό ή κοινωνικό περιβάλλον 7
Άλλο……………………………………………..8

2. Σε ποιο βαθμό πιστεύετε ότι μπορείτε να αναγνωρίσετε ένα μαθητή που πιθανώς χρειάζεται ειδική υποστήριξη στη σχολική τάξη με βάση τις γνώσεις σας?

Σε μεγάλο βαθμό 0

Πολύ 1

Αρκετά 2

Λίγο 3

Καθόλου 4

3. Εάν έχετε έναν μαθητή με μαθησιακές δυσκολίες μέσα στην τάξη, είναι δύσκολο για εσάς να τον διαχειριστείτε?

Σε μεγάλο βαθμό 0

Πολύ 1

Αρκετά 2

Λίγο 3

Καθόλου 4

4. Εάν έχετε έναν μαθητή με κινητικά προβλήματα μέσα στην τάξη, είναι δύσκολο για εσάς να τον διαχειριστείτε;

Σε μεγάλο βαθμό 0

Πολύ 1

Αρκετά 2

Λίγο 3

Καθόλου 4

5. Εάν έχετε έναν μαθητή με προβλήματα στην όραση μέσα στην τάξη, είναι δύσκολο για εσάς να τον διαχειριστείτε;

90
Σε μεγάλο βαθμό 0
Πολύ 1
Αρκετά 2
Λίγο 3
Καθόλου 4

6. Εάν έχετε έναν μαθητή με προβλήματα στην ακοή μέσα στην τάξη, είναι δύσκολο για εσάς να τον διαχειριστείτε;
Σε μεγάλο βαθμό 0
Πολύ 1
Αρκετά 2
Λίγο 3
Καθόλου 4

7. Εάν έχετε έναν μαθητή με διαταραχή του λόγου μέσα στην τάξη, είναι δύσκολο για εσάς να τον διαχειριστείτε;
Σε μεγάλο βαθμό 0
Πολύ 1
Αρκετά 2
Λίγο 3
Καθόλου 4

8. Εάν έχετε έναν μαθητή με διάχυτες αναπτυξιακές διαταραχές μέσα στην τάξη, είναι δύσκολο για εσάς να τον διαχειριστείτε;
Σε μεγάλο βαθμό 0
Πολύ 1
Αρκετά 2
Λίγο 3
Καθόλου 4

9. Εάν έχετε έναν μαθητή με νοητική υστέρηση μέσα στην τάξη, είναι δύσκολο για εσάς να τον διαχειριστείτε;
Σε μεγάλο βαθμό 0
Πολύ 1
Αρκετά 2
Λίγο 3
Καθόλου 4

10. Εάν έχετε έναν μαθητή με προβλήματα συμπεριφοράς προερχόμενα από το οικογενειακό ή κοινωνικό περιβάλλον, είναι δύσκολο για εσάς να τον διαχειριστείτε;
Σε μεγάλο βαθμό 0
Πολύ 1
Αρκετά 2
Λίγο 3
Καθόλου 4

11. Ένιωθα σίγουρος να διδάσκω ένα παιδί με ειδικές ανάγκες.
Σε μεγάλο βαθμό 0
Πολύ 1
Αρκετά 2
Λίγο 3
Καθόλου 4
12. Είχε ο μαθητής σας βοήθεια από ειδικό παιδαγωγό ή βοηθό μέσα στην τάξη;

Ναι 0
Όχι 1

13. Συμμετέχει ο μαθητής σας με ειδικές ανάγκες σε όλα τα μαθήματα μαζί με τα υπόλοιπα παιδιά στην τάξη;

Ναι 0
Όχι 1

14. Σημειώστε ποια μέθοδο εφαρμόσατε για να βοηθήσετε το μαθητή σας με ειδικές ανάγκες.

Βοήθεια από ειδικό παιδαγωγό 0
Βοήθεια από (ανειδίκευτο) βοηθό 1
Συνδιδασκαλία 2
Ενθάρρυνση των υπόλοιπων μαθητών να συνεργάζονται με τον μαθητή και να τον βοηθούν 3
Δε χρησιμοποιήσα καμία μέθοδο 4

3º μέρος: Στάσεις

1. Πιστεύω ότι οι μαθητές με ειδικές ανάγκες θα πρέπει να βρίσκονται σε ειδικές τάξεις.

