ENACTING INCLUSION FOR STUDENTS WITH DYSLEXIA: USING CULTURAL HISTORICAL ACTIVITY THEORY TO EXPLORE TEACHERS' BELIEFS AND CLASSROOM PRACTICES IN CYPRUS AND NORTH WEST ENGLAND

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ABSTRACT

This thesis has a specific focus on teachers’ beliefs in inclusion and dyslexia and how these are linked to their professional practice when working with dyslexic learners in their classrooms in two cultural contexts; in Cyprus and in North West England. The study is guided by the theoretical framework of Cultural Historical Activity Theory (CHAT) and more specifically by Engeström’s (1999) second generation of CHAT which was used as the descriptive and analytical tool to explore teachers’ personal interpretations in the context of their school and how teachers view their role and responsibilities for supporting dyslexic learners in their classes. A qualitative research design is used and includes semi-structured interviews, classroom observations and follow-up discussions with ten teachers in total, five Greek-Cypriot and five British teachers.

The findings indicate that the teachers presented similarities on the way the concepts of inclusion and dyslexia are perceived and understood. For example, teachers interpret ‘inclusion’ as a shared objective to work collectively towards, making reference to shared values such as ‘human rights’ and ‘equal participation’. One difference identified in some of the Cypriot teachers was that they appeared more critical about teaching disabled students (e.g. students with more complex needs) in relation to their counterparts. Another commonality identified is the need for collaboration in the school community where, the British teachers seemed to evaluate the role of the family as critical for the education of their children, especially those with literacy difficulties experienced at school. In terms of dyslexia, most of the Cypriot and British teachers conceptualised it as a disorder with a biological basis but, at the same time, they refer to the mediating role played by the environment in contributing further to students’ difficulties with literacy. Teachers who engage in practices in their classrooms in order to be more inclusive were identified as those who propose innovation in their activities. On the other hand, there are teachers who seem less inclusive, by creating learning opportunities which are not sufficiently made available for everyone and can allow dyslexic students to access the curriculum.

The study enriches the international literature on teachers’ beliefs and how they can influence teachers’ professional practice. Cultural Historical Activity Theory, contributed into understanding the factors that can influence teachers’ practice for inclusion and their between interactive relationship in an activity system. This is an important area of investigation since changing teachers’ beliefs about students’ ability can reflect changes in their professional practice. The study makes a methodological contribution by using the elements of the second generation of Cultural Historical Activity Theory along with the Developmental Work Research (DWR) model in order to link teachers’ beliefs and their practice. In particular, the use of the DWR model allowed gaining a more in-depth understanding of teachers’ practice.
However, the authors have acknowledged the need for further research studies as changes in teachers’ beliefs about ability, their students’ needs and their beliefs as teachers may be reflected in changes to their practices (Jordan et al., 2009).
DECLARATION

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<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>ADHD</td>
<td>Attention Deficit Hyperactivity Disorder</td>
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<td>ASD</td>
<td>Autistic Spectrum Disorder</td>
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<td>AT</td>
<td>Activity Theory</td>
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<td>BDA</td>
<td>British Dyslexia Association</td>
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<tr>
<td>BW</td>
<td>Big Writing</td>
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<tr>
<td>CERE</td>
<td>Centre of Educational Research and Evaluation</td>
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<td>CES</td>
<td>Cypriot Education System</td>
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<td>CDA</td>
<td>Cyprus Dyslexia Association</td>
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<tr>
<td>AT-Cultural Historical Activity Theory</td>
<td></td>
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<tr>
<td>CPD</td>
<td>Continuing Professional Development</td>
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<tr>
<td>CPI</td>
<td>Cyprus Pedagogical Institute</td>
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<td>DfE</td>
<td>Department for Education</td>
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<td>DFS</td>
<td>Dyslexia-Friendly Schools</td>
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<td>DoH</td>
<td>Department of Health</td>
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<td>DWR</td>
<td>Developmental Work Research</td>
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<td>EU</td>
<td>European Union</td>
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<td>EYFS</td>
<td>Early Years Foundation Stage</td>
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<td>HI</td>
<td>Hearing Impairment</td>
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<td>INSET</td>
<td>In-Service Training</td>
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<td>NLS</td>
<td>National Literacy Strategy</td>
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<tr>
<td>LD</td>
<td>Learning Difficulties</td>
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<tr>
<td>LSB</td>
<td>Local School Boards</td>
</tr>
<tr>
<td>MoEC</td>
<td>Ministry of Education and Culture</td>
</tr>
<tr>
<td>MLD</td>
<td>Moderate Learning Difficulties</td>
</tr>
<tr>
<td>OFSTED</td>
<td>Office for Standards in Education</td>
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<tr>
<td>SEN</td>
<td>Special Educational Needs</td>
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<td>SENCo</td>
<td>Special Educational Needs Coordinator</td>
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<td>SEND</td>
<td>Special Educational Needs and Disabilities</td>
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<td>SpLD</td>
<td>Specific Learning Difficulties</td>
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<tr>
<td>TA</td>
<td>Teaching Assistant</td>
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**CHAPTER 1: INTRODUCTION**
1.1 Introduction

The current study uses Cultural Historical Activity Theory (CHAT) to explore teachers' beliefs about inclusion and dyslexia and how these are reflected in their professional practice in primary classrooms in two cultural contexts, Cyprus and North West England. It is suggested that mastering basic literacy skills, such as reading and writing, are seen as the fundamental basis for educational achievement, career prospects and, ultimately, adult well-being (Maughan, Messer, Collishaw, Pickles, Snowling, Yule, & Rutter, 2009). However, it has been noted that in every cultural context and in every language, a significant proportion of children experience difficulties in acquiring and mastering those skills. Even though, in some cases, the initial difficulty can be gradually overcome, there is still a significant proportion of children who struggle to acquire functional literacy throughout their childhood and, as a result, their difficulties persist in adulthood (Elliott & Grigorenko, 2014). Inclusive classrooms are now viewed as places which support learning for a number of diverse learners, where deficit views of difference and ability are rejected, while participation in the learning process enhances the experience of all individuals in the community of the classroom (Berry, 2006; Florian, 2009; Kershner, 2009; Kozleski, Artiles & Waitoller, 2014).

1.2 Rationale

There has been an international movement towards more inclusive education systems following the Salamanca and Dakar Agreement (UNESCO, 1994). The Salamanca Statement (UNESCO 1994), acknowledges the uniqueness of each child and his/her fundamental human right to education. The Statement has been subsequently supported by the Framework for Action, which emphasizes the need for schools to employ child-centered pedagogies for supporting all children (Armstrong, Armstrong & Spandagou, 2011). Across Europe, many countries have declared a commitment to work towards ensuring more inclusive education systems (European Agency, 2016). Each country has a different approach towards doing so, depending on its past and current context and history. However, inclusive education systems are seen as vital component within the wider vision of creating more socially inclusive societies, with which all countries align themselves, both ethically and politically (European Agency, 2015). The European Agency has provided a vision which aims to inform and support its work and that of its member countries in line with current trends regarding inclusive education:

The ultimate vision for inclusive education systems is to ensure that all learners of any age are provided with meaningful, high-quality educational opportunities in their local community, alongside their friends and peers. For this vision to be enacted, the legislation directing inclusive education systems must be underpinned
by the fundamental commitment to ensuring every learner’s right to inclusive and equitable educational opportunities” (European Agency, 2015, p.1).

Despite the fact that educational policies in both cultural contexts in the current study highlight the need for equal opportunities for participation in education for all learners (DoH, 2014; MoEC, 2008), there is at the same time an international ‘demand’ for higher performance standards, where good literacy skills are considered fundamental for economic competitiveness (PISA, 2015; PIRLS, 2011). Even though the goal of such policies might be to improve students’ skills, the implementation of inclusive education in practice faces particular challenges. On the one hand, changes in education have placed new challenges and demands on the teaching profession, as teachers have greater responsibility for classrooms which contain heterogeneous groups of learners from different backgrounds and with different levels of ability and needs (Engelbrecht et al., 2015). On the other hand, due to the demands for higher academic standards, teachers may feel pressured to cover an increased amount of material at the expense of more inclusive instructional activities that may benefit learners who struggle with literacy skills or are at the risk of school failure (Benz, Lindstrom & Yovanoff, 2000).

Historically speaking, educational policies may shape the institutional context in which teachers act; however, it is teachers’ personal interpretations and understandings along with their everyday enactment of inclusion, which determine the way in which such policies are implemented in practice (Sikes, Lawson & Parker, 2007). It is suggested that teachers’ attitudes and beliefs regarding inclusive education and their understanding of students’ difficulties are crucial elements in the successful implementation of inclusion in practice (Jordan, Schwartz & McGhie-Richmond, 2009). The way inclusive practices are implemented in teachers’ classrooms are possibly influenced by systemic contextual factors (e.g. the ethos of the school) but equally importantly by teachers’ sense of professional responsibility for all their students (Jordan & Stanovich, 2003). Daniels and Cole (2002, p.321) underline the importance of teachers’ beliefs by considering the way “values and beliefs... enter into the micro-political life of institutions”. Jordan and Stanovich (2003) and Jordan et al., (2009) have made a significant contribution in this regard. However, the authors have acknowledged the need for further research studies as changes in teachers’ beliefs about ability, their students’ needs and their beliefs as teachers may be reflected in changes to their practices (Jordan et al., 2009). This renders the current study significant and necessary to be explored in two contexts. What is more, my interest in exploring dyslexia is based on both my personal and professional experience. To start with, my sister was struggling with literacy during her primary school years and when my parents sought more guidance and support, the educational psychologist of the district referred to her difficulties as ‘dyslexia traits’. This was the first time, the word ‘dyslexia’ entered the lexicon in the family environment and I was interested in learning more about this concept. In addition, due to having past professional experience with dyslexic learners in both Cyprus and in Manchester, as a practitioner in the private sector in Cyprus and in further education in Manchester accordingly challenged
me to explore teachers professional practice in two cultural contexts. It is suggested that the study will complement my own professional knowledge in relation to the teachers’ professional practice for dyslexic students.

Considering the above, the main purpose of this study is to gain a deeper insight into a group of teachers in Cyprus and in North West England personal understanding of the concepts of inclusion and dyslexia and how their understanding relates to subsequent actions to implement inclusive education in their classrooms for dyslexic learners. In doing so, the current study is guided by the theoretical framework of Cultural Historical Activity Theory (CHAT) in order to answer the following research questions:

1) How do primary teachers understand the concepts of inclusion and dyslexia in the context of their school based on cultural, social and historical factors?
   a. What are the differences and the similarities among the teachers of two cultural contexts: Cyprus and North West England?

2) How is teachers’ understanding of inclusion and dyslexia related to their classroom practice for dyslexic students in the two cultural contexts?
   a. What is the contribution of social, cultural and historical factors to their classroom practice?

These questions are important in shaping an enquiry into the wider dimensions of teachers’ professional practice, the ways in which teachers’ beliefs as value systems are narrowed down into their practice and how their roles and responsibilities are perceived within the collective activity of teaching. The questions enabled the investigation into how teachers’ experience determines policies in their work and the ways in which their professional practice is affected by contextual factors at micro- and meso-level in two different cultural contexts. Finally, these questions offered the opportunity to examine possible differences and similarities in teachers’ actions, reactions and beliefs regarding concepts such as inclusion and dyslexia, and how they may share similar concerns about how to effectively support dyslexic learners in their classrooms.

1.3 Organisational Structure of the Thesis

The overall structure of the study takes the form of eight chapters. Each chapter systematically discusses essential information regarding this research. The procedures followed are described and presented in detail, so that the reader is able to conceptualise the steps leading to the final conclusions.

Chapter One is the introduction, which offers a general overview of the study, including the research questions, objectives and the rationale. It provides a brief explanation of the importance of this project and its contribution.
Chapter Two outlines the background to dyslexia and inclusive education in the two cultural contexts: Cyprus and North West England. In particular, attention is given to definitions of dyslexia and to the process of identification of dyslexia, to models of disability as value systems and to inclusive education in the educational systems of the two contexts. These sections cover aspects of historicity with regard to the development of Special Educational Needs and inclusion, followed by cultural aspects of dyslexia in Cyprus and in North West England. The chapter concludes with the section on teachers’ beliefs and inclusion.

Chapter Three presents the theoretical Framework of Cultural Historical Activity Theory, which acts as a descriptive and analytical tool in this thesis. The chapter begins with the historical development of the theoretical framework briefly presenting the three generations of Cultural Historical Activity Theory. The six elements – subject, object, tools/artefacts, and division of labour, community and outcome – are unfolded and discussed, allowing the reader to gain a better understanding of how they are going to be used in the study. In addition, an example of the second generation of AT based on the pilot study is presented and explained in detail to encourage deeper understanding.

Chapter Four sets out the methodological approach that has been used for achieving the objectives of this study. The research methodology, design and methods used are discussed in detail along with issues of sampling and data collection.

Chapter Five presents the data analysis process, including aspects of data preparation and the analytical framework for data analysis. Cultural Historical Activity Theory (CHAT) is presented as the analytical tool along with the hybrid step-by-step process of thematic analysis. Following this, any research integrity issues raised during the research, as well as matters concerning validity and reliability in qualitative research are addressed.

Chapter Six presents the first chapter of the discussion of the findings, where three broad themes from the data analysis are presented using the element of the Cultural Historical Activity Theory in order to answer the first research question. The aim is to demonstrate teachers’ understanding of inclusion and dyslexia in the context of their schools. In addition, the key themes and sub-themes are discussed in relation to the broader literature on these issues.

Chapter Seven focuses on the accounts of four teachers and connects the findings from Chapter Six to individual accounts in order to answer the second research question. Teachers’ understanding of the concepts of inclusion and dyslexia is connected to their professional practice in the context of their classrooms. Developmental Work Research (Engeström, 2007) is used as an analytical tool in reflective sessions with the teachers, aiming to reveal tensions and relations embedded in the activity system of classrooms and teachers’ work.
Chapter Eight draws upon a summary of the main findings, the objectives and the procedures followed during this research. The main findings deriving from this research are summarised with respect to the research questions developed for the purpose of this study. Furthermore, this chapter underlines the implications of the research findings and presents the unique contribution of this research to the field of inclusive education and dyslexia, along with the methodological contribution based on the use of Cultural Historical Activity Theory. Finally, the chapter discusses how the current study can be taken forward.

CHAPTER 2: DYSLEXIA AND INCLUSIVE EDUCATION

2.1 Introduction

This chapter is concerned with the areas of theory, policy and research in relation to the main focus of the study. The aim of the literature review is to discuss the key themes that form the basis of the research focus. More specifically, the literature review is based on the following four main areas: (a) The history, definition and identification of dyslexia; (b) Models of Disability; (c) Dyslexia and Inclusive Education; and (d) teachers’ beliefs and attitudes towards dyslexia and inclusion. In this section, reference is also made to inclusive practice in mainstream schools. The first section discusses the debate about the plethora of definitions as they have been developed over the years along with issues
around the area of identification and assessment of dyslexia in both cultural contexts. The next section provides a discussion of the development of the models of disability, where each one has a contribution to make towards explaining the difficulties experienced by students with dyslexia. These models of disability form part of the value systems that affect teachers’ beliefs and they will be further explored in the section of analysis for the purposes of this study. In the section on Dyslexia and Inclusive Education, cultural, historical and social influences on the development of educational systems in both contexts are taken into consideration, along with the development of inclusive education in relation to dyslexia. The role of the teacher is emphasised and highlighted throughout the discussion. In the final section, studies are presented regarding teachers’ beliefs and their role in supporting students with SEND, including dyslexia.

2.2 Dyslexia: History, Definition and Identification

2.2.1 History and Definition of Dyslexia

Historically speaking, the discussion around the concept of dyslexia started over a hundred years ago. Pringle Morgan (1896) described the case of an intelligent 14-year-old boy, Percy, who, despite the fact that he was developmentally similar to his peers, had been unable to learn to read and spell. Morgan described this inability as a profound and remarkable one which without doubt was due to congenital defect. Percy’s problem was termed “congenital word blindness” (Morgan, 1896).

Since then, dyslexia has constituted a term open to debate and it carries different meanings to different people (Armstrong & Squires, 2014). This debate has led to a plethora of definitions, based on different criteria and agendas, and as understood from different discipline areas and theories. Rice and Brooks (2004, p.279) state in their systematic review:

“There are many definitions of dyslexia but no consensus. Some definitions are purely descriptive while others embody causal theories. It appears that ‘dyslexia’ is not one thing but many, in so far as it serves as a conceptual clearing house for a number of reading skills deficits and difficulties, with a number of causes”.

Tønnessen (1997) mentions that, with regard to the issue of definition, there seems to be a set of conflicting interests or an ongoing power struggle that transcends the needs of diverse professional groups. As Stanovich (1992, p.279) notes: “Some definitions serve scientific purposes and can be judged by research criteria. But definitions of learning disabilities serve other purposes as well”. He continues by underlining that school personnel have used definitions as a mechanism to allocate school services for supporting students who are considered as low achievers. In other instances, definitions have been used by parents’ groups as an advocacy tool in order to gain legislative recognition and secure access to additional resources to certain groups of children (Elliott, 2005).
Given the above examples, there seems to be a “tension between value-driven submissions of advocacy groups and evidence-driven submissions from scientists” (Rice & Brooks, 2004, p. 14). In addition to this, the extensive use of the term ‘dyslexia’ in the press has led to confusion among groups of people, including teachers in schools about what dyslexia might be, what might cause it, and what to do about it (Kerr, 2001).