Συμφωνώ απόλυτα 0
Συμφωνώ 1
Αβέβαιος/ή 2
Διαφωνώ 3
Διαφωνώ απόλυτα 4

2. Πιστεύω ότι οι μαθητές με ειδικές ανάγκες θα πρέπει να βρίσκονται σε «κανονικές» τάξεις.
3. Τα παιδιά με ειδικές ανάγκες μαθαίνουν κοινωνικές δεξιότητες από τα «κανονικά» παιδιά.

4. Τα παιδιά με ειδικές ανάγκες έχουν μεγαλύτερες ακαδημαϊκές επιδόσεις όταν ενσωματώνονται.

5. Τα παιδιά με ειδικές ανάγκες έχουν περισσότερη αυτοπεποίθηση όταν ενσωματώνονται.
Διαφωνώ απόλυτα 4

6. Τα παιδιά με ειδικές ανάγκες παρεμποδίζουν την ακαδημαϊκή πρόοδο των «κανονικών»
tάξεων.

Συμφωνώ απόλυτa 0

Συμφωνώ 1

Αβέβαιος/η 2

Διαφωνώ 3

Διαφωνώ απόλυτα 4

7. Τα παιδιά με ειδικές ανάγκες είναι δύσκολο να πετύχουν τους στόχους τους όταν
ενσωματώνονται.

Συμφωνώ απόλυτa 0

Συμφωνώ 1

Αβέβαιος/η 2

Διαφωνώ 3

Διαφωνώ απόλυτα 4

8. Κατά τη γνώμη μου, όλα τα παιδιά είναι ικανά να μάθουν.

Ναι 0

Όχι 1

9. Πιστεύω ότι η ειδική κατάρτιση απαιτείται για τους «κανονικούς» καθηγητές ώστε να
dιδάξουν ένα μαθητή με ειδικές ανάγκες.

Συμφωνώ απόλυτα 0

Συμφωνώ 1

Αβέβαιος/η 2

Διαφωνώ 3
10. Εμπιστεύομαι τον εαυτό μου να διδάξω έναν μαθητή με μαθησιακές δυσκολίες.
Συμφωνώ απόλυτα 4
Συμφωνώ 1
Αβέβαιος/η 2
Διαφωνώ 3
Διαφωνώ απόλυτα 4

11. Εμπιστεύομαι τον εαυτό μου να διδάξω έναν μαθητή με κινητικά προβλήματα.
Συμφωνώ απόλυτα 0
Συμφωνώ 1
Αβέβαιος/η 2
Διαφωνώ 3
Διαφωνώ απόλυτα 4

12. Εμπιστεύομαι τον εαυτό μου να διδάξω έναν μαθητή μεπροβλήματα στην όραση.
Συμφωνώ απόλυτα 0
Συμφωνώ 1
Αβέβαιος/η 2
Διαφωνώ 3
Διαφωνώ απόλυτα 4

13. Εμπιστεύομαι τον εαυτό μου να διδάξω έναν μαθητή μεπροβλήματα στην ακοή.
Συμφωνώ απόλυτα 0
Συμφωνώ 1
Αβέβαιος/η 2
14. Εμπιστεύομαι τον εαυτό μου να διδάξω έναν μαθητή μεδιαταραχή του λόγου.

15. Εμπιστεύομαι τον εαυτό μου να διδάξω έναν μαθητή μεδιαχρονίας αναπτυξιακές διαταραχές.

16. Εμπιστεύομαι τον εαυτό μου να διδάξω έναν μαθητή μενοητική υστέρηση.

17. Εμπιστεύομαι τον εαυτό μου να διδάξω έναν μαθητή μεπροβλήματα συμπεριφοράς προερχόμενα από το οικογενειακό ή κοινωνικό περιβάλλον.
Συμφωνώ απόλυτα 0
Συμφωνώ 1
Αβέβαιος/η 2
Διαφωνώ 3
Διαφωνώ απόλυτα 4
Appendix 2

Table 1

<table>
<thead>
<tr>
<th>Area</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>0 rural</td>
<td>41</td>
<td>28.7</td>
<td>28.7</td>
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<tr>
<td></td>
<td>1 urban</td>
<td>102</td>
<td>71.3</td>
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<td>Total</td>
<td></td>
<td>143</td>
<td>100.0</td>
<td>100.0</td>
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</tbody>
</table>