As such, it is acknowledged that dyslexia has so many aspects and that there are major difficulties in attempting to give a description (Miles, 1994). However, it is important to gain an understanding of the debate of such a multifaceted concept as that of dyslexia. Armstrong and Squires (2014) state that by doing so, it will be helpful for considering the assessment of dyslexia, who are identified as being dyslexic, what can be done for the remediation of dyslexia, and the adjustments that can be made so that the curriculum, place of study and access to work are made easier for dyslexic people to participate in more fully. The latter is of particular interest, since it lies within the purposes of this study, which is about exploring teachers’ understanding of dyslexia and how this is reflected in their practice. The way in which teachers conceptualise terms such as dyslexia is associated with different belief systems about the nature of children’s difficulties, which, in turn may also influence the sense of professional responsibility for specific group of learners (Jordan & Stanovich, 2003; Elliott & Gibbs 2008).

In terms of theoretical explanation, there might be valid distinctions between ‘poor readers’ and ‘dyslexics’, underlining possible biological causes of reading difficulties (Fowler & Scarborough, 1993) but research evidence suggests that there might be also possible experiential causes (Vellutino, Fletcher, Snowling & Scanlon, 2004). In this regard, inexplicit teaching, which may not be successful in addressing students’ difficulties when information is presented in particular ways, could be seen as one of them. Bearing this in mind, it is important to emphasise that teachers need definitions that specifically tell them what they should be looking at, for example, in a child’s reading pattern (Elliott, 2005) instead of categorising different types of learners as ‘poor readers’ and/or ‘dyslexics’. It could be argued that for teachers, such distinctions of category might not be helpful in practice, since priority should be given to what teachers do in order to effectively engage the students in the learning process and how to meet their individual needs in the class.

The discussion which follows is concerned with the different definitions developed over the years based on four criteria: exclusionary, discrepancy, working definition and descriptive. The discussion’s purpose is to demonstrate the difficulty in defining dyslexia in one way only and to show that each definition should be understood based on the specific concept of dyslexia to which it refers.

*Exclusionary definitions:*
In 1968, The World Federation of Neurology (cited in Riddick, 2010) developed a definition as follows:

“A disorder manifested by the difficulty in learning to read despite conventional instruction, adequate intelligence and socio-cultural opportunity. It depends on fundamental cognitive disabilities which are frequently of constitutional origin”.

While definitions such as this one have been important in the development of the theory in the field (Catts, 1989; Rice & Brooks, 2004), they have met some serious objections both on theoretical and empirical grounds (Stanovich, 1993). One of the primary limitations of this definition is that, for a person to be considered as ‘dyslexic’, their difficulties in learning to read are not attributable to any other possible explanation such as opportunity or experience (Rice & Brooks, 2004). As such, children are identified as dyslexic only when a number of factors are excluded, including sensory impairment or they are socially disadvantaged (Riddick, 2010). However, dyslexia can occur in all groups, no matter their social background and gender (Richardson, 1992). It is worth mentioning, though, that definitions which are exclusionary in nature have been used primarily in research (Vellutino, 1979). Tønnessen (1997), states that, originally, these groups were excluded for methodological purposes. The attempt was to assure that the condition under study was not “caused by impoverished environment or deficient intelligence (p.81)

Another problem with this definition is that it provides a very limited description of the characteristics which can present in the disorder, making the process of identification even more difficult (Catts, 1989). Finally, Prior (1996) mentions that, for parents and teachers, the definition which uses exclusionary criteria seems to be a more convenient one, as for parents such a definition can explain their child’s problem from a more medical-based point of view and thus suggests that medical treatment could perhaps cure the problem. On the other hand, teachers are also more familiar with this type of definition since it can be applied to learners who cannot overcome poor reading instruction without special help (McGuinness, 1997).

In the following section, the discussion is about the definitions based on the measured IQ - attainment discrepancy. Exclusionary definitions have relied upon the measured IQ-attainment discrepancy in order to develop the theory of dyslexia and their sole justification was to identify potential research participants for the studies (Nicolson, 1996).

Discrepancy definitions:

This type of definition has been based on the discrepancy formula and constitutes one of the most debated and questionable types of definition for dyslexia. Mortimore (2008) states that definitions like this emphasise the limitations observed in behaviours or skills and they suggest the existence of a discrepancy between intelligence and reading skills as a crucial part of the definition. More specifically, the formula that is used to define learning disabilities is the calculation of the difference between a student’s actual achievement and their measured potential, as determined by an IQ test (Siegel, 2003). If
there seems to be a sufficiently large discrepancy, then the child is labelled as having a learning disability (Siegel, 2003). The assumption behind this definition is that an individual’s IQ, as a measure of intelligence, is also a good enough measure of his/her ability to learn to read and, as such, intelligence test scores are good predictors on tests of reading achievement (Butler, 1971 cited in Vellutino, Scanlon & Lyon, 2000).

In other words, dyslexia has been defined as the difficulty in reading at a level that it is significantly below the “expected reading level”, excluding criteria such as other emotional difficulties, sensory deficits, possible neurological diseases and/or educational opportunities (Siegel, 1992). With regard to the expected reading level, two variables taken into consideration are the chronological age and the intelligence level. Chronological age is an important measure as it is expected that older children develop their reading skills better than the younger children. The intelligence level is measured by a score in an intelligence test (IQ) where, the use of IQ test scores as a sole measure to define learning disability (LD) have been criticised (Lyon, 1995). However, IQ scores in interaction with other domains, including conceptual, social and practical is an important value as it can explain how well the person can do in society in terms of its capabilities and functioning (Armstrong & Squires, 2014).

Despite the controversy surrounding the concept of intelligence in the literature (including cognitive, developmental and psychometric literature), measured intelligence has gained popularity and it was adopted as the foundational construct for the definition of dyslexia (Stanovich, 1991). According to research evidence, some professionals tend to believe that IQ scores are valid measures of intellectual potential but, in essence, reading disabled children with high IQ scores (the IQ discrepant poor readers) do not necessarily differ from reading disabled children with lower intellectual aptitudes on measures which assess decoding ability (Vellutino, 2001) and word recognition skills (Fletcher, Francis Rourke., Shaywitz & Shaywitz, 1992). In addition to this, the validity of the IQ-discrepancy criterion has also been questioned in studies used for intervention purposes (Fletcher et al., 1992; Vellutino et al., 2000). However, it should be stressed that the IQ criterion should not be seen as a measure of intellectual potential (Stanovich, 1999), but should rather be a measure of the ability to profit from intervention (Vellutino et al., 2000).

Nonetheless, it could be argued that the choice of IQ test performance and the use of discrepancy based definitions have been extensively used as the basis for rationing support to some students compared to others and they are accepted by teachers, schools, professional organisations and government agencies (Stanovich, 1991). In essence, students who seem not to be performing well according to their chronological age or may not have as high intellectual aptitudes as their peers were labelled as being poor readers, as this label might be of convenience to teachers and schools which are under pressure to demonstrate quality teaching. A meta-analysis conducted by Stuebing et al., (2002, p. 507) demonstrated that “any classification of poor readers based on IQ-discrepancy is an artefactual distinction based on arbitrary subdivisions of the normal distribution”.

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At this point, it is worth drawing a parallel with more recent studies in relation to the socio-political influences on the identification of children as having learning difficulties (LD). For instance, Armstrong and Squires (2014) discuss the fact that schools in England are judged on the basis of how many children reach a politically determined level of attainment. The pressure is to over-identify children with LD since schools are judged on the quality of the teaching provided. The more children being able to reach the level, the better the school is seen to be performing. Each school publishes its performance tables at the end of the year, demonstrating and comparing itself with other schools on how well it performs academically. According to the authors, the underlying assumption here is that, if children are equal at the beginning of school, the level of attainment reached at the end of each phase of education is regarded as an indication of the quality of teaching. However, children are not equal on these terms and, more importantly, when they enter school they are developmentally different and there is a normal distribution of all abilities, producing in this way variability in learning rates and in final attainments (Armstrong & Squires, 2014).

Furthermore, in relation to the aspect of age, research evidence demonstrates that children who are chronologically younger than their peers within the same age cohort have more possibilities of being perceived as having special educational needs by their teachers (Squires, Humphrey, Barlow & Wigelsworth, 2012; Squires, Humphrey & Barlow, 2013) and to be referred for dyslexia assessment by their parents (Johnson, Freedman & Rack, 2013). In this case, it is suggested that there seems to be a mismatch between teaching and learning, when students’ developmental age at the time of entering school is lower and their language, perceptual and social skills are less than those of their peers (Armstrong & Squires, 2014). Teachers then perceive those students as slower learners compared to their older peers and, as a consequence, they are labelled as having special educational needs.

It is important to acknowledge that discrepancy definitions do not take into account more recent studies, which include explanatory theories, such as phonological deficit theory, magnocellular deficit hypothesis and cerebellar deficit hypothesis, which have added further knowledge to our understanding of dyslexia (Mortimore, 2008). For instance, research evidence from a recent study conducted by Papadopoulos, Georgiou & Douklias (2009) addressing the issue of a possible integrative account of phonological, cognitive, and linguistic deficits of dyslexia, demonstrated that phonological awareness proved to be a good predictor of reading ability when possible confounding variables, such as general intelligence and letter knowledge, have been ruled out. Furthermore, Ziegler and Goswami (2005) have suggested that phonological awareness tasks may be easier for dyslexic readers in orthographically transparent languages. The authors, using a psycholinguistic grain size theory, stated that readers in more transparent languages receive consistent
feedback in terms of achieving correct pronunciation and that reinforces the acquisition process further. In particular, psycholinguistic grain size theory is a novel theoretical framework developed by the authors in order to explain the lexical organisation and processing strategies that are characteristics of skilled reading in different orthographies and writing systems (Ziegler & Goswami, 2005). These studies can be seen as examples that have addressed the indicators of dyslexia and/or learning difficulties from other explanatory theories’ perspectives. As suggested in the Rose (2009) review, dyslexia is best thought of as a continuum rather than as a distinct category in which there are not clear cut-off points.

Descriptive Definitions

A common way used to explain and describe dyslexia falls into the category of descriptive definitions. The definitions provided by the British Dyslexia Association (BDA, 2009, see Appendix 1) and the working definition constructed for the purposes of the review for dyslexia by Sir Jim Rose (2009) can be regarded as illustrative examples of definitions included in this category. The Rose review proposes that:

Dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling. Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed. Dyslexia occurs across the range of intellectual abilities. It is best thought of as a continuum, not a distinct category, and there are no clear cut-off points. Co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation, but these are not, by themselves, markers of dyslexia. A good indication of the severity and persistence of dyslexic difficulties can be gained by examining how the individual responds or has responded to well founded intervention (Rose, 2009, p.30).

This definition addresses the primary difficulties that dyslexic people experience, which are related to the skills involved in accurate and fluent word reading and spelling, and suggests that it is best to think of dyslexia as existing on a continuum from mild to severe rather than as a formed discrete category (Rose, 2009). The latter is an important point since, until recently, definitions tended to categorise children into those who either have or do not have dyslexia according to some specific criteria. This definition now recognises that it is not necessary to have a sharp dividing line between those who have a learning difficulty such as dyslexia and to those who not have it. In other words, research evidence supports that definitions such as this one recognise that dyslexia cannot be categorised in terms of “yes or no” by someone who may present it or not, but rather it is more about individual differences and degrees of dyslexic difficulties (Reid, 2009; Riddick, 2010; Rose, 2009).

Riddick (2010) states that descriptive definitions have been developed based on the criticism that some of the earlier definitions had addressed dyslexia largely or most exclusively in terms of the reading problems. Even though learning to read seems to be one of the main problems experienced by dyslexic people, descriptive definitions attempt to deal with this kind of criticism by specifying the cognitive impairments underlying
dyslexia and the range of skills that seem to be affected by these impairments (Riddick, 2010).

**Working definition:**

In 1999, a working definition of dyslexia with no exclusionary criteria was proposed by the British Psychological Society (BPS). More specifically, the Working Party convened by the Division of Educational and Child Psychology (DECP) proposed the following dyslexia definition:

Dyslexia is evident when accurate and fluent word reading and/or spelling develops very incompletely or with great difficulty. This focuses on literacy learning at the “word level” and implies that the problem is severe and persistent despite appropriate learning opportunities. It provides the basis of a staged process of assessment through teaching.

(British Psychological Society, 1999, p.18)

In particular, the working definition was based on the work of the Committee of the Health Council of the Netherlands and emphasis is given to the word-reading level (BPS, 1999). The definition represents the core features of literacy learning difficulties, does not include any causal factors and is in line with the “skills deficit” understanding of learning difficulties and what exactly learners cannot do in relation to the tasks of reading and writing (Woods, 2002). The latter is considered as probably one of the most important and prevalent behavioural features in any dyslexia definition, which is concerned with “difficulties with literacy learning” (Woods, 2002).

Another important aspect that the DECP report addressed was that of the conceptualisation of SEN, dyslexia and their interrelationship. It is noted that the concept of “specific learning difficulties” in relation to literacy learning has been previously explained as a concept that can be linked to discrepancy understanding, including constructs of measured intelligence. As such, this had led to the creation of a subgroup of children who are identified and considered as having Special Educational Needs (Woods, 2002). This, along with socio-political influences on teaching all students to a standard level, has also led to the over-identification of students with SEN, including many students with learning difficulties (Squires et al., 2013). The proposed definition attempted to address this issue by emphasising the “skills deficit understanding” as mentioned above.

The definition of the report was the object of criticism (Reid & Kirk, 2001) as it is lengthy and theoretically complicated in parts and does not seem to precisely indicate what literacy measurements can be made and why, such as word reading within or out of text, fluency over shorter/longer time periods, etc. (Woods, 2002). Furthermore, it does not seem to provide a causal explanation for incomplete or slow literacy development, as this can be provided by a causal model of dyslexia (see section 2.3.4 *Causal Modelling Framework* for more details). Norwich (2009), mentions that the definition seems to
exclude ‘appropriate learning opportunities’ as a causal explanation of the ‘severe and persistent’ difficulties.

Despite the critiques, the BPS definition has made a considerable progress towards clarifying some of the previous fundamental problems in relation to the dyslexia definition. The challenge was to evaluate the potential of the dyslexia report for influencing educational assessment, identification, intervention and policy (Woods, 2002) by providing a basis for a staged process of assessment through teaching. In addition to this, the report is considered as a landmark in the development of collaborative practices between teachers and psychologists in the school context (BPS, 1999).

To sum up, this section has discussed the plethora of definitions and the difficulty in attempting to describe a complicated phenomenon such as dyslexia. Every definition addresses particular aspects of dyslexia and serves different purposes. Teachers, in this regard, need definitions that describe the characteristics of dyslexia with no causal explanations and exclusionary criteria so as to enable them to identify dyslexic students at an early stage and make the necessary arrangements in their classroom to allow them to access the curriculum. However, what should be taken into consideration is that even though there might be a list with known factors and/or indicators which can explain an individual’s difficulties in reading, this may not be the case for every individual. In fact, there might not be a single theory that can explain one individual’s failure or one possible factor that causes these difficulties or even an interaction between two factors (Rice & Brooks, 2004).

### 2.2.2 Identification and assessment of dyslexia

A growing body of research evidence has demonstrated that a number of young adults and children with dyslexia have been assessed late on (Ingesson, 2007; Riddick, 2010; Riddick, Farmer and Sterling, 1997). For example, in Ingesson’s (2007) study, the teenagers’ and young adults’ mean age for ‘diagnosis’ was 12 years. Before that, the children had experienced a sense of feeling inferior in school attainment and they were puzzled about what was wrong with them. It has been suggested that a late ‘diagnosis’ has an impact on such individuals’ personal lives and on their school experience, including low school attainment, bullying (Humphrey, 2002) and, in some cases, even dropout (Ingesson, 2007) and a general lack of self-esteem (Riddick, 2010; Glazzard, 2010; Glazzard & Dale, 2013).

One of the key points highlighted in the literature of dyslexia is early identification (Reid, 2016; Rose, 2009), which is an important stage in the assessment process (Reid, 2016). It is generally accepted that the earlier difficulties with dyslexia are identified, the better are the chances for young children to be put on the road to success. Educators face a complex challenge to recognise the signs which suggest that a child is at risk of reading failure (Snowling, 2013). Such early identification can allow interventions to be carried out...
before children start experiencing underachievement, lowered self-esteem and a lack of or poor motivation (Snowling, 2013).

However, a long and questionable discussion concerns the purposes of the assessment itself (Armstrong & Squires, 2014) and aspects of how such identification should take place, when it can be most effectively and most sensitively be conducted (Reid, 2016). To start with, Armstrong and Squires (2014) state that assessment can be undertaken to give a label or to assess a pupil’s progress when the intervention is implemented. The latter is important since, in this case, the label of dyslexia can be given to the child at a particular point in time and if successful teaching is provided, then the label may no longer apply. What is more, assessment in some cases is required to help decision-makers allocate resources within schools so that some pupils receive support or materials and others do not. However, in order for such decision to be reached, a discrepancy model – between general ability (IQ measures) and ability in literacy – is applied. However, despite any ethical questions that may arise, this may be unavoidable in many contexts due to a lack of resources (Miles & Miles, 1999).

Other reasons for assessment might be to make reasonable adjustments to examinations and the learning environment, based on the social model of disability approach; emphasis is placed on the social learning environment, which can be adjusted so as to be accessible to all children to learn (Armstrong & Squires, 2014). This is of particular importance for the purposes of this study, since responsibility is primarily placed on the teacher, who has to adapt his/her approach to teaching to ensure that the child has access to learning. Practices and approaches can include the use of technology for leaning within the classroom and/or differentiating teaching such as modifying a task, changing the learning outcomes for a classroom task or increasing the adult support for those students who seem to require additional assistance in relation to their peers (Armstrong & Squires, 2014). Another initiative that has been employed in schools in the UK (the “dyslexia-friendly schools” initiative) suggests necessary adjustments to the classroom environment and to teachers’ approach in order for the school to become more inclusive (BDA, no date). This will be further discussed in later sections in this chapter. Finally, another reason for assessment could be to challenge teachers’ beliefs about children’s ability based on their literacy performance. As Armstrong & Squires (2014) underline, teachers assume that a child’s low ability in literacy is related to a general low ability to learn in other contexts too. Challenging teachers’ beliefs based on informed knowledge of what they can do as educators is a first step forward in identifying learner’s strengths so they can maximise their assets and support learning (Armstrong & Squires, 2014). For Miles & Miles (1999), clarifying a person’s strengths and the associated weaknesses should be the primary aim of assessment, since these vary from one dyslexic individual to another. In doing so, it could further help determine what the exact needs of the students are to be addressed. As such, it is of great importance for teachers to be involved in a careful identification of those children who are experiencing
significant problems in their reading performance, which can subsequently lead to a thorough assessment for dyslexia and precisely identify the literacy skills that can be mastered so that new skills can be matched to the learning (Armstrong & Squires, 2014).

How and when an early identification process takes place and the effectiveness of the whole assessment process is a matter of debate too (Reid, 2016). The term ‘early identification’ suggests that some form of intervention needs to be put in place so as to note the difficulties that some children may be experiencing. However, other factors also have to be taken into consideration when engaging in this process; for instance, early identification does not have to exclusively focus on the child’s deficits that can sometimes be apparent before the child enters school and has the opportunity to benefit from the learning opportunities in nursery or school (Reid, 2016). Research studies of children at family risk of reading problems suggest that there might be some established precursors of dyslexia in the pre-school environment that can be taken into account (Gallagher, Frith & Snowling, 2000; Snowling, Mutter & Carroll, 2007). In addition to this, Reid (2016) refers to “curriculum access” as an integral part of the identification procedures for dyslexia in the report of the Task Force for Dyslexia for the Republic of Ireland. The document highlights the phrase “continuum of identification and provision”, which it is a policy-led identification and support model. The assessment focusing on curriculum can enable the teacher to identify particular strategies or resources that can help access the curriculum for a particular child (Reid, 2016). Briefly, the model basically operates in the classroom and the key person in the class is the teacher. Irrespective of the ‘diagnosis’, the teacher is the one dealing with the child’s learning from a problem-solving perspective using curriculum access as the target and differentiation as the means. It is noted that this model is consistent with the principles of inclusion and requires clear curriculum objectives to locate the pupil’s progress (Reid, 2016). In addition, if a child has already been assessed, further assessment can contribute to the monitoring and review process. The assessment should be linked to teaching as it can assist in measuring the effect of teaching and/or also offering suggestions for teaching programmes or approaches (Reid, 2016).

In essence, the purpose of early identification should not be to necessarily label children for the sake of the label but rather to identify those who are at risk of developing difficulties related to acquiring literacy. Undoubtedly, early identification is of high importance in the assessment process and it can make a huge difference to the achievement outcomes of children at risk. It is suggested that it is essential that the assessment be linked to teaching and to curriculum. Reid (2016) emphasises the significance for schools to have procedures in place in order to meet the needs of early identification. Some aspects that have to be taken is to account in this regard are a whole-school policy, the role of other professionals, linkage with teaching, the role of parents, and professional development and training.
However, the assessment process is not a straightforward one and, on many occasions, including most of the aspects, if not all, is not an easy task. For instance, Armstrong & Squires (2014) highlight the fact that, even though there might some forms of assessment to be undertaken, the lack of a multi-professional approach may undermine the validity of the conclusions; in another scenario, a child might be described as dyslexic due to the fact that a differential diagnosis has not been in place, but in reality the child may experience other kinds of difficulties. Bond et al., (2010) notice that the limited availability of human resources to make multi-professional assessments can lead to politically and arbitrary decisions by which children are assessed. This is also consistent with research findings in the context of Cyprus. More specifically, within the Cypriot educational system, dyslexia falls under the category of Special Educational Needs (MoEC, 2008, see section 2.4.2 for more details). If a student is not identified as having Special Educational Needs (SEN) but is experiencing significant and persistent learning difficulties, it lies within the responsibilities of the class teacher to initiate the identification process for the student (Mamas, 2013). This could be happening due to the very limited number of educational psychologists per district compared to the number of schools across the country (MoEC, no date). This is in line with research evidence in the UK, in which it was noted that a persistent shortage of educational psychologists has acted as a driver for increasing teachers’ skills in order to be able to assess dyslexia in schools (Armstrong & Squires, 2014).

However, this raises concerns about teachers’ competencies to successfully identify signs of dyslexia and differentiate it from other conditions, which may lead to poor reading and or spelling progress (Armstrong & Squires, 2014). Since this study is concerned with the roles and responsibilities of class teachers for students with dyslexia, it is worth questioning whether such a complicated task, along with other influencing factors such as lack of training and professional development in the case of Cyprus, and time pressure to meet curriculum objectives and other demands of the profession, can drive teachers to more ‘deficit-oriented’ approaches to identification (Mamas, 2013) for students who are struggling to acquire literacy compared to their peers.

2.2.2.1 The process of identification and assessment of dyslexia in Cyprus

The assessment of Dyslexia/Specific Learning Difficulty can be conducted by the District Committee on Special Education, the Cyprus Dyslexia Association and in the private sector such as by private diagnostic centres or by the special school (New Hope, no date). In the public sector, the District Committee is responsible for undertaking the assessment process. According to the 1999 Education Act, the District Committee for Special Needs consists of a multi-agency team, including the First Officer of Education of the MoEC such as the president, a representative of primary education from the MoEC, one educational psychologist, one Special Educational Needs (SEN) teacher, one clinical psychologist, one social worker and one speech therapist. The
District Committee for Special Needs is responsible for identifying the needs of the child and, based on the assessment, for entitling a child to special provision either in school or in a special unit within the school. In some cases, the provision is suggested for special schools, which is still an option in the CES (Symeonidou, 2011).

The parent or the primary school teacher, together with the head teacher, is responsible for identifying the first signs and for informing the District Committee about the child’s case as soon as possible (MoEC, no date). Then the school is responsible for sending relevant information to the District Committee, such as the medical history of the child and any parental information. More specifically, the teacher and the SEN teacher need to complete further assessment forms including information relevant to the following areas: (1) history of the child, (2) motor and sensory area, (3) learning and perceptual area: (a) pre-reading and reading skills (comprehension, decoding, fluency), (b) mathematics (concepts, arithmetic functions, problem-solving), (c) speaking skills and communication, (d) writing/composition, (4) emotional area, (5) social area (behaviour, social relationships, personal care) (MoEC, no date).

According to the 1999 Education Act, the parent and the child are involved in the process as well but the teacher is excluded from it (MoEC, no date). The assessment tools used by the educational psychologists and clinical psychologists are not published on the Ministry’s website and there is no more information with regard to the age at which a child can be referred for assessment. This lack of information suggests that further research is needed in the area of assessment in the Cypriot context and also raises questions about which students are allocated resources and special provision, as well as adjustments to examinations in high school (N. 22(1)/2006). The CDA notes that it can accept children from five years old for the identification process (CDA, no date). If a child is considered to have Special Educational Needs, then the District Committee informs the school and develops an Individual Educational Plan (IEP) in collaboration with the SEN teacher of the school (MoEC, no date).

Based on the latest reform agenda on inclusion in Cyprus (section 2.4.2, The Cypriot Educational System), teachers are given greater responsibility and accountability for all their students in the classroom for their identification and support. On the other hand, recent studies suggest that teachers feel that they are not adequately equipped to work with students with diverse and/or additional needs (Symeonidou & Phitaka, 2009). This draws attention to the case of appropriate further training in assessment and in dyslexia intervention that teachers need. It could be suggested that teachers in Cyprus seem not to have the ability to conceptually understand different conditions, to differentiate among them and eventually, to effectively support learners with diverse needs and abilities, due to a lack of training on these issues.

2.2.2.2 The process of identification and assessment of dyslexia in the UK
Schools in England and Wales have statutory baseline arrangements for SEN that involve assessing each child when they start the reception stage at school with an accredited baseline assessment (Frederickson & Cline, 2009). The Foundation Stage Profile is a national assessment that helps teachers sum up each child’s progress and learning needs and it is completed by the end of Reception year in primary school (Frederickson & Cline, 2009). It is based on ongoing observations and assessments carried out during the final year of the Foundation Stage.

In the new SEND Code of Practice (DfE & DoH, 2015), the categories of School Action and School Action Plus have been replaced by a single category of SEN support. Thus, if a pupil is identified as having SEN, the schools should take action to remove barriers to learning. Such an approach could be regarded as a system level approach in which the school is responsible for adapting the environment in order to make it accessible for all learners. Such approaches have also been proposed through the Index for Inclusion (Booth & Ainscow, 2002) and the ‘Dyslexia-Friendly’ Schools Initiative (BDA, 2009) and it could be suggested that they are inclusive for all learners. The graduated approach is a four-stage cycle (Assess, Plan, Do, Review), which starts at the whole-school level and emphasis seems to be placed on environmental factors, such as the removal of barriers through necessary adaptations. In essence, the graduated approach, as outlined in the SEND Code of Practice (DfE, 2014), emphasises the role of the class/subject teachers in continually assessing, planning, implementing and reviewing their approach to teaching all children, including those who might experience literacy difficulties. Where a child is identified as having potential educational needs, then the four-stage cycle is personalised to each individual. Such an assessment involves collaboration between the practitioner, the SENCo of the school and the child’s parents (DfE, 2014).

This initial assessment needs to be reviewed regularly to ensure that support is matched to need. In case that there is little or no improvement in the progress of the child, then a more specialist assessment might be called for that can be conducted by specialist teachers or by health, social services or other agencies (DfE, 2014). Specialist teachers have undertaken further training in assessment and in dyslexia intervention and research evidence suggests that a main attribute of the specialist teacher is the ability to conceptually understand and carry out a diagnostic assessment for dyslexia (Bell, 2013; Rose, 2009). However, there is still a debate going on about the assessments carried out by specialists and those made through teaching (Armstrong & Squires, 2014). As this debate is related to the purpose of the assessment, Peacey (2001) suggests that schools need to recognise how to utilise the best possible teaching approaches, which can support assessment as well. In this regard, the quality of the environment is of great importance and the assessment process through teaching needs to consider aspects of the learning environment, as well as the school climate and the need for teamwork (Reid, 2016). Wearmouth, Soler and Reid (2003) suggest that when planning programmes to address
the needs of dyslexic students, the focus should be on the learning environment, the characteristics of the student, the perspectives of the parents and the school.

From one point of view, dyslexic children can be assessed at the age of seven years old (Riddick, 2010; Fawcett & Nicolson, 1995), as this is the age at which it is possible to measure the child’s reading age and compared it to his/her chronological age. However, considering the discussion in the ‘definition of dyslexia’ section, this raises a number of questions in relation to who is eventually assessed as dyslexic and who is not, based on reading age, and how far “behind” a child should fall in order to be considered as being at-risk of being labelled dyslexic (Prior, 1996). The concept of ‘reading age’ and IQ discrepancy has been the subject of long criticism as it has assumed that poor readers with high discrepancy as indicated by the IQ performance test were different from poor readers with lower aptitude. As such, children may be labelled as “dyslexic’ or ‘reading disabled’ if they demonstrate statistically significant discrepancies between reading ability and intelligence test performance” (Stanovich & Siegel, 1994, p.25). Finally, considering reading age as the criterion for making decisions about adjustments, another question arises: who is finally going to benefit from accessing resources or adjustments to educational examinations by making use of the dyslexia label?

Previous sections have addressed the aspect of the definition of dyslexia, based on different criteria including discrepancy, exclusionary, descriptive and working definitions. The discussion emphasized the diversity of definitions for understanding such a complicated concept as dyslexia and the difficulty in describing it in a single definition. Then the discussion focused on the identification and assessment process in the two cultural contexts, in which the role of teachers in this process was addressed.

2.3 Models of Disability

In this section, the discussion will focus on the different models of disability developed over the years. As Cunningham and Davis (1985) assert, ‘models’ are social constructions and frameworks through which someone is able to examine society's understandings and interpretation of social behaviours. The authors claim that “models are a guide to our behaviour” and in essence “they are not absolute, they can be changed” (Cunningham & Davis, 1985, p.19). It could be suggested that models of disability are related to different value systems, attitudes and behaviours (Pearson, 2009). The focus of this study is narrowed down to teachers’ beliefs about dyslexia and to a particular set of behaviours, such as that of pedagogical practice. The study is based on the view that effective inclusionary practice, and therefore overall teaching depends in part on the beliefs of the teachers about the nature of disability and about their roles and responsibilities towards their students (Jordan et al., 2009).

2.3.1 The Medical/Individual model of disability
The medical model of disability has been extensively used in research and medical practice to describe the symptoms or to identify the causes of many health conditions and/or disorders, including dyslexia. The origins of dyslexia seem to be embedded within the medical model, such as in earlier descriptions of ‘congenital word blindness’ by Pringle-Morgan. The conceptualization of the individual’s difficulties in learning to read and write has been associated with a number of different theories on the causes of dyslexia, for example a cognitive explanation of dyslexia arising from phonological deficit theory (Snowling, 2013).

Generally speaking, prior to the 1980s, there seems to have been a well-acknowledged emphasis of academic research on disability, which was almost entirely confined to conventional and individualistic medical explanations (Barnes, Oliver & Barton, 2002). Barnes and Mercer (2010) state the medical model primarily emphasises the deficits and the personal, functional limitations that lie within the responsibility of the person concerned. These functional limitations cause a disadvantaged experience for the person, as disabled people need to adjust themselves to society in order to function ‘normally’ (Hughes, 2010). What disabled people ‘could not do’ led to their type and degree of impairment being labelled and categorized differently in relation to that of non-disabled people (Reiser, 2012). This attitude is often reinforced and persists in traditional views around the world and it has become a powerful way of oppressing such individuals (Reiser, 2012).

It is worth noting here that there is a difference between medical model thinking and the use of the medical model for intervention and allocation of resources purposes (Hughes, 2010). For instance, for many disabled people, access to medically-based interventions is vital for them to get the best support available (Reiser, 2012). However, when we talk about medical model thinking, we refer to the way disability is constructed when individuals are not able to fully participate in society (Reiser, 2012).

It is suggested that, to a large extent, the medical model is dominant in explanations of the difficulties that students face in school (Farrell, 2004; Booth, 1998), by categorising them and labelling them according to their ‘problem’. In addition, the language used in schools around students’ difficulties could be seen to stem from the medical model, including words such as ‘impairment’, ‘disorder’ and ‘symptoms’ which tend to pathologise students’ experience at school (Farrell, 2004).

In this regard, a student who might experience difficulties in literacy or be dyslexic, is seen through the medical lens as a student with a ‘problem’ when it comes to acquiring basic literacy skills compared to his/her peers. Such students are perceived as unable to participate in the learning process to the same extent as their peers. These values and ideas were challenged by the social model of disability, which argued that people with impairments are disabled because the social system has created barriers which restrict
their full participation in society (Hughes & Paterson, 1997). From the social model of disability perspective, barriers may exist in the classroom environment, through a traditional and conventional lesson which is presented based only on text and scripts and does not give the opportunity to dyslexic students to access the curriculum and participate more fully in the learning process.

At this point it should be highlighted that the medical model of disability is enshrined in the term “people with disabilities” emphasising that person’s pathology and deficit whereas the social model of disability in the English context, prefers the term “disabled people”, reflecting the view that disability is a social construction and that the social model mandates barrier removal and anti-discriminatory legislation (Shakespeare, 2013). In the same vein, in this study, the term ‘dyslexic people’ is favourable in light of the espoused social constructivist model of reality (see Chapter 4). More specifically, social constructionism emphasises the knowledge creation, specifying the social nature of the construction of the knowledge with its interest in social structures, relations and institutional practices. In this sense, it is suggested that dyslexia as a learning difficulty could be understood as a socially constructed notion considering the social structures and the institutional practices of school settings. For example, the interaction of dyslexic learners with disabling school and classroom environments can create difficulties accessing the curriculum. Thus, dyslexic learners are considered those who are not able to access the curriculum as this is currently structured and implemented in practice in historically accumulated social systems such as the school system. In light of this, it is suggested that the barriers in the learning process need to be removed and the term ‘dyslexic students’ and ‘dyslexic people’ is used to demonstrated that the difficulties experienced in school contexts are socially constructed based on current social structures and practices.