Table 2

<table>
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<th>Experience as a secondary teacher</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 1 4-6 years</td>
<td>8</td>
<td>5.6</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>2 7-10 years</td>
<td>17</td>
<td>11.9</td>
<td>11.9</td>
<td>17.5</td>
</tr>
<tr>
<td>3 more than 10</td>
<td>118</td>
<td>82.5</td>
<td>82.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>100.0</td>
<td>100.0</td>
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</tr>
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Table 3

<table>
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<tr>
<th>Training on SN</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 0 yes</td>
<td>15</td>
<td>10.5</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td>1 no</td>
<td>128</td>
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<td>89.5</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Valid Percent</td>
<td>Cumulative Percent</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td>---------</td>
<td>---------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Valid</td>
<td>0 yes</td>
<td>98</td>
<td>68.5</td>
<td>68.5</td>
</tr>
<tr>
<td></td>
<td>1 no</td>
<td>45</td>
<td>31.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
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<td>143</td>
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<td>100.0</td>
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</table>

**Table 5**

Learning difficulties

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>0 no</td>
<td>23</td>
<td>16.1</td>
<td>23.5</td>
</tr>
<tr>
<td></td>
<td>1 yes</td>
<td>75</td>
<td>52.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>98</td>
<td>68.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing System</td>
<td>45</td>
<td>31.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>143</td>
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### Table 6

**Behavioral Problems**

<table>
<thead>
<tr>
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<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 0 no</td>
<td>59</td>
<td>41.3</td>
<td>60.2</td>
<td>60.2</td>
</tr>
<tr>
<td>1 yes</td>
<td>39</td>
<td>27.3</td>
<td>39.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>68.5</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing System</td>
<td>45</td>
<td>31.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>100.0</td>
<td></td>
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</table>

### Table 7

**Motion Disabilities**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 0 no</td>
<td>63</td>
<td>44.1</td>
<td>64.3</td>
<td>64.3</td>
</tr>
<tr>
<td>1 yes</td>
<td>35</td>
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</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>68.5</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing System</td>
<td>45</td>
<td>31.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>100.0</td>
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<td></td>
</tr>
</tbody>
</table>

### Table 8 Reliability, Attitude Scale

**Reliability Statistics**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>N of Items</td>
<td></td>
</tr>
<tr>
<td>.709</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>
Table 9 Reliability, Difficulty Scale

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>.812</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>
Appendix 3

Table 1

Experience as a secondary teacher - MEANS

<table>
<thead>
<tr>
<th>experience as teacher</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Upper Bound</td>
</tr>
<tr>
<td>1 4-6 years</td>
<td>22.250</td>
<td>2.448</td>
<td>17.409</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>27.091</td>
</tr>
<tr>
<td>2 7-10 years</td>
<td>28.882</td>
<td>1.680</td>
<td>25.562</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32.203</td>
</tr>
<tr>
<td>3 more than 10 years</td>
<td>28.025</td>
<td>.638</td>
<td>26.765</td>
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<tr>
<td></td>
<td></td>
<td></td>
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Table 2

Experience as a secondary teacher - ANOVA

<table>
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<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>272.329</td>
<td>2</td>
<td>136.165</td>
<td>2.839</td>
<td>.062</td>
</tr>
<tr>
<td>Intercept</td>
<td>32584.583</td>
<td>1</td>
<td>32584.583</td>
<td>679.433</td>
<td>.000</td>
</tr>
<tr>
<td>p1v2</td>
<td>272.329</td>
<td>2</td>
<td>136.165</td>
<td>2.839</td>
<td>.062</td>
</tr>
<tr>
<td>Error</td>
<td>6714.188</td>
<td>140</td>
<td>47.958</td>
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<td></td>
</tr>
<tr>
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<td>143</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
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<td></td>
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</tbody>
</table>
Table 3

Experience as a secondary teacher - DICHOTOMIC - Means

<table>
<thead>
<tr>
<th>p1v2DIC years of experience</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>AttitudeScale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 less experience</td>
<td>8</td>
<td>22.25</td>
<td>9.498</td>
<td>3.358</td>
</tr>
<tr>
<td>2 7 or more years of</td>
<td>135</td>
<td>28.13</td>
<td>6.743</td>
<td>.580</td>
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<tr>
<td>experience</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4