2.3.2 The Social Model of Disability

The social model has emerged as a radical alternative to the individualized medical view by the Union of Physically Impaired Against Segregation (UPIAS) network (Shakespeare, 2013). It offered a radical reconceptualisation of disability by asserting that it is society that has disabled physically impaired people and that disability can be principally understood as a social barrier that isolates and excludes people with impairments from fully participating in society (UPIAS, 1975). The limitations imposed on physically impaired people are not based on the individual’s pathology but rather on social, cultural, economic and environmental barriers (Oliver, 1990; 2009). The key elements of the social model include the critical distinction between disability (as social exclusion) and impairment (as physical limitation), making disabled people ‘an oppressed group’ in society (Barnes, 1992; Oliver, 1996; Shakespeare, 2013).

The movement has been successful in attempts to make the media change the image of disabled people, to make transport services and public buildings more accessible to such people and, more importantly, to achieve the 1995 Disability Discrimination Act under the
Equality Law 2010 (Shakespeare, 2013). It could be noted that there seems to be a change in terminology which moves away from medical model language such as the ‘Discrimination Act’ to social model language, as reflected in the ‘Equality Law’ 2010. This change in terminology suggests changes in the way disability is perceived by society. Despite its “emancipatory force” (Tregaskis, 2002, p.457) and positive changes, the Social Model of Disability (SMD) has been criticised for being an “outdated ideology” by some scholars (Shakespeare & Watson, 2001). Even though it is not within the scope of this study to provide an extensive account of the criticism of the social model of disability, it is worth discussing how it has been presented in the academic literature. Gaining an insight into the criticism of SMD could be helpful in understanding its contribution to our thinking about disability today, along with the critical role of environment and social and biological aspects, which also contribute to the experience of dyslexia.

To start with, a number of researchers cite the neglect of impairment and, more specifically, the personal experience of impairment as an important aspect of many disabled people’s lives (Corker, 1998; Hughes, 2004; Morris, 1993; Shakespeare & Watson, 2001; Shakespeare, 2013; Thomas 1999). However, it has been argued that the social model does not exclude the personal experiences of disabled people since ‘disability is something that is imposed on top of our impairments’ (UPIAS, 1975, p.3). It is suggested that social model discusses the role of impairments in the experience of disability but that these impairments are placed in a wider, more complex frame which leads to artificial constructs of disability, due to various barriers – economic, political and social (Barnes et al., 2002). The other weaknesses identified in the relevant literature concern the sociological relational approach and the dichotomous nature of the SMD, defining disability as a social oppression rather than as a dimension involving oppression. In addition, there have been intense battles over the crude distinction between impairment (medical) and disability (social) (Shakespeare, 2013) and the removal of the body from the social model of disability (Allan, 2010). In this regard, the bio-psycho-social model, as adopted by the International Classification of Functioning, Disability and Health (ICF), includes biological, social and environmental aspects in order to explain the concept of disability (see section 2.3.3 below).

It could be argued that these battles focus on the theoretical grounds of the SMD and challenge theoretical underpinnings, which, in essence, cannot be applied in practice when considering the difficulties that dyslexic learners experience in schools. As mentioned above, the SMD appears not to address aspects such as the environment and how it might be transformed in order to remove barriers to learning for these learners. Considering the historical development of the movement, the social model of disability can be seen as ‘a practical tool, not a theory, an idea or a concept’ (Oliver, 2004, p. 30). In this regard, the ‘Dyslexia Friendly Schools’ (DFS) notion was developed by the British Dyslexia Association, originating in the whole-school police approach in order to respond
to diverse learning needs, including areas such as specific learning difficulties/dyslexia (Norwich, Griffiths & Burden, 2005). From the 1980s onwards, a whole-school approach to Special Educational Needs has been promoted for all areas of SEN, including those of specific learning difficulties/dyslexia (Thomas & Feiler, 1988). As such, the DFS was developed as a systemic approach in order to remove barriers to learning, to enable children to learn to how best they can learn, to give access to specialist teaching (with a balance between withdrawal and in-class support) so that dyslexic learners are not placed in special classes (BDA, no date; Norwich et al., 2005). Such an approach would seem to contribute to the advance of the struggle to achieve inclusive education (Allan, 2010) by identifying instructional barriers to participation, not only for students with physical limitations but also for those with dyslexia/learning difficulties.

To sum up, the Social Model of Disability has taken a step forward in challenging assumptions about literacy standards (Riddick, 2001), considering the fact that skills in numeracy and literacy are necessary for economic and social participation (Barton, 2003) and a prerequisite for the future economic workforce (MacDonald, 2009). The production of disability in relation to dyslexia can be seen in relation to the interaction with the environment and the necessary “educational adjustment accommodations” (MacDonald, 2009, p.349) that need to be made on the behalf of teachers to make the environment more accessible to those students. In the following sections, the bio-psycho-social model and the causal modeling framework are discussed in relation to dyslexia.

2.3.3 The Bio-psycho-social model

The “bio-psycho-social” model has been adopted as the conceptual framework for the World Report on Disability by the International Classification of Functioning, Disability and Health (ICF) (World Health Organisation, 2011, p.4) in an attempt to understand functioning and disability in terms of the dynamic interaction between the health condition and contextual factors (personal and environmental). According to the report, the Preamble to The United Nations Convention on the Rights of Persons with Disabilities (CRPD) acknowledges disability as “an evolving concept” but, at the same time, it underlines that “disability results from the interaction between people with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others” (WHO, 2011, p.4).
The promotion of the “bio-psycho-social model” by the ICF, represents an attempt at integration of the medical and the social models (Farrell, 2004), addressing the criticism that previous definitions of the ICF placed their emphasis on the medical aspect of disability and the classification of the impairments (Barton, 1998; Shakespeare, 1998). As such, the definition provided by the ICF is organised in two parts, as illustrated in Box 1 above. Part one includes aspects of the body and activities and participation and the second part those of 'contextual factors' such as environmental and personal factors.

Based on this model, disability is considered as the umbrella term for impairments, activity limitations and participation restrictions, with reference to the negative aspects of the interaction between an individual (with a health condition) and that of individual’s contextual factors (environmental and personal) (WHO, 2011, p. 5). One of the strengths of this approach can be seen the acknowledgment that different dimensions (bio-psycho-social) interact in producing disability, which is regarded as not being an attribute of the person (WHO, 2011). In the context of dyslexia, such interaction can be useful to explain the presentation of dyslexia (behaviours or factors attributed to dyslexia) and to better demonstrate how individuals experience dyslexia.

Another strength that could be identified concerns the emphasis given to environmental and personal factors, which can be either facilitators or barriers and include products and technology; the natural and built environment; support and relationships; attitudes; and services, systems, and policies (WHO, 2011). The report stresses the importance of the impact that a person's environment has on the experience and the extent of disability and notes that changes that can be brought about through policy changes, legislation, capacity building, etc. In terms of personal factors, even though these have not yet been conceptualised, factors such as motivation and self-esteem are mentioned in the report (WHO, 2011).

It could be argued that, in the context of dyslexia and educational practice, the impact of the environment through this model is less clear (Armstrong & Squires, 2014). The environment is related to aspects of learning and examining and how can these be adjusted so as to have a positive impact on the learning experience of the students (Reid, 2016). Aspects of the environment and their influence on dyslexia are discussed in more detail in the following model, which seems to take these factors into account, highlighting the critical role of the environment.

### 2.3.4 The Causal Modeling Framework

The causal modeling framework was developed by Frith (1995) as a way of illustrating some known facts about developmental disorders. The three levels of description –
behavioural, cognitive and biological – indicated by Frith in the causal model framework of dyslexia, are used to contrast competing theories of dyslexia, providing a useful guide and clarifying some of the issues relating to the concept of dyslexia; in essence, it could be regarded as the most helpful way to define and explain dyslexia at present. As Frith (2002, p.45) suggests, the important point is that "at all three levels interaction with cultural influences occur”. It is generally accepted that, when we discuss dyslexia, there is a concern about literacy, which is a supremely cultural phenomenon (Frith, 2002). As such, recognition of environmental and cultural influences on the chain of causal links from brain to mind to behaviour (Frith, 2002) is of great importance, since cultural and environmental factors are important aspects of today's society (Reid, 2016).

In particular, the author suggests that dyslexia is a neuro-developmental disorder with "a biological origin and behavioural signs which extend far beyond problems with written language" (Frith, 2002, p.45). To start with the biological level, dyslexia is assumed to be a condition with a genetic origin and a basis in the brain. There may be multiple genetic or brain influences, which will result in different phenotypic expressions through diverse environmental and cultural contexts such as different languages, different literacy demands and technologically advanced societies (Frith, 1999).

At the cognitive level, there seem to be specific processing deficits or hypothesised within the child causes of poor reading performance that, as a consequence, lead to the
behavioural level at which the child displays poor reading and writing. These observations, difficulties in learning to read and write, which are characteristic features of dyslexia, are situated at the behavioural level. Teachers can directly observe behaviours, such as words being misspelled or read inaccurately. However, any observations and data collected are subject to the effect of a range of environmental factors such as social and physical conditions and, within the child, factors such as motivation, which may not be directly related to literacy difficulties but themselves, are open to environmental influences (Frith, 1999).

It is worth noting the critical mediating role the environment plays in this regard. In particular, the author points out that, whether cognitive or, in some cases, affective difficulties result in literacy problems, these will not only depend on the severity and the nature of the problem but also on the interactions with other possible environmental factors, including the complexity of the writing system and the effectiveness of the teaching. This is of interest in the case of this study, since dyslexia is understood in two different cultural contexts, in which the writing system is different. For example, the Greek language is presented as a phonologically transparent language but less transparent in its spelling, since some of the vowels are represented by more than one alternative grapheme (Nikolokopoulos, Goulandris, Hulme & Snowling, 2006). English is one of the less transparent languages, which affects the reading acquisition of pre- and school readers and which, in turn, has a reciprocal effect on phonological awareness (Goswami, Ziegler & Richardson, 2005; Ziegler & Goswami, 2005).

With regard to environmental causes, the effectiveness of teaching, the provision of teaching, school policy, cultural attitudes and teacher attitudes towards dyslexia and socio-economic factors might be considered (Frederickson & Cline, 2009; Frith, 2002). More specifically, Frederickson & Cline (2009) state that particular emphasis needs to be placed on the interaction of the child with his/her learning environment, not only during the teaching and learning process but also for assessment purposes. The authors stress that some difficulties in learning can be caused or exacerbated by the school's learning environment and/or the relationship between adult and child (Frederickson & Cline, 2009). It is suggested, that a careful examination of matters such as classroom organisation, teaching materials, teaching style and differentiation is of great importance, in order to decide how these can be developed so as to enable the child to learn more effectively (Frederickson & Cline, 2009).

Reid (2016) highlights that the environment can also extended from the learning context of the classroom to the school and to the community. The author suggests that individual learning styles and cultural preferences could be taken into account, along with the policy and ethos of the schools. Bell (2013) underlines that, for teachers, it would be an important step forward to gain an understanding of the nature and the causal factors of dyslexia and reading difficulties, which extends beyond a simple observation of learning
behaviours, taking into account biology, cognition and environment. Considering all these factors and understanding how they may be linked can help the school provide a more supportive environment (Reid, 2016) and the educator the most right kind of teaching and learning so that the student will have a positive experience of dyslexia. As Armstrong and Squires (2014) mention, a failure to understand these issues can lead to a hostile teaching environment in which the dyslexic student will negatively experience dyslexia, which will then negatively affect those involved with the child and the child's social relationships with its peers (Glazzard, 2010). As this study is concerned with the teachers' role and how the environment of the classroom can enable or humble inclusive practice for these students, it takes into account the causal model of dyslexia as a guiding model for understanding dyslexia.

2.4 Dyslexia and Inclusive Education

2.4.1 Understanding Inclusion

Following the Salamanca statement (UNESCO, 1994), including students with diverse educational needs and abilities is now at the heart of education policy in many parts of the world (Florian & Spratt, 2013; Riddell, 2007; Savolainen, Engelbrecht, Nel & Malinen, 2012) and there is evidence of a policy response throughout Europe for a commitment to working towards more inclusive educational systems (European Agency for Special Needs and Inclusive Education, 2016). Both the Salamanca Statement (UNESCO, 1994) and, more recently, the UNESCO Policy Guidelines (UNESCO, 2009) emphasise that inclusion is an ongoing and complicated process and that one of the biggest challenges that education systems face nowadays is that of developing practices, which will approach those learners who are failing due to the existing arrangements (Ainscow, 2007). It is suggested that, for an educational system to become more inclusive, early identification of those children that may be at risk of failure and the removal of the barriers in the learning environment that prevent all learners from participating more fully in learning opportunities are needed (European Agency for Special Needs and Inclusive Education, 2016; UNESCO, 2009; Winter & O’Raw 2010).

The field of inclusive education still remains complicated regarding what it implies, despite the increased interest in the area worldwide (Ainscow, 2007). The confusion arises partly from the fact that inclusion is understood and defined in many different ways (Ainscow, 2007; Thomas & Vaughan, 2004). According to Ainscow (2007), there are many typologies of ways of thinking about inclusion. For example, in many countries, the terminology around ‘inclusion’ and ‘inclusive education’ has shifted its focus from being mainly concerned with students with special educational needs and disabilities (SEND) and challenging aspects of their educational placement, to an approach which meets the needs of a wide range of learners who may be vulnerable to exclusion, despite their needs, abilities, gender, race and socio-economic background (Kozleski, Artiles, Fletcher
& Engelbrecht, 2007; Waitoller & Artiles, 2013). In this study, the discussion will be on dyslexia and/or Specific Learning Difficulties, which both fall under the broad category of SEND in both England and Cyprus. While children with dyslexia might benefit from inclusive settings, further consideration in terms of the processes and the adjustment of the environment is needed.

What could be underlined is that while inclusion caters for all students, the individual needs of children should not to be overlooked. As Florian (2005, p. 96), states “inclusive education is not a denial of the individual difference, but an accommodation of it within the structures and processes that are available to all learners”. In doing so, emphasis is placed on understanding inclusion from a social and environmental point of view. Zoniou-Sideri and Vlachou, 2006, (p.379) suggest that inclusive education requires not only the social view of disability but also a reconstruction of ‘special educational needs’ along with “the restructuring and reorganisation of each mainstream school and its curriculum and management structures in order to provide a culture and practice in which all barriers to participation can be identified and ultimately removed”. Teachers’ values and beliefs about inclusion need to be enacted in practice by making necessary accommodations to the classroom environment and by adapting their teaching to the needs of the dyslexic students so as to teach them the way to learn (MacKay, 2012).

The importance of both initial training and ongoing professional development for inclusion is underlined in many international reports (European Agency for Special Needs and Inclusive Education, 2012; 2015; UNESCO, 2009; WHO, 2011) and in the international literature (Engelbrecht, 2013; Forlin, 2012). A main concern being identified internationally in this regard is that of developing teachers’ competencies through suitable models of teachers’ education and by addressing the conceptual and philosophical challenges involved in this process (Forlin, 2012).

For instance, a report on Teacher Education for Inclusion across Europe, conducted by the European Agency for Development in Special Needs Education (2012), drew some conclusions on the identified changing role of the teacher, based on factors such as immigration and the increased number of students with diverse abilities and needs in mainstream classrooms. The report concluded that, in order to envision a more equitable education system, it is important that teachers not only be equipped with the required competencies but also with the values and beliefs needed to achieve the goals of inclusive education and that they have to be integrated into both their initial teacher education and their ongoing professional development of teachers (European Agency, 2012). While there seems to be a universality that inclusive education is viewed as the fundamental way of realising quality education for all, it is important to acknowledge that there are key differences in national policies and the implementation of inclusive education in each country is dependent on the interaction of the context and the culture (Kozleski et al., 2007; Savolainen et al., 2012). It could be suggested that, in order to develop a better
understanding of the changing role of the teacher based on the new demands on the teaching profession, it is important to take into account the historical and cultural aspects of each context. In doing so, researchers can develop an understanding of the influence that societal, cultural, economic and political forces have on variations and identified patterns in the way inclusive education is implemented and perceived by teachers and the way teachers see their role in inclusive education (Savolainen et al., 2012). In this process, the teachers’ role is critical as their perceptions might act as a barrier to its successful implementation (Mittler, 2012).

In the following sections, a discussion on the cultural and historical approach to the development of inclusive education, in relation to dyslexia in each cultural context, is presented. The educational system in each context is discussed, along with the historical development of special education in relation to inclusion. This is addressed together with the role of the teacher in educating all children and, in particular, students experiencing difficulties of a dyslexic nature.

### 2.4.2 The Cypriot Educational System (CSE)

Based on its conflicted past, including an uncertain political status and the government’s influence over educational decisions (Liasidou, 2007), Cyprus could be seen as a case of British colonial education’s ‘lending’ policy soon after independence in 1960 (Persianis, 1996). The colonial policy has to a great extent influenced post-colonial educational structures and practices in Cyprus. One of the main features of the colonial policy applied in the case of Cyprus is the ‘adapted education’ policy which, in later years, would become a more open and fervent policy of cultural and educational lending (Persianis, 1996), including influences from the Greek educational system as well (Persianis, 1998). The 1960 independence agreements included provisions for education, such as the placement of education under two parallel Communal Chambers, one for the Greek Community and one for the Turkish Community (Pashiardis, 2004). In 1965, the Greek Communal Chamber transferred all such administrative functions to the Ministry of Education and Culture.

Since then, the Ministry of Education and Culture (MoEC) has been the Government's policy-making and administrative body for Education (Pashiardis, 2004). Generally speaking, the Cyprus Educational System (CES) is characterised as highly centralized (Mamas, 2013; Nikolaidou & Georgiou, 2009; Pashiardis, 2004), controlled by the MoEC, which is also responsible for the implementation of international educational laws, the preparation of new legislation and the financing of schools (Pashiardis, 2004). The responsibilities of the Ministry extend to all Greek Cypriot schools and to those of the other ethnic groups aligned with the Greek Cypriot Community: prescription of the syllabus, the national curriculum and national textbooks (Pashiardis & Ribbins, 2003) and the regulation and supervision of all institutions under its authority (Pashiardis, 2004; Pashiardis, Georgiou & Georghiou, 2009).
Local School Boards (LSB), whose role may be seen as similar to that of the Local Education Authorities (LEAs) in England and Wales, consist of 5-11 members in each district or region and fall under the regulation of the Technical Services Department of the MoEC; their main responsibilities include the organisation, construction, maintenance and provision of equipment for schools, making the necessary arrangements for the reallocation of pupils to the district’s schools and managing school budgets in collaboration with the school Principal (Theodorou, 2006).

The Educational Service Commission is a five-member independent body, appointed by the President of the Republic, and is responsible for appointments, transfers, promotions and disciplinary action regarding all teaching personnel and the Inspectorate of the Public Educational System (Pashiardis, 2004). The role of inspectors relates to the successful implementation of the Government’s education policies, curriculum development, school evaluation and the appraisal of teaching personnel (Kyriakides, 1997). UNESCO (1997) has criticized the provision of in-service training (INSET) by inspectors for its consulting rather than training character. The mobility of teachers is based on a transfer credit system: for example, a teacher is awarded transfer credits for every year they work and the type of school in which they serve (e.g. if it is a large or small). The more transfer credits a teacher has, the closer he/she will be appointed to his/her home base (Nicolaïdou & Georgiou, 2009). Based on this system, it is uncommon for teachers in Cyprus to have long service in a particular school and there is an obvious lack of staff stability (Karagiorgi, 2012a).

Initial teacher education is provided at higher educational level, particularly in universities in Cyprus or abroad, including Greece, the UK and the US. In-service training (INSET) is mainly offered by the Cyprus Pedagogical Institute (CPI), whereas the Inspectorate and the MoEC has a secondary role (Symeonidou & Phtiaka, 2009). The CPI organises a series of professional seminars for the continuing professional development (CPD) of teachers, based on teachers’ needs, every year (Karagiorgi & Symeou, 2008). The seminars offered in all districts, are optional, short in length (six meetings after school, with a total duration of 15 hours), they have not evolved into more structured practices (Karagiorgi & Symeou, 2007) and they are not attended for the purpose of promotion or salary increases. Mandatory courses are for those teachers who are promoted to administrative positions or, in terms of special education, to the role of Special Educational Needs teachers (Cyprus Pedagogical Institute, 2010). A limited number of on-site seminars, workshops and conferences may also be offered by the CPI (Symeonidou & Phtiaka, 2009) on topics of interest or concern to the teaching personnel of a school. The courses offered by the CPI cover areas of intercultural education, information technology communication, Greek Language and Maths teaching, based on the latest curriculum reform and educational research skills. Professional seminars related to inclusion and the education of disabled children do not appear to be offered by the CPI, apart from some
that focus on behavioural problems in schools, on students with intellectual disability and those with sensory impairments (Cyprus Pedagogical Institute, 2015). Finally, the Ministry has also offered optional seminars on relational approaches and communication with special needs students (including aspects of inclusion) (MoEC, 2016), on autism and teaching approaches for these students (MoEC, 2014; 2015) and on developmental and learning disorders in the classroom, characteristics and methods of intervention, (MoEC, 2011).

Special Educational Needs and Inclusion in Cyprus

The CES and its Special Educational System, as regards its segregated form, have been challenged following the Salamanca Statement (1994) and especially following criticisms by UNESCO of the Cypriot educational system in 1997 (Liasidou, 2007; UNESCO, 1997). Soon afterwards, a coordinated effort took place, which led to the passing of the 1999 Special Education Law, namely the Education Act for Children with Special Needs Law (113(I)/1999) (Ministry of Education and Culture) and subsequent guidance on the implementation of the legislation in 2001. In relation to dyslexia, the Dyslexia Committee was one of the bodies in Cyprus, which, along with the necessity of the CES to adjust to European Union norms, applied pressure for the passing of the 1999 Special Education Law (Apostolides, 2005). The Special Education Law proclaimed the right of disabled children to be educated in their neighbourhood schools alongside their peers (Liasidou, 2007) and it established the legal basis for dealing with dyslexia in the CES (Apostolides, 2005). The adoption of the 1999 Special Education Law is considered a landmark in the development of inclusive education in Cyprus.

At this point, the development of special education/inclusive education in the cultural context of Cyprus is presented historically and is divided into the following four phases: (a) 1929-1979, (b) 1979-1988, (c) 1988-1999 and (d) 1999-present (Phtiaka, 2007, p 54-55). The discussion following sheds light on the influences on the CES from the ‘lending’ of educational policies from mainly Greece and the UK (Phtiaka, 2007) and on how dyslexia is situated within the Cypriot context.

Table 1 below illustrates the shift from a medical model of disability towards a more social model of disability in relation to the understanding of dyslexia. In particular, during phase 2, dyslexia came under the responsibility of the Ministry of Health and dyslexic children were educated in special schools and tutorial schools (phase 3). The Education Act for children with Special Needs (N.113 (I)/1999), as explained earlier, is regarded as a milestone towards inclusive education in Cyprus, legitimising the right of disabled children to be educated along with their peers. Dyslexic students were categorised as students with Special Educational Needs and placed in mainstream schools along with their peers.
Despite the move towards integration dating back to the 1980s-1990s in Cyprus (see table 1), the progress made in terms of integration and inclusion was not great until 1999. The definition of learning difficulties as illustrated in Box 2 below seems to have been influenced by the Warnock report (1978) and the subsequent Education Act (1981) in the UK. The report was progressive in challenging notions of segregation as a provision for disabled students and suggested their integration into mainstream schools, leading to the idea of ‘Special Educational Needs’ children with complex needs (Squires, 2012).
### Table 1: ‘The four phases of the development of special and inclusive education in Cyprus’

A great number of students who are different in abilities and needs, including those with learning difficulties/dyslexia, were labelled as ‘special educational needs’ students in the mainstream school, being entitled to special provision. It could be argued that a gap

| Phase 1: 1929 – 1979 | Legislation: Lack of uniform legislation on Special Needs  
| | Philosophy: Lack of common vision for inclusion  
| | Practice: Gradual Establishment of Special Schools  
| | Examples: 1929: School for the Blind  
| | 1953: School for the Deaf  
| | 1962: First Special Class for ‘mentally retarded children’  
| | 1979: Special School for maladjusted children  
| | Political situation:  
| | 1929-1959 Cyprus a British colony  
| | 1960 Cyprus gains independence  
| | 1974 Turkish Invasion  
| | Philosophy: Towards integration  
| | Practice*: Special schools, no appropriate infrastructure in mainstream schools  
| *Dyslexia under the responsibility of Ministry of Health (Apostolides, 2005)  
| | Philosophy: Integration  
| | Practice:  
| | - 1990: Integration of blind children into mainstream schools  
| | - 1990s: Establishment of two private independent schools for dyslexia: one Special school and one tutorial school.  
| | - Special Units for autistic children  
| | - 1993-1994: Establishment of the Cyprus Dyslexia Association (CDA)  
| | Philosophy: Inclusion  
| | Practice*: an increased number of students with special needs and disabilities attend mainstream schools  
| *Dyslexic students are categorised as students with Special Educational Needs under the Education Law (1999)
between theory and practice is evident in the Cypriot Context and that, despite the rhetoric of inclusion, in some instances in practice the CES has a more integration- and segregation-driven approach, by which students are categorised based on their deficits (Angelides & Michaelidou, 2007). This is also evident in the terminology used for defining ‘learning difficulties’ under the 1999 Education Act. The definition of learning difficulty seems to be based on a discrepancy definition in which a child has a learning difficulty that is much bigger than the majority of children of the same age.

A child shall be considered to have a learning or special learning difficulty if:
- It has a seriously bigger difficulty compared with the majority of the children of the same age or
- It has a disability which excludes or hinders him/her from using the educational means of the sort of the schools for children of the same age generally provide.

Definition taken from the Education Act for Special Needs 1999 (N.113(I)/1999)

Box 2: Definition of learning difficulty based on the Education Act for Special Needs/113(I)/1999

Such a description of learning difficulties has been critically discussed earlier in this chapter (see section 2.2.1) and questioned for its usefulness, as it based on a ‘expected level’ of competency to learning, excluding other criteria such as emotional difficulties, sensory deficits, possible neurological diseases and/or educational opportunities (Siegel, 1992). Secondly, it refers to ‘disability’ which, in this case, is related to the medical model of disability, emphasising the within the child’s pathology, which hinders or prevents it from using educational means at the school. Considering the discussion in the earlier section (section 2.2.1) that learning difficulties/dyslexia can be explained based on a causal model, with emphasis on the critical role of the environment (Frith, 2002), it could be argued that this definition constructs the disability of the person in relation to the environment from a more medical-deficit point of view. Liasidou (2008) and Angelides et al., (2006) noted that the terminology of ‘special needs’ as presented in the 1999 Education Act is segregated in nature rather than inclusive, implying the need for special treatment and promoting the medical-deficit model instead the social model of disability.

The above argument could be further elaborated, taking into account the dual provision system currently operating in Cyprus for students with Special Educational Needs. For example, pupils who experience learning difficulties of a more moderate nature (currently the largest portion of pupils accredited with SEN, including dyslexia) are accommodated in mainstream classes but are regularly withdrawn for individualised learning support in a resource room (MoEC, 2014). This support is provided by a special support teacher or a specialist such as a speech therapist (Symeonidou, 2002). Students who are assessed
with syndromes such as autism and Down's syndrome, along with those with complex needs including brain disorders and ‘severe mental delay’ (Mamas & Avraamidis, 2013), are educated in special units within the mainstream school. Again, this has been characterised by some scholars as a form of segregation, since the special unit “functions in a mainstream school and in which certain children are categorised as having special needs” (Angelides & Michailidou, 2007, p. 86). On the other hand, research evidence in the English context suggests that “time spent out of the ordinary classroom for appropriate individual or group work on a part-time basis is not segregation. Neither is removal for therapy or because of disruption, provided it is time-limited, for a specified purpose [...] any time-out of the ordinary classroom should not affect a student’s right to full membership of the mainstream” (Thomas & Vaughn, 2004, p. 137). The lack of a specific definition of inclusion, which aligns with the government’s policy, together with specific aspects such as that of class withdrawal for up to a substantial period of time, raises questions as to what might be acceptable as ‘inclusive’ (Norwich, 2009) in each context.

As such, the CES has been further challenged over its current integration policy, since there have been increasing calls for a shift towards inclusive education principles at the same time as in many other European countries (Symeonidou, 2010). This is reflected in the development of the New National Curriculum (NNC) in 2010, which was been officially implemented in all public schools in the academic year 2010-2011. In particular, the NNC is a reflection of the national report within the framework of the Cyprus National Reform Programme 2011 (UNESCO, 2012). The main objectives of the reform programme, as outlined by the MoEC (2011a), were to fulfil the vision of a better education system, which would meet the challenges of society in the 21st century, with particular emphasis placed on the development of an inclusive, humane and democratic school with an orientation towards a student-focused education system respecting all students, regardless of social, racial or ethnic background, gender, mental or physical ability, thus embracing all students equally and providing education to each and every child according to their needs, assisting them to reach the maximum of their potential. Emphasis is placed at the same time on the role of teachers in inclusive schools to “respond to the diverse needs of the students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use and partnerships with their communities” (MoEC, 2008, p.7).

Other skills and attributes associated with education reform and the role of the teachers include the cultivation of critical thinking, problem-solving, reflective practice, creativity, the good, flexible and wise use of ICT, the ability to transform theory into practice, the ability to work collectively and enthusiasm for teamwork. The report also acknowledges the pressure that such a transformation puts on the teachers’ role and notes that the need for
the continuous development of teachers’ skills through pre-service and in-service training "has become a factor of paramount importance" (MoEC, 2008, p. 34).

The latter has been stressed in previous studies, which have questioned the lack of efficient training opportunities and provision in the Cypriot context (Karagiorgi & Symeou, 2008; Karousiou, 2013). In-service training (INSET) is mainly informal and voluntary and it has been questioned for its focus on the individual rather than cooperative participation (Angelides, 2002; Karagiorgi & Symeou, 2006). In relation to inclusion and dyslexia, there have not been many training opportunities on these issues since the passing of the law in 1999 (Symeonidou & Phtiaka, 2009). The identified lack of links between participation and promotion and the absence of specific prerequisites for professional development, has reduced the interest of teachers in engaging in continuing professional development (CPD) activities (Charalambous, no date).

*Dyslexia in the Greek-Cypriot context*

Until 1993, Cyprus did not have a policy on dyslexia in any area and it came under the responsibility of Ministry of Health rather than of the Ministry of Education. The CES, as indicated, had no legal provisions for anything other than two special needs groups: the blind and the deaf. It should be noted that, during this period, internationally, emphasis was being given initially to aspects of mobility and sensory impairments (Phitaka, 2007). In addition, a very limited number of people in the Ministry of Education and Culture were even aware of the term ‘dyslexia’, and few of the psychologists (only two out of the nine in total) accepted the scientific basis of dyslexia at the time (Apostolides, 2005). In general, there was no provision for dyslexic children in the CES, nor for examinations in general education. In the private sector, there was more knowledge around dyslexia, with a few qualified educational psychologists leading the way, and speech therapists trained for the remediation of dyslexia were also involved to a greater extent into the ‘diagnosis’ of the students than psychologists and special educational specialists, due to the fact that they were more experienced in working with students with learning difficulties (Apostolides, 2005). Two Independent private schools were founded in 1990s: one the ‘special school’ catering for children with mild to moderate learning difficulties as well children of a dyslexic nature, which provides intensive and specific programmes based on the needs of the learners; the other is the ‘tutorial school’, which caters for children with learning difficulties and specifically dyslexia, dysgraphia, dyscalculia and non-verbal difficulties, who may attend day schools in the public or private sector and require a special programme of teaching to supplement their everyday school activities in the afternoon (New Hope, no date).

The Cyprus Dyslexia Association (CDA) was established in 1993 and registered as an association in January 1994. The main objective of the Association was the creation of a national policy on dyslexia. Initially, emphasis was given to providing information and
educating both the public and officials, while collaborating with and obtaining support from private and state sector specialists that were active in ‘diagnosis’ and remedial training (Apostolides, 2005). The public response was extraordinary and the CDA took responsibility for providing guidance to parents and to dyslexic people themselves. The CDA organises yearly conferences for public information, collaborates on research projects with the University of Cyprus and other research centres, and also operates a dyslexia assessment centre (Cyprus Dyslexia Association, no date). The CDA has been successful in raising awareness of dyslexia in the Cypriot context and it has also been actively engaged with international organisations through its membership of the European Dyslexia Association (EDA) and the International Dyslexia Association (IDA). The definition provided at the moment by the CDA is the following:

Dyslexia is a specific learning difficulty that focuses on the difficulty of acquiring reading and spelling skills. It is characterised by short-term memory, lack of organisational ability, difficulty in writing skills along with difficulties in arithmetic and to the acquisition of foreign languages.

(Cyprus Dyslexia Association, no date)

The CDA mentions that there is a graduation of the difficulties presented by dyslexic people, from mild to complete illiteracy. Dyslexia is recognised as a specific learning difficulty and it can be referred to as both ‘dyslexia’ and as one of the ‘Specific Learning Difficulties’ (SpLD). The definition seems to be influenced by the European Dyslexia Association, providing a descriptive list of the characteristics associated with dyslexia. The definition does not take into account possible causal explanations, since it does not consider it as a condition; it does, however, acknowledge that dyslexia can be hereditary (CDA, no date).

2.4.3 Special Educational Needs and Inclusive education in England

In the UK context, the shift in thinking in terms of inclusive education dates back to 1978 with the publication of the Warnock Report (Warnock, 1978), which was adapted by the CES in the 1990s (see section 2.4.2). The report stated that all children should be educated in mainstream schools with an emphasis on their inclusion and integration rather than segregated provision (Squires, 2012). The Warnock Report led to the 1981 Education Act which introduced the Statements of Special Educational Needs for those children with the most complex and severe needs (ibid). Prior to 1981, the focus was more on identifying and making provision for handicapped individuals, including the blind, partially sighted, deaf, maladjusted, autistic and those with speech defects (Frederickson & Cline, 2009). The Warnock Report suggested that the statutory categories of disabled students should be abolished and that children who require special educational needs provision should be identified on the basis of a detailed profile of their needs following
assessment (ibid). The implementation of the subsequent 1981 Education Act changed the purpose of the assessment from diagnosis of the disability to the identification of the SEN. In this regard, the teacher is responsible for identifying and providing for special educational needs while, at the same time, the Local Authorities (LA) are responsible for assessment and placement and for ensuring that the educational needs of the children are met (Squires, 2012). This has led to tension between the local authorities and teachers regarding the number of children in need of assessment and the expenditure that this would involve for LAs (ibid). Furthermore, the 1981 Act gave parents the right to appeal to their LA in relation to their child’s Statement. According to the 1981 and subsequent 1996 Education Acts, children are identified as having SEN or a learning difficulty, if they require special provision:

A child has special educational needs or he/she has a learning difficulty which calls for special educational provision to be made for him or her.