Experience as a secondary teacher - DICHOTOMIC - Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>AttitudeScale</td>
<td>Equal variances assumed</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
</tr>
</tbody>
</table>
Appendix 4

Table 1

<table>
<thead>
<tr>
<th>Training on special needs education - Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>training on SN</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>yes</td>
</tr>
<tr>
<td>no</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Training on special needs education - Independent Samples Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene's Test for Equality of Variances</td>
</tr>
<tr>
<td>----------------------------------------</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Equal variances not assumed</td>
</tr>
</tbody>
</table>

105
Appendix 5

Table 1

<table>
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<tr>
<th>experience on SN</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>98</td>
<td>27.21</td>
<td>7.190</td>
<td>.726</td>
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<tr>
<td>no</td>
<td>45</td>
<td>29.09</td>
<td>6.508</td>
<td>.970</td>
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</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
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</tr>
<tr>
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</table>
Appendix 6

Table 1

Learning Difficulties - Means

<table>
<thead>
<tr>
<th>learning difficulties</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>23</td>
<td>30.00</td>
<td>6.053</td>
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<td>7.329</td>
<td>1.846</td>
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Table 2

Learning Difficulties - Independent Samples Test

<table>
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<tr>
<th>AttitudeScale</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Sig.</td>
</tr>
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<td>Equal variances assumed</td>
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<td>.551</td>
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Table 3

Motion Disabilities - Means

<table>
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<th>motion disabilities</th>
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<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>63</td>
<td>27.81</td>
<td>7.164</td>
<td>.903</td>
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<td>35</td>
<td>26.14</td>
<td>7.216</td>
<td>1.220</td>
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</table>

Table 4
## Motion Disabilities - Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.236</td>
<td>.628</td>
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<td>1.098</td>
<td>69.930</td>
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</table>

### Table 5

## Vision Disabilities - Means

<table>
<thead>
<tr>
<th>vision disabilities</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no</td>
<td>94</td>
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<td>.729</td>
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<td>4</td>
<td>20.75</td>
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<td>4.090</td>
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</table>

### Table 6

## Vision Disabilities - Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
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<td>.727</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.123</td>
<td>.066</td>
</tr>
</tbody>
</table>
Table 7

<table>
<thead>
<tr>
<th>hearing disabilities</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
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<tr>
<td>no</td>
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<td>7.405</td>
<td>,794</td>
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<td>11</td>
<td>27.82</td>
<td>5.419</td>
<td>1,634</td>
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</table>

Table 8

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.564</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-.374</td>
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Table 9

<table>
<thead>
<tr>
<th>speech disorder</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>AttitudeScale</td>
<td>88</td>
<td>27.45</td>
<td>6,789</td>
<td>,724</td>
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</table>
Table 10

### Speech Disorder - Independent Samples Test

<table>
<thead>
<tr>
<th>Attitude Scale</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>3,131</td>
<td>.080</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.706</td>
<td>9,908</td>
</tr>
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</table>

Table 11

### Pervasive Developmental Disorders - Means

<table>
<thead>
<tr>
<th>Attitude Scale</th>
<th>pervasive developmental disorders</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>Attitude Scale</td>
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<td>27,35</td>
<td>6,938</td>
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<tr>
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<td></td>
<td>14</td>
<td>26,43</td>
<td>8,812</td>
<td>2,355</td>
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</table>

Table 12

### Pervasive Developmental Disorders - Independent Samples Test

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>3,131</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.706</td>
</tr>
</tbody>
</table>
### Table 13

#### Intellectual Disorders - Means

<table>
<thead>
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<th>Attitude Scale</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>71</td>
<td>27.52</td>
<td>7.038</td>
<td>.835</td>
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<tr>
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<td>27</td>
<td>26.41</td>
<td>7.652</td>
<td>1.473</td>
</tr>
</tbody>
</table>

### Table 14

#### Intellectual Disorders - Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.988</td>
<td>.323</td>
<td>.683</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.658</td>
<td>.4373</td>
<td>.514</td>
</tr>
</tbody>
</table>
Table 15

### Behavioral Problems - Means

<table>
<thead>
<tr>
<th>behavioral problems</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>AttitudeScale no</td>
<td>59</td>
<td>28,29</td>
<td>7,216</td>
<td>.939</td>
</tr>
<tr>
<td>AttitudeScale yes</td>
<td>39</td>
<td>25,59</td>
<td>6,927</td>
<td>1,109</td>
</tr>
</tbody>
</table>