A child has a learning difficulty if he or she:

a) Has a significantly greater difficulty in learning than the majority of children of the same age
b) Has a disability which either prevents or hinders the child from making use of educational facilities of a kind provided for children of the same age in schools within the area of the local Education Authority
c) Is under five and falls within the definition of (a) or (b) above or would do if special educational provision was not made for the child.


**Box 3: Legal definition of learning difficulty**

The new approach to SEN was initially welcomed as it was perceived as an improvement to the replacement of the ‘categories of handicap’ approach (Frederickson & Cline, 2009). However, a number of criticisms were raised in relation to the relationship between needs and provision, as the one is defined with reference to the other (ibid). Nonetheless, the categories of SEN have continued to be in use over the last 25 years when designing special schools, by local authorities and in schools (Wedell, 2003).

In 1988, the Education Reform Act aimed at driving up standards in education which, despite the fact that it was not specifically about students with SEN, had implications for their learning and teaching (Squires, 2012). In particular, the introduction of the National Curriculum meant that all children had to follow the same curriculum, regardless of ability or placement. Thus, a child placed in a special school would follow the curriculum at a
lower level than his/her peers in mainstream school, which could potentially benefit the transfer between special schools and mainstream schools (Squires, 2012). Finally, the 1988 Act gave freedom to parents to choose the schools they want for their child, which led to a greater demand for ‘good schools’ than for ‘underperforming schools’. Measures of performance were introduced via the National Curriculum and the Key Stage Standard Attainment Tests (SATs) at set stages in schooling (ibid). The quality of the teaching and, subsequently, of the schools was measured based on these exams and accompanied by the publication of ‘league tables’ (performance tables) which can inform parents about the quality of the school. This meant that, subsequently, schools were in competition with one another and students with SEND who were not able to perform as well as their peers in SATs were viewed less favourably as regards the school’s performance table (Reid, 2016; Squires, 2012). At the same time, a shift was noted in the inspection regime for the quality of teaching from the LA and Her Majesty’s Inspectors to OFSTED, which was considered a more objective means of inspection (Squires, 2012). This created more threats and challenges to teachers since OFSTED seemed to be a means of judging individual performance and students such as those with emotional and behavioural difficulties were seen as disrupting the lesson when an Inspector from OFSTED was present. It is noted that some of these unintended consequences of the 1988 Act remain as forces which act against the idea of inclusion, including the increased demand for additional support for pupils with SEN from LAs or the creation of demand for alternative placements (Squires, 2012).

The call for inclusion has continued and has been evident in various government initiatives since the late 1990s, including the Special Educational Needs and Disability Act (DfES, 2001) and the associated Code of Practice, and the ‘Removing Barriers to Achievement’ Strategy (DfES, 2004). Despite these policies, inclusion still remains a controversial issue and until the 1990s the term ‘inclusion’ was not used on a regular basis in this context (Hick, Kershner & Farrell, 2009). There were still pressures for maintaining special schools from some parents who seem concerned about their children’s educational experiences and available school choices. What is more, the schools were still under pressure than ever to raise their academic standards for all pupils, and following this trend, teachers were reluctant to identify more pupils with special needs in the fear that their presence may negatively affect the attainment of other pupils (ibid).

Thus, until the 1990s, there were references to ‘integration’ or ‘mainstreaming’, implying the placement of pupils with disabilities or special educational needs in mainstream schools. What can be noted is that there were different degrees of integration, from the full-time placement of disabled children in a mainstream class in their local school (functional integration), to the placement of a pupil in a special class or unit attached to a mainstream school (locational integration) (Hegarty, 1991; Hick, Kershner & Farrell,
2009). However, as addressed in the Cypriot context (section 2.4.2), the notion of the special unit has been challenged for the difference in relation to a traditional special school, which can be seen as a segregated experience for the child (Jupp, 1992). Research evidence suggests that, even when students are placed in the mainstream classroom but are working with a support assistant in one-to-one sessions for the majority of the day, this could also seen as segregation (Hick et al., 2009).

These notions have been further challenged by the term of ‘inclusion’, which places emphasis on the role of the school or community to welcome all students, including those being identified as having special educational needs, and to adjust their environment for them, to accept them as full members of the group and value them for the contribution they make (Booth & Ainscow, 2002). In these terms, the Index for Inclusion can be regarded as an influential resource for improving schools according to inclusive values, concerned with achievement that builds a collaborative relationship and improves the learning and teaching environment. The Index has been developed to encourage a different view of learning: that of the students actively involved and integrating what they are taught with their own experience (Booth & Ainscow, 2002). Within the Index, the term ‘barriers to learning and participation’ are used instead of SEN, with an intended focus on an interactional model of SEN, and on learning difficulties highlighting the role of the school in identifying barriers and eliminating or minimizing them through provision and/or appropriate support (Frederickson & Cline, 2009). This also embedded within the National Curriculum statutory inclusion statement, which outlines the key principles for developing an inclusive curriculum: setting suitable challenges, responding to pupils’ needs and overcoming potential barriers to learning and assessment for individuals and groups of pupils (DfE, 2014).

**Dyslexia in the English context**

In the field of learning difficulties, inclusive education has been linked with a critique of the medical model, which emphasises the deficits of dyslexic people (Norwich, 2009). In Britain, as in other countries including Cyprus, dyslexia is often subsumed under the more generic category of Specific Learning Difficulties and is regarded as part of a continuum of special needs (Riddick, 2001). Dyslexia in the English context has been examined for more than 100 years (Miles, 2006) and research into dyslexia, conducted over the past 50 years, has made enormous progress, providing evidence about its nature, etiology and assessment (Snowling, 2013). As already discussed elsewhere in this chapter (see sections 2.2 and 2.3 for more details), research studies have explored the field in terms of how dyslexia is constructed and understood, how different disciplines can influence educational provision and assessment for those students and how dyslexia can influence the experience of dyslexic students (Humphrey, 2002; Riddick, 2010). Researchers are
generally agreed that dyslexia in children is not a straightforward matter to be discovered and simply remediated (Prevett, Bell & Ralph, 2013). It has been recognised and underlined that, in order to understand and respond effectively to the learning needs of children identified as having learning difficulties and/or dyslexia in school, it is necessary to take into consideration a range of interacting factors, including biological, psychological, social and cultural (Norwich, 2009; Reid, 2016). Particular emphasis is placed on the environment’s mediating role, including the literacy environment at home, which can influence children’s reading development (Snowling, 2013). Approaches such as the social model of disability and the causal model of dyslexia (section 2.3.4) have advanced our understanding of the field and have shed light on aspects of quality teaching by removing barriers to learning in schools.

Considering the advances of research in the area, the term ‘dyslexia’ has gradually gained acceptance in the English context and is included in key policy documents such as the Special Educational Needs (SEN) Code of Practice (DfE, 2014). The British Dyslexia Association (BDA) has played a crucial role in directing policy and practice relating to dyslexia in the United Kingdom, defining dyslexia as “the specific learning difficulty which mainly affects the development of literacy and language related skills” (BDA no date, p. 1). The BDA has also developed the notion of ‘Dyslexia-Friendly Schools’ (DFS), which aims to reflect the values of dyslexic people (BDA, no date) and has conceptual links to the idea of inclusive schools. The dyslexia-friendly practice can be examined in relation to schools’ literacy provision, in which part of the debate on how to meet the learning needs of children with dyslexia is concerned with how far the school system and its current practices should be adapted in order to successfully meet the needs of all children (Riddick, 2001). This is of particular relevance to literacy, which is an essential area of learning in schools (ibid) and, in more recent years, there has been a recognition internationally that good literacy skills underpin economic competitiveness (Armstrong & Squires, 2014). This has led to Government attempts to strengthen the curriculum and control the way literacy is taught, and to international comparisons of literacy in a country (Armstrong & Squires, 2014; Riddick, 2001). In response to this, in the UK, the National Literacy Strategy (NLS) was launched in 1998 (DfES, 1998), introducing a prescriptive approach to teaching and setting expected targets for each child to reach every term (Armstrong and Squires, 2014). In addition, all primary schools (5-11 years) are required to devote at least 1 hour a day to structured literacy in what is called a ‘literacy hour’, with a strong emphasis on a systematic and intensive approach to teaching phonics and phonological awareness (Riddick, 2001). One of the benefits of the National Literacy Strategy was to address the criticism of poor-quality teaching by supporting teachers with ongoing training, materials and approaches. On the other hand, the NLS expected all children to learn at the same pace during the ‘literacy hour’ (Armstrong & Squires, 2014)
and even though the National Literacy Strategy reported some improvements to children’s literacy (Armstrong & Squires, 2014; DfE, 2011) a number of children still struggle to acquire adequate literacy skills (Riddick, 2001).

The dyslexia-friendly schools (DFS) initiative

During the late 1990s, there was an increased level of parental dissatisfaction with the support that dyslexic children were receiving at school, along with a rising number of Statements of SEN for dyslexia that required funding (Springett, 2002) and the current existing provision for those children. In response to these concerns, professionals from the Swansea Local Educational Authority (LEA) reviewed their existing provision for children with dyslexia (Riddick, 2001). In collaboration with the BDA, the notion of ‘Dyslexia-Friendly Schools’ (DFS) was developed with the aim of reflecting the values of dyslexic people (BDA, no date) and had conceptual links to the idea of inclusive schools. The BDA issued a DFS resource pack (BDA, 2005) which used a checklist to specify a DFS addressing the following areas:

A) Teachers are appropriately trained; aware of the impact of cognitive difficulties on teaching their subject; aware of the strengths and weaknesses of individuals with dyslexia; practise appropriate assessment, which focuses on content rather than presentation; make an effort to raise self-esteem and enable the child to develop its strengths; accept that parents have anxieties and are to be responded to positively; seek advice when they face problems in responding to children with dyslexia.

B) The school system enables children to learn how best to learn; gives access to specialist teaching (balance between withdrawal and in-class support); gives access to appropriate ICT to support learning (BDA, 2005; Norwich, 2009).

Mackay (2004) argues that, in order to create and build a school culture of dyslexia friendliness, one needs to acknowledge the differences in how learners respond to changes in methods, materials and approaches, to empower learners to achieve their potential, acceptance of dyslexia and clarity of objectives in terms of enabling assessment of what is to be learned). The author emphasises that the notion of DFS has its origins in a “whole school SEN approach” which had been promoted in the 1980s across all areas of SEN and included specific areas such as Specific Learning Difficulties/dyslexia (Norwich, 2009). In particular, the principle of DFSs lies in the ‘whole school SEN approach’, which emphasises the need of schools to embrace difference in learning needs, by accommodating and responding positively to diverse learning needs which can also be related to more recent conceptualisations of inclusive schools (Norwich, 2009).
The purpose of the DFS, in relation to the wider context of inclusion, is to change aspects of school practice at different levels so that the barriers to learning for children with dyslexia are removed (Riddick, 2001). Taking into consideration arguments about a specific kind of inclusiveness and a specific category of children such as those with dyslexia (Norwich, 2009), the BDA (2005) suggested that many of the practices advocated for a dyslexia-friendly school could benefit not only those learners identified as dyslexic but also a wide range of children. However, to date it seems that there is not enough research evidence exploring the benefits of DFS for non-dyslexic students and this could be suggested as an area for future research.

The conceptualisation of DFS by the BDA emphasises the interactional model, which identifies both targeted interventions to address basic processing difficulties and more systemic environmental changes to address the barriers and negative feedback that students with dyslexia often have to deal with in the classroom (Riddick, 2001). In terms of the identification of the barriers to learning, there should be a focus on looking at students' holistic needs, including cognitive (learning skills), environmental (learning experience) and progress in basic attainments (literacy acquisition) (Reid and Came, 2009). These factors underline the interactive nature of a number of key factors that are related to the learner, the task and the learning experience; thus, the focus should not be solely on the child and on what he/she can or cannot do but rather on the task that is presented, the expectations being placed on the learner and the learner's readiness for the task (ibid). It is important that dyslexic learners experience some success that can help them develop positive self-esteem as this is of paramount importance for successful learning (Reid & Came, 2009; Riddick, 2001).

The DFS source pack emphasised the use of dyslexia-friendly resources as required, the need for teacher training to be enhanced and specialist dyslexia teachers to be appointed and it encouraged parental involvement (Riddick, 2006). The development of the DFS is regarded as one of the main developments for the inclusive practice for students with dyslexia in the English context, and it has gained popularity as an initiative for promoting inclusion. The need for quality teaching is now at the heart of inclusion policy for all learners, including those with dyslexia, and teachers are responsible for adapting their teaching and accommodating the environment of the classroom to the needs of their students.

2.5 Teachers' beliefs and attitudes towards dyslexia and inclusion

It is well documented that there is an international drive towards inclusive education. Policy and practice in relation to meeting the needs of all children, including those with identified Special Educational Needs and Disabilities (SEND), have shifted their focus
from medical-model thinking towards a more social model or interactive view, addressing environmental changes for removing barriers to learning (Frederickson & Cline, 2009). At the same time, emphasis is placed on good quality education, while preventing or reducing school failure, which imposes high costs on society (OECD, 2012). Major international surveys, such as PIRLS and PISA, put further pressure on governments around the world to improve students’ performance through the publication of league tables on each country’s national performance (Tjernberg & Mattson, 2014). In light of these changes, a growing interest has been noted in the concept of quality teaching and teacher responsibility for SEND in policy documents such as the New National Curriculum in both Cyprus and the UK (MoEC, 2008; DfE, 2014) along with the new SEN and Disability Code of Practice (DfE & DoH, 2015) introduced into English schools (Ekins, Savolainen & Engelbrecht, 2016). Both the New SEN and Disability Code of Practice (DfE & DoH, 2015) in England and the New National Curriculum (MoEC, 2008) in Cyprus have underlined the importance of high-quality teaching, along with a direct focus on the responsibilities of the teacher rather than the SENCo or Teaching Assistants (TAs) (e.g. graduated approach, DfE & DoH, 2015) in the case of the English context. Research evidence underlines that teaching quality is one of the most important factors in ensuring students’ achievement in, for example, reading and writing (Crawford & Torgesen, 2006; Hattie, 2009; Tjernberg & Mattson, 2014).

It has been reported that such changes have an impact on teachers’ professionalism and professional competence, roles and responsibilities, and can have implications on how teachers can be best supported in order to be able to respond to these changes and adequately support all students in their classrooms (Ekins et al., 2016). Research studies suggest that professional competence can be a crucial factor not only in the classroom but also in school practices (Kunter et al., 2013). Teachers’ beliefs and attitudes are related to their strategies for coping with everyday challenges in their professional life and to their general well-being. They shape students’ learning environment and they influence student motivation and achievement (OECD, 2009). Also, they are expected to mitigate the effects of job-related and education policies such as changes to curricula, teachers’ initial education programmes or professional development on student learning.

Such issues are part of a ‘global movement’ (Artiles, Kozleski & Waitoller, 2011) and teachers in different cultural contexts, including the English and Cypriot contexts, experience them in their everyday professional lives. While the concept of teacher responsibility is rooted in policy developments dating from the 1980s (see sections 2.4.2, 2.4.3), and has gradually come to support a more inclusive approach to meeting the needs of all pupils, it is suggested that, in practice, it has been undermined, providing opportunities for teachers to consider that pupils with SEND might be someone else’s responsibility (Rouse, 2008). For example, in the UK, the increased number of Teaching Assistants (TAs) and support staff who often work one-one-one or in small
groups, withdrawn interventions may have created a climate in which many teachers may feel that it is not their responsibility to support all students, including those who are struggling with literacy in their classroom (Rouse, 2008). In Cyprus, the existence of a segregated curriculum taught only by SEN teachers in primary schools has been reported as having an influence on class teachers’ beliefs and perceived lack of responsibility for students with SEND (Mamas, 2013). Similar concerns have been reported in other studies in Greece and Finland. For instance, the Greek study explored teachers’ beliefs about SEND children and their inclusion in mainstream settings (Zoniou-Sideri & Vlachou, 2006). Even though the majority of teachers surveyed believe that SEND children can be included in ordinary schools, the majority of participants felt that the responsibility for implementing inclusion fell predominantly on specialist staff, such as special educators who possessed the necessary knowledge and instructional skills to effectively teach children with complex needs. In a similar vein, the presence of specialized teachers who have the main responsibility for extensive learning support services provided in Finland, has led many mainstream teachers to believe that teaching students identified as having special needs can only be done by teachers specifically trained for that purpose (Malinen, Väisänen & Savolainen, 2012).

Jordan et al., (2009) support the contention that effective inclusionary practices, and, therefore, overall effective teaching, depend in part on the beliefs of teachers about the nature of disability and about their roles and responsibilities in working with students with special education needs (Jordan et al., 2009; Specht et al., 2015). It is suggested that teachers need to believe that all students belong in regular classrooms, have confidence in teaching all students in those classrooms and have the knowledge and skills to do so (Florian & Black-Hawkins 2011; Specht et al., 2015).

Teachers’ attitudes and beliefs about inclusion have been directly related to the implementation of inclusive classroom practices (Avramidis & Norwich, 2002). One important finding that seems to be prevalent in many studies on teachers’ attitudes towards inclusion is that the attitudes are not based on ideological arguments but rather are focused on more practical concerns, such as how inclusive education can be implemented in practice in their classrooms (Burk & Sutherland, 2004). More recently, there has been evidence of a growing interest in studying the practical side of teaching by measuring and exploring teachers’ beliefs and feelings of efficacy in implementing inclusive practice (Sharma, Loreman & Forlin, 2012).

In this study, teachers’ beliefs are explored in relation to conceptual terms, such as that of inclusion and dyslexia and beliefs about their practice (Foroni & Rothbart, 2011). It should be noted that teachers’ views on dyslexia and on inclusion are not explored in isolation in the current study but rather teachers’ understanding of dyslexia could be seen as a factor, among others, which can influence teachers’ practice for inclusion for these students.

For the purposes of this study, the term ‘inclusive practice’ refers to instruction assessment, classroom behaviour management and collaboration with other members of
staff (Malinen et al., 2013). Teachers' beliefs about their teaching efficacy may be defined as beliefs or conviction that they can influence how well students learn, even those students who may be considered difficult or unmotivated (Guskey & Passaro, 1994). Teaching efficacy or confidence in one's ability to have an impact on student outcomes can inform teachers' attitudes, teaching behaviours and practices while, at the same time, shaping pupils' experience of inclusive education (Tschannen-Moran & Hoy, 2001). Efficacious teachers assume greater responsibility in meeting the needs of their students by considering that the latter can be reached and their difficulties can be addressed by adapting teaching methodologies and practices to the students' needs, (Pas, Bradshaw & Hershfeldt, 2012). This is also related to the needs of dyslexic learners in classrooms and how teachers respond to their learning needs. It is well established that pupils whose teachers have a positive belief in their efficacy are more likely to do well in school (Tschannen-Moran, Hoy & Hoy 1998). In this regard, teachers' beliefs about the nature of children’s difficulties, e.g. with literacy difficulties or dyslexia, may also have an influence on their sense of professional responsibility for specific groups of children (Jordan & Stanovich 2003; Stanovich & Jordan 1998). As such, attempts to improve the quality and effectiveness of teaching need to be concerned with the development of a better understanding of teachers' beliefs and how they can influence their practice in relation to children’s literacy (Tschannen-Moran & Johnson, 2011).

The importance of teachers' beliefs about the children they teach, including those who present learning difficulties/dyslexia, has long been well documented (Agne, Greenwood & Miller, 1994; Fang, 1996). Mills (2006) suggests that what matter most for the learning of children with learning difficulties and disabilities are the commitments and capabilities of their teachers. As discussed already in this chapter, dyslexia could be explained from a causal model framework including the interaction between biological factors, cognition, behaviour and the mediating role of the environment (see section 2.4.2). It is suggested that the study of teachers’ beliefs about dyslexia and inclusion is of great importance since, in terms of the classroom environment, teachers play a critical role in the way they will implement the necessary arrangements to the learning environment to make it more accessible to those students. To further explain the mediating role of the environment, it is important to acknowledge that, for many teachers, the way they teach, learn, communicate and interact is linked directly to the lessons and values they experience in their culture. As such, teachers’ cultural perspectives and belief systems have a significant impact on the way they deliver their lessons and the decisions they take when instructing students (Knopp & Smith, 2005). In other words, teachers could be seen as social and cultural transmitters. At the same time, learners arrive at school having their own cultural perspective in place. For instance, for some learners, the school culture can be so different from their home and, in essence, learning at school can be seen as challenging at best and exclusionary or alienating at worst (ibid). Daniels (2004) suggests that there is a need to analyze pedagogical practice at two levels: at the structural level and at the
interactional level. This can be facilitated by the analytical potential that Cultural Historical Activity Theory framework can offer and it is discussed in more detail in Chapters 3 and 4. Lee and Smith (2001) state that, “There appears to be a high correlation between the extent to which a teacher articulates a belief in making a difference, and rejects deficit models of students and their families, with the quality of their pedagogies” (p. 37). For example, a study conducted in the Cypriot context demonstrated that the medical model of disability is prevalent in explaining teachers’ perspectives in relation to inclusive education for students identified as having special educational needs (Mamas, 2013). The author suggests that this model seems to be predominant in teachers’ everyday teaching practice while, at the same time, it provides the framework for ‘defending’ their stance towards supporting those students due to their perceived lack of responsibility (ibid).

Pearson (2009) in her study reports that models of disability are associated with different value systems, beliefs and behaviours and it is thus important that these be studied along with constructs such as disability and special educational needs. Jordan and Stanovich (2003) examine the link between teachers’ beliefs, their preferences for alternative delivery modes (e.g. withdrawal or in-class support) and their level of interaction with students. The authors contend that, teachers view their role for instructing these students according to the model that they emphasise regarding the nature of disability. As can be understood, one obstacle to implementing inclusive education is the way teachers perceive students with SEN and dyslexia, based on the model of disability, and the task of educating the children, which may require specialist knowledge, special treatment and SEN specialist pedagogies, as the only way of meeting students’ needs (Mittler, 2012; Terzi, 2008; Thomas & Loxley, 2001). The emphasis on expert knowledge, which teachers believe they lack, serves to maintain lower levels of belief in their own efficacy (Ekins et al., 2016). It is suggested that the challenge is “to strike a good balance between accessing the expertise of others outside the school and empowering staff to value and draw on resources available within the school” (Sakellariadis, 2010, p.32) by highlighting the range of inclusive skills, resources and expertise that can be drawn upon.

Teachers’ efficacy beliefs are also related to their collaboration with other members of staff. Research studies on collaborative work for inclusion demonstrate that such work, as perceived by teachers, is an important dimension of inclusive practice (Mulholland & O’Connor, 2016). Teachers feel that collaboration can benefit them not only professionally but it has the potential to inform school practice and improve the outcomes of students with SEND. Teachers who tend to be confident and efficacious in their practice can collaborate with other members of the school community. The value of collaborative teaching practice, as related to teachers’ perceived ability to work with other members of staff, has been acknowledge as contributing to the positive educational experience of students with SEND (Boyle et al., 2011b; Florian & Rouse 2010; Kaldi, Filipattou & Anthopoulou 2013).
Taken collectively, it has been suggested that the successful implementation of inclusive education is heavily dependent on the responsibility of the class teacher and the importance of examining teachers' beliefs in relation to inclusion and dyslexia and to their practice has been highlighted. The studies reported have addressed some of the factors that seem to influence teachers, including aspects of provision for professional development, a lack of specialist knowledge, the existence of special support staff and wider influences, such as changes in policy around inclusion in both cultural contexts.

2.6 Conclusion

This chapter has provided a detailed account of the main areas of interest of this study, including the history, definition and identification of dyslexia, the various models of disability, a historical and cultural approach to inclusive education and dyslexia in both contexts (Cyprus and the UK) and teachers' beliefs and attitudes towards dyslexia and inclusive practice.

The main theme points to be summarised here are the following:

- It is widely accepted that dyslexia is an issue of international concern and its complicated nature has led to a lack of a consensus over a single definition of dyslexia. Despite the diversity of definitions and the long-running debate around dyslexia, one main point underlined is that of finding ways to further develop teachers’ understanding and professional expertise in identifying dyslexia and supporting dyslexic learners so as to enable them to participate in the learning process.

- In terms of the models of disability, dyslexia can be understood and explained based on social approaches to disability and to the causal modeling framework. The causal model takes into account the mediating role of the environment, which is considered of high importance in schools since, through adjustments, it can become more accessible to dyslexic learners.

- Research evidence suggests that both educational systems have moved towards implementing inclusive education based on recent changes in policy, including the New National Curriculum in Cyprus and the New SEND Code of Practice in England. Taking a historical and cultural approach to inclusive education in both contexts has proved valuable in gaining an insight into the development of inclusive education in each cultural context. It is been noted that Cyprus has traditionally followed British ideas and legislation, which have their roots in the country’s past status as a British colony (Symeonidou, 2009). This led to lending policies and practices that were implemented before the construction of the new state following independence in 1960.
• The dyslexia-friendly initiative which has been developed in the English context could be seen as inclusive practice for all students, including dyslexic students, and it is currently implemented in many schools across the United Kingdom.

• Teachers’ beliefs and attitudes about inclusion and the nature of children’s difficulties are of great importance and need to be explored, since they might have an influence on their sense of responsibility towards specific groups of children.

  Teachers’ beliefs in their teaching efficacy and competence are of equal importance when exploring inclusion in practice.

To conclude, there is evidence of diversity in the way dyslexia is conceptualised and interpreted. Such interpretations by different groups of people and, in particular, by teachers lead to different actions in the classroom environment. It is suggested that gaining an understanding of teachers’ personal interpretations could be helpful to an understanding of their actions. More specifically, primary teachers’ personal interpretations of dyslexia and inclusive education are explored in relation to the activity of their professional practice when working with learners in the context of their school. In doing so, the second generation of AT (as discussed in the following chapter) is used to explore the link between teachers’ beliefs and their professional practice. For instance, teachers (subject) who understand dyslexia through the casual model framework (tools/artefact), make necessary adjustments to the environment of the class (rules), by using more dyslexia-friendly techniques and methods for supporting those learners (tools/artefact). These elements (e.g. tools/artefact, rules and subject) will be further discussed in relation to inclusive practice in the following chapter.
CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Introduction

This section begins with a description of the theoretical framework that guided this research, namely Cultural Historical Activity Theory (CHAT). More specifically, a brief historical journey into the development of AT is presented, aiming to offer a view of the origins of the underlying theory and to illustrate how it can be used within the current study. The historical perspective of the development of the theory provides an insight into the epistemological positioning of the current research and also a lens through which to explore the data.

It is worth starting this historical exploration by noting that there seems to be no ‘unified perspective’ among the diverse methodological and theoretical approaches that fall under the umbrella term of “Cultural Historical Activity Theory” such as ‘Socio-Cultural Activity Theory’, ‘Cultural Historical Activity Theory’ and ‘Cultural and historical theory of activity’ (Holzman, 2006). As Holzman (2006, p.6) suggests “…Cultural Historical Activity Theory’s developers and practitioners, (...) take what they find useful in the theoretical writings and utilize it in diverse areas…”

The author draws particular attention to the fact that rather than a unified theory of Cultural Historical Activity Theory, there is a set of articulations that frequently overlap than separate. These are mostly agreed by ‘activist theorists’ and they are as follows:

- The study of the human mind in its cultural and historical contexts
- A general conceptual system with these basic principles: the hierarchical structure of the activity, object orientedness, internalisation/externalisation, tool mediation and development
- Theoretical approaches that place culture and activity at the centre of attempts to understand human nature
- A psychology that focuses not on the individual but on the interaction between an individual, systems of artefacts and other individuals in historically developing institutional settings
- A non-dualistic approach to understanding and transforming human life that takes dialectical human activity as its ontology. (Holzman 2006, p.6)

It could be suggested that this profound diversity in approaches, interpretation and application of the theory could enable a degree of flexibility and choice but, at the same time, could be a source of confusion in identifying and clarifying the key concepts and elements for a particular piece of research. In this regard, this study is concerned mostly
with the work of Vygotsky and his students, particularly the work of Leont’ev and the further development of these ideas by Western scholars, such as the work dominated by Engeström and the development of the three generations of Cultural Historical Activity Theory. The focus of this project in particular is on Cultural Historical Activity Theory (CHAT), which is distinguished from other socio-cultural approaches and, according to Roth and Lee (2007), is much more related to the work of Leont’ev.

3.2. Cultural Historical Activity Theory

3.2.1 Origins and history

Cultural Historical Activity Theory (CHAT) originates in the work of Lev Vygotsky and his colleagues in the 1920s and 1930s and is an attempt to understand and explain the links between individual processes of learning and development and, most importantly, the cultural and social contexts in which all learning and development take place (Leadbetter, 2008). In the 1920s, psychology was dominated by two unsatisfactory orientations, psychoanalysis and behaviourism (CRADLE, no date). Vygotsky and his colleagues Luria and Leont’ev developed a completely new theoretical concept to transcend this: the concept of artefact-mediated and object-oriented action (CRADLE, no date). Vygotsky’s concept of ‘mediation’ opened the way for the development of a non-deterministic approach, in which “mediators serve as the means by which the individual acts upon and is acted upon by social, cultural and historical factors” (Daniels & Cole, 2002, p. 313). In other words, a human individual does not react directly to the environment. The relationship between the human agent and the objects of the environment is mediated by cultural means, tools and signs.

The concept of ‘mediation’ has gained popularity in recent years and scholars following Vygotsky’s interest in mediation have emphasized the role of semiotics as signs, symbols and in relation to the language (Daniels & Cole, 2002). For instance, Wertsch’s (1991) work has been particularly focused on the concept of mediation, emphasizing the semiotic means of mediation, whereas other approaches have emphasized the activity system itself, in which actions take place (Engeström, 1993). The current study is more closely related to Engeström’s approach to the activity system, as discussed in the following section. Vygotsky’s conceptualisation of ‘mediation’ has been described as the ‘first generation of Cultural Historical Activity Theory’ and it is illustrated in Figure 2 below:
According to Kozulin (1990), one of the characteristics of this model is Vygotsky’s mediation using psychological tools, which can be seen in the form of material tools (e.g. a machine or instrument), systems of symbols or through the behaviour of other people. Vygotsky’s primary focus in ‘mediation’ was predominately on the aspect of speech and particularly semiotics. Another characteristic of this model is the focus on individual activity, which is considered a limitation of the theory and, in this regard, Leont’ev was a pioneer in addressing it by introducing the notion of collective activity.

Leont’ev talked about the mediation by other human beings and social relations, which are not theoretically integrated into the triangular model of human action as depicted in Figure 3 (Engeström & Miettinen, 1999). According to the authors, such integration requires a “breakthrough to the concept of activity by separating the activity into collective activity and individual action” (Engeström & Miettinen, 1999, p. 4). As such, Leont’ev’s expansion introduced the notion of ‘division of labour’ as a reconstruction of the means of collective activity which was inspired by Marxist readings. This distinction between collective activity and individual action became the basis of Leont’ev’s three levels model of activity. More specifically, Engeström and Miettinen, in their work on the Perspectives of Cultural Historical Activity Theory, specified these three levels as the following:

The uppermost level of collective activity is driven by an object-related motive; the middle level of individual (or group) action is driven by a goal; and the bottom level of automatic operations is driven by the conditions and tools of actions at hand (Engeström & Miettinen, 1999, p.4).

Engeström (2001) in his first work as a Western scholar referred to the influences on his work of all the three members of Vygotsky’s group, including Luria. Luria’s focus was mainly on the cultural impact on the psychological processes. Vygotsky’s and Luria’s work more specifically centred on the impact of different historical backgrounds on the way social experiences ‘stimulated’ different mental processes. Luria demonstrated that implementing written language and logico-mathematical operations, typically connected to formal schooling, can have a significant influence on how people categorise objects of the environment (CRADLE, no date). Their work has been criticised as methodologically and ethically ‘problematic’ (Scribner, 1985). However, it is of interest to draw attention to their focus in the study on the historical, cultural and social influences on psychological processes. This significant contribution of the cultural-historical school of Russia, along with the cultural psychology developed later by Michael Cole in the United States (Daniels, 2004; Newman & Holzman, 1993) brought the development and introduction of Cultural
Historical Activity Theory to the West. A wide range of interpretations and developments of Cultural Historical Activity Theory were introduced to the West after the work of Vygotsky, Luria and Leont'ev and they were translated into English, enabling access to them to the West.

3.2.2. Second generation of Cultural Historical Activity Theory

As it is noted earlier in this section, this study is mostly related to the work of Engeström and, in particular, to the second generation of Cultural Historical Activity Theory. This is attributed to Engeström (1987), who takes into account inter-relationships between the individual and the community, the historical context, and the interaction of the situation and activity, incorporating first generation AT into his ideas.

As mentioned earlier, one limitation of the first generation was that of the unit of analysis, which remained individually focused (Engeström, 2009). According to the author, the second generation, being centred on the work of Leont'ev, succeeded in overcoming this limitation. The well-known example of “primeval collective hunt” (Leont’ev, 1981, p. 210-213) shed light on the vital importance between an individual action and a collective activity. That distinction, as described earlier in this section, became the basis of Leont’ev’s three-level model of activity. Leont’ev never graphically illustrated or expanded Vygotsky’s original model (Figure 2) into a model of collective activity system (Engeström, 1987, p.78). Such a model is depicted in Figure 3 below.

As such, the current study makes use of the second generation model of Cultural Historical Activity Theory, with emphasis on the elements that are included in this model in order to answer the following two research questions:

1) How do primary teachers understand the concepts of inclusion and dyslexia in the context of their school, based on cultural, social and historical factors?
   a. What are the differences and the similarities among the teachers of the two cultural contexts: Cyprus and the UK?

2) How is teachers’ understanding of inclusion and dyslexia related to their classroom practice with dyslexic students in the two cultural contexts?
   b. What is the contribution of social, cultural and historical factors to their classroom practice?
The extended Activity System model as depicted above uses a range of new elements, which have been elicited from and added to the original model of human action. This enables the study of wider historical and contextual factors in relation to the actions taken and the methods used to achieve outcomes (Leadbetter, 2008). For instance, the historical development of inclusive education is explored in both contexts (Chapter 2, ‘Dyslexia and Inclusive Education) in order to gain a more in-depth understanding of how teachers construct the notions of inclusion and dyslexia. Teachers’ understanding of the notions influences their actions in the class when working with dyslexic students.