Table 16

### Behavioral Problems - Independent Samples Test

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.025</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1,856</td>
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</table>

Table 17 DIFFSUM and Attitude

### Correlations

<table>
<thead>
<tr>
<th></th>
<th>AttitudeScale</th>
<th>DIFFSUM</th>
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</thead>
<tbody>
<tr>
<td>AttitudeScale</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>143</td>
<td>98</td>
</tr>
<tr>
<td>DIFFSUM</td>
<td>Pearson Correlation</td>
<td>.521**</td>
</tr>
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</table>
Table 18

<table>
<thead>
<tr>
<th>Correlations</th>
<th></th>
<th>DIFFSUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho p3v10 I trust myself to teach</td>
<td>.418 **</td>
<td></td>
</tr>
<tr>
<td>a child with learning difficulties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>p3v11 I trust myself to teach a child with motion</td>
<td>.276 **</td>
<td></td>
</tr>
<tr>
<td>disabilities</td>
<td></td>
<td></td>
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<tr>
<td>Correlation Coefficient</td>
<td></td>
<td>.006</td>
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<tr>
<td>N</td>
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<td>98</td>
</tr>
<tr>
<td>p3v12 I trust myself to teach a child with vision</td>
<td>.455 **</td>
<td></td>
</tr>
<tr>
<td>disabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>p3v13 I trust myself to teach a child with hearing</td>
<td>.514 **</td>
<td></td>
</tr>
<tr>
<td>disabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td></td>
<td>.000</td>
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<tr>
<td>N</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>p3v14 I trust myself to teach a child with speech</td>
<td>.485 **</td>
<td></td>
</tr>
<tr>
<td>disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>p3v15 I trust myself to teach a child with pervasive</td>
<td>.385 **</td>
<td></td>
</tr>
<tr>
<td>developmental disorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>p3v16 I trust myself to teach a child with intellectual disorder</td>
<td>Correlation Coefficient</td>
<td>.446**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>98</td>
</tr>
<tr>
<td>p3v17 I trust myself to teach a child with behavioral problems</td>
<td>Correlation Coefficient</td>
<td>.265**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>98</td>
</tr>
</tbody>
</table>
Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES

Peer Møller Sørensen
Institutt for spesialpedagogikk Universitetet i Oslo
Postboks 1140 Blindern
0318 OSLO

Vår dato: 29.08.2014
Vår ref: 39311 / 33 / 04
Dato: Deres ref.

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 16.07.2014. Meldingen gjelder prosjekttet:

39311  Experience and Attitudes of Secondary Teachers Towards Inclusion of Students with Special Needs in Mainstream Schools
Behandlingsansvarlig  Universitetet i Oslo, ved institusjonens øvste leder
Daglig ansvarlig  Peer Møller Sørensen
Student  Panagoula Dima

Etter gjennomgang av opplysninger gitt i meldeskjemaet og øvrig dokumentasjon, finner vi at prosjekter ikke medfører meldesplit eller konsekvenssplikt etter personopplysningslovens §§ 31 og 33.


Vedlagt følger vår begrunnelse for hvorfor prosjekter ikke er meldepliktig.

Vennlig hilsen
Katrine Utaker Segadal

Kjersti Haugstvedt

Kontaktperson: Juni Skjold Lexaa tlf: 55 58 36 01
Vedlegg: Prosjektvurdering
Kopi: Panagoula Dima yalied@hotmail.gr
Based on the information we have received about the project, the Data Protection Official cannot see that the project will entail a processing of personal data by electronic means, or an establishment of a manual personal data filing system containing sensitive data. The project will therefore not be subject to notification according to the Personal Data Act.

The Data Protection Official presumes that all information processed using electronic equipment in the project is anonymous.

Anonymous information is defined as information that cannot identify individuals in the data set in any of the following ways:
- directly, through uniquely identifiable characteristic (such as name, social security number, email address, etc.)
- indirectly, through a combination of background variables (such as residence/institution, gender, age, etc.)
- through a list of names referring to an encryption formula or code, or
- through recognizable faces on photographs or video recordings.

Furthermore, the Data Protection Official presumes that names/consent forms are not linked to sensitive personal data.