Engeström has introduced his ideas to describe the lower part of the triangle as presented in Figure 3 as being influenced by Marxist thinking. Elements such as community, rules and division of labour are introduced as significant elements in the explanation of the group activities in which people are engaged. One of the distinctive contributions of the Western developments of Cultural Historical Activity Theory was the study of activity as as a tool, compared to the Russian developments in which Cultural Historical Activity Theory was viewed as an explanatory principle (Hakkarainen, 2004). Engeström’s (1987) work has significantly contributed to the development of Cultural Historical Activity Theory at the Centre for Cultural Historical Activity Theory and Developmental Work Research. An example of an activity system in the context of the classroom is presented in Figure 4 below, using the Developmental Work Research (DWR) model. The example is taken from the initial coding phase of the data analysis used in the pilot study (see section 4.4.1) conducted prior to the main data collection stage. An activity system model operates in relation to the various elements mentioned above, and each of these has a particular contribution to make to the activity. The activity system is located in particular settings.
(e.g. the school context) and, within an activity system, multiple other activity systems can be identified (e.g. of the classroom). In the following section, the six elements of Cultural Historical Activity Theory were used for the analysis of the data in the activity system of the classroom. The activity explored in Figure 4 below is part of the professional practice of the teachers and, more specifically, is the differentiated instruction.
3.2.3 Elements of the Cultural Historical Activity Theory model

Subject, object and outcome

To start with, the subject is a person or group working to achieve an object which leads to an outcome. In this study, the subject is primary teachers who have current experience of working with students with dyslexia such as Ellie in Figure 4. From a AT perspective and, in particular, as this is derived from Leont’ev’s conceptualization, human subjectivity is seen to stem from existing activity processes (Stetsenko & Arievitch, 2004). According to Stetsenko and Arievitch, (2004, p. 476), a number of recently evolving transactional approaches have been observed, which “focus on relational and inherently social realms as producing the phenomena of human subjectivity”. These approaches illustrate a progressive shift away from individualism towards a more collective approach of human subjectivity and development, which emphasises the influence of social factors such as interactive experiences with significant others and group membership, along with the roles and positions that each individual occupies in society (ibid). Such approaches consider human nature and development as being rooted in material social practices that, on the one hand, produce social interactions and human subjectivity, and, on the other hand, are themselves reciprocally produced by these interactions and subjectivity (ibid). As Stetsenko (2005) suggests, it is a challenge for Cultural Historical Activity Theory to eliminate the dichotomy between the individual and the social dimensions of activity. Human development is, in essence, based on active transformations of existing environments and the creation of new ones through human activity; such activity is practical, social and purposeful (object-related) and is the principal form of human life (Stetsenko, 2005). The activity involves the collective and collaborative (social) use of tools, in which the individual efforts interact to produce and preserve efficient tools and eventually transfer them to new generations. As Wheelahan (2004) notes, in AT, an analysis of the agency of human subjectivity and intersubjectivity should acknowledge that its ultimate origin is embedded in the material processes of human activity.

Engeström developed the notion of activity more broadly, based on Vygotsky and, more specifically, on Leont’ev’s ideas, emphasizing the social at the expense of the individual. His work has been criticized for neglecting the importance of human subjectivity (Avis, 2007; Langemeyer, 2006; Stetsenko & Arievitch, 2004). The criticisms address the issues of personal motivation as ignored in Engeström’s work and that of internalized constraints as possible barriers to teachers’ practice (Langemeyer, 2006). For Stetsenko and Arievitch (2004), Engeström’s work is considered as a particular version of AT, in which the self does not seem to have an agentive role in the production of discourse, community or society itself. Hodkinson and Hodkinson (2003), in their critique of Engeström’s Cultural Historical Activity Theory in relation to workplace learning, suggest that he only recognizes the contribution of the individual as small whereas it is an integral part of something much
wider. The authors contend that, in Engeström’s model, the focus shifts away from notions of individual learning or collective learning and are, instead, concerned more with how they can both be directed and organised towards developing shared objects.

It could be argued that Engeström’s work is based on interventionist research in which change and development are the main principles for transforming collective activity systems (Sannino & Ellis, 2013). From a AT perspective, intervention in practice is concerned with the process of ‘expansive learning’ which puts the primacy on learners as communities, on the transformation and creation of culture, the formation of theoretical concepts and the construction and implementation of new objects into practice (Engeström & Sannino, 2010; Sannino & Ellis, 2013). According to Engeström (2006, p.4) any intervention should not miss the “human potential for agency, for intentional, collective and individual actions aimed at transforming the activity.” That gives the potential for “agents to create intellectual, emotional and moral judgments in their own names that function as intentional transformative actions” (Sannino & Ellis, 2013, p. 64). Such actions are of importance when necessary contradictions are identified within an activity system and they can be sources of development. For instance, teachers have the potential to start a cycle of expansive learning within a school when they start questioning existing practices. This could lead to the externalization of practices, hitherto internalized by others and eventually change will happen systemically.

Engeström’s argument is particularly useful in addressing issues such as the reconceptualisation of human development as a way of ‘moving away’ from old constraining rules/relationships and on to something new within an activity system. It could be suggested that a first step, before engaging teachers in the process of questioning existing practices, would be to get teachers to understand the factors that influence their actions and practices and to understand why they do the things they do. As Daniels and Cole (2002) emphasize, it is important to examine the factors that influence teachers’ actions if research seeks to change practice. In particular, they argue that “a detailed analysis of the current circumstances must be supplemented by an understanding of how that practice has come to be as it is” (Daniels & Cole, 2002, p.320). As Daniels (2008, p 162) suggests, “the notion of ‘subject’ within Cultural Historical Activity Theory requires further expansion and clarification.”

It is worth noting that the current study is exploratory in nature and the focus is on gaining an insight into teachers’ practice. In doing so, the Cultural Historical Activity Theory model, as developed by Engeström’s work (1987; 2000) along with the patterns and elements used to inform and understand the meditational structure of a classroom as an activity system and make possible the analysis of a range of relations, positions the individual in a dialectical relationship with the object of the activity. The analysis of the data using the
second generation of Cultural Historical Activity Theory and the Developmental Work Research model is discussed in more detail in the following chapter.

In terms of the object of the activity, the notion has already been mentioned in this chapter of the object-relatedness of an activity, which is embedded in Leont’ev’s approach; Leont’ev promotes the idea of the self as it “originates in actual processes of human activity and develops within transformations of its structures, including prioritization among various elements of object-oriented activity” (Stetsenko & Arievitch, 2004, p. 484). Activity theorists, whether based on the concepts of Leont’ev or Engeström, find common ground and agree that an activity is defined by its object (Leont’ev, 1978; Centre for Cultural Historical Activity Theory and Developmental Work Research, 2004), which is the source of the motivation for a person’s actions. The object can be the goal of an activity, the subject’s motives for participating in an activity, and the material products that subjects gain through an activity (Yamagata-Lynch & Haudenschild, 2009). Waite (2003, p. 3) states that “The perceived difference between the current state of the object and the desired outcome provides the motivation for the subject to develop goals and actions to transform the object into the desired outcome”. Considering the example in Figure 4, Ellie is engaged in the activity of teaching and particularly in differentiating her instruction since in her class there is a student (Chris) with identified dyslexia. In her interview, Ellie explained that by differentiating her instruction in relation to the task and the pace at which the student completes the work, she enabled him to ‘catch up with the rest of the group’ and ‘not to feel different from his peers’ and ‘not to let dyslexia affect his self-image and self-esteem’. Ellie seemed to have taken into consideration the student’s self-esteem, confidence and participation and these have acted as the motives and driven her actions.

For Engeström (1999), object should not be confused with goals, since goals are attached to specific actions and they are short-term. Instead, the object of the activity is constantly enacted and reconstructed in specific forms and contents within an activity system and its generated actions (ibid). For instance, Ellie is motivated by the need to effectively support the student in her class, so that he does not feel different from his peers and, in the long term, will not be negatively affected by his dyslexia. The object is related to inclusion and to the need for providing all students with equal opportunities of participation and to make them feel valued and secure in the school environment (Booth & Ainscow, 2002). The action is her decision to provide the student with a differentiated task to work on in class during the lesson.

Such an approach can allow the researcher to make sense of a person’s actions by attempting to understand the motivation behind those actions which then lead to the outcome. The object is often related to the more immediate goals/motives that the subjects aim to achieve within an activity system, mediated by the role that a social
environment such as the classroom or the school can play. The outcome then is described as the purpose of the actions which are aligned with the purposes of the community (Waite, 2003) in an activity system. In this regard, in the primary school classroom setting in which teachers work, the subjects could be the teachers, the object or motive could be the teachers’ actions based on their beliefs and expectations (a differentiated task on outcome so as ‘to catch up with the lesson’) in order to achieve the expected outcome which is ‘not to feel different from his peers’ and more generally to make all students feel equal and valued in the school environment.

In Figure 3 earlier in this chapter, the object is illustrated with the help of an oval which, according to Engeström (2009), indicates that object-oriented actions are always “explicitly or implicitly, characterized by ambiguity, surprise, interpretation, sense-making and potential for change” (p.55). Engeström and Miettinen (1999) make that case that the concept of an object-oriented, collective and culturally mediated human activity or activity system, which is characterized by internal tensions and surprises, can be the ‘new’ unit of analysis. In this new formulation of the unit of analysis, the elements of subject, object, mediating artefacts/tools, rules, community and division of labour are considered as the minimum elements of the system. The expansion of these ideas characterises the development of the third generation of the activity system, including the concept of ‘expansive learning’ (Engeström, 2009). While the third generation of Cultural Historical Activity Theory has the potential to explore tensions and contradictions that can be identified within an activity system in more depth, it was not used for the purposes of the current study.

More specifically, in the context of this study, one activity system is considered the classroom context, in which other activity systems that can be identified and linked to it are related to different aspects of the teaching practice of the teachers (e.g. the identification process, collaboration with parents, etc.). The focus will be on two elements of Engeström’s principles which seem to be particularly relevant to the current research: the role of tensions and contradictions and the shared object.

**Rules/norms, community and division of labour**

Roth and Tobin (2002, p.114) provided a definition of community as “multiple individuals or subgroups who share the same general object”. In the context of this study, the relevant community may include the school community, such as the principal, pupils, support staff, etc., who exist and work together. In Figure 4, the community includes the peers of the classroom, the SEN teacher and Chris’s mother. Research findings from the study have provided some insight into the contribution of different members of the relevant community to the object of the activity system of the classroom and also how teachers are
related, both socially and professionally, to other members of the school community (Chapters 6 and 7).

*Rules or norms* refer to the explicit and implicit regulations that drive actions and interactions within an activity system (Roth & Tobin, 2002). In the case of teachers and their practice in the school, these rules/norms might be related to the general rules that govern the school as a community, possible regulations with regard to the inclusion policy of the school, and specific rules and guidelines in the context of the classroom. In her interview, Ellie referred to both constraining and enabling rules. The constraining rule is related to the curriculum objectives and the tasks for the students, all of whom have to complete the ‘same amount of work’. Any possible clash with the rules can be a source of internal tensions and contradictions, which, according to Engeström and Miettinen (1999, p. 9), are the “motive force of change and development”. As such, Ellie decided to be more flexible in her approach towards the student by differentiating some of the tasks. This flexibility could be seen as enabling the students to work on the task.

With regard to the introduction of the notion of *division of labour*, it is suggested that it refers to the role demarcation and role expectation of each individual in the pursuit of a desired outcome within an activity system (Leadbetter, 2008). This can lead to questions about how the work is shared out within a community and why (ibid). Other considerations concerning division of labour refer to the “division of authority and status” (Roth & Tobin, 2002, p. 114). A useful example in this regard could be that of the power relationship between the authority of a school community, the head teacher of the school and the teachers. For instance, teachers might experience internal tensions and contradictions with regard to division of labour when supporting students with dyslexia in their classrooms. Ellie referred to the lack of teaching assistants in classrooms in primary schools in Cyprus. In the interview, she stated that it would be helpful for a teaching assistant to be present in the class and share the workload. This would eventually help provide more effective support to all students, including the particular student with dyslexia.

### 3.3. Systemic contradictions/tensions in Cultural Historical Activity Theory

The notion of *systemic contradictions and tensions* has been central to the work of Engeström and constitutes one of the five basic principles of the third generation of Cultural Historical Activity Theory (Engeström, 2009). Cultural Historical Activity Theory is sometimes used to identify some of the underlying issues that produce failures and disruptions or necessitate innovations. The concept of contradiction or tension applies to dissonance or clashes within elements of a system or between related activity systems (Kuutti, 1996). According to Kuutti (1996), contradictions or tensions manifest themselves...
as problems, ruptures, breakdowns and clashes. Engeström (1999, p.32) notes that “actions in activity systems are not fully predictable, rational, and machine-like; the most well planned and streamlined actions involve failures, disruptions, and unexpected innovation”. In complex social systems, there may be competing goals, limited resources, differing values and a variety of desired outcomes and when subjects or participants from different backgrounds meet, they may have different objects/motives without realizing this at first.

The concept of contradiction is of great importance in Cultural Historical Activity Theory and especially in an analysis that seeks change, and it has been extensively used in sociocultural analyses. It may also be referred to more loosely as ‘tensions’ in activity – theoretical terms indicating that tensions are not only personally experienced but are also systemic and structural constraints which need to be overcome and broken away from, so that new forms of activity can emerge (Sannino & Ellis, 2013). Historically speaking, the resolution of internal contradictions within an activity system can lead to new forms of activity. Participants in activity systems who recognise the constraints of the situation can make available the use of cultural tools in order to break away from that situation and transform it (ibid). Many studies using activity systems analysis have focused on the descriptive nature of the second generation of Cultural Historical Activity Theory while others have also used activity systems analysis as a supplementary tool in qualitative research to identify contradictions and tensions in activity systems (Yamagata-Lynch & Haudenschild, 2009).

The current study is an exploratory qualitative study in which the elements of the second generation of Cultural Historical Activity Theory were used to guide the data analysis. The focus is on one activity system – the classroom system – with the positioning of teachers as subjects in the activity of inclusive practice for dyslexic learners. The elements of the second generation are used to describe and identify possible tensions and contradictions in the activity system, taking into consideration social, historical and cultural factors. The contradictions are seen as prompts for initiating change to the activity system or to elements within that system (Russel, 2002). For example, the teacher felt that the fact that all students had to complete the same amount of work could be seen as constraining for the student with dyslexia. This created tension in the activity system of the classroom, in which the teacher works with the dyslexic learner. Such tension might have led to the teacher’s decision to differentiate the task for her student so that he would not feel different from his peers and could complete his task. Such an approach can consequently lead to the concept of innovations. The concept of innovations is explored in Chapter 7, in teachers’ accounts in which some of them proposed innovations in their practice.
3.4 Applications of Cultural Historical Activity Theory

Over the last three decades, there has been a growing interest in the use of Cultural Historical Activity Theory in research (Roth & Lee, 2007). Cultural Historical Activity Theory has been applied in diverse disciplines and research areas across professional and academic boundaries, including education in general (Edwards, Gilroy & Hartley, 2002), to specific curriculum areas (Van Aalsvoort, 2004), to the constructs of disability and special educational needs in inclusive education (Pearson, 2009), to the professional practice of educational psychologists (Leadbetter, 2008; Soan, 2012), to health and social care (Engeström, 2000) and to special education (Daniels & Cole, 2002; Pearson & Ralph, 2007). For the purposes of this study, references to applications of Cultural Historical Activity Theory are confined to the field of education, considering the use of AT as both a descriptive tool, a way of collecting data and an analytical tool in order to make sense of the themes emerging from the data. It is acknowledged that the use of the third generation of Cultural Historical Activity Theory is valuable since it examines the potential for organisational development by using Engeström’s expansive learning cycles and developmental work research. The current study makes use of the elements of the second generation of Cultural Historical Activity Theory but, in some instances, may refer to the possibility of expansive learning as a future development in teachers’ work.

To start with, Pearson (2009) used Cultural Historical Activity Theory as an analytical tool in her study to explore prospective teachers’ attitudes towards conceptualizations of the terms ‘disability’ and ‘Special Educational Needs’ in relation to inclusive education. The author used the theories of the models of disability as value systems for exploring the two terms. Her analysis demonstrated some broad trends with an emphasis on the element of object in relation to the terms of disability and SEN, but also there was an observed heterogeneity between the collective (art/science cohorts) and the individual level. Oswald (2014) conducted a critical ethnographic case study, exploring teacher learning in a primary school in South Africa. She utilised the AT framework within a qualitative research methodology, presenting the learning trajectories of two teachers and the empirical relationship between the individual (teacher) and the social (school as system). A combination of an abductive and inductive process for data analysis was used, which revealed the broad themes and patterns underlying the affordances and constraints of teacher learning. The themes and patterns informed Engeström’s (1987) mediational structure of the school as an activity system in which an analysis of the multitude of relations was made possible. Atkinson (2006) explores the transitional issues for young people from primary to secondary school, employing a qualitative research design and collecting data from young people and school staff. The study uses thematic analysis guided by the ‘lens’ of AT and identifies the tools that the pupils and staff used along with the contradictions between the two groups at key points during the time of the transfer.
process. In the Greek context, Rontou (2013) applied Cultural Historical Activity Theory in qualitative research to understand and analyse the contradictions that can emerge regarding provision for students with dyslexia in Greek state secondary schools in the subject of English as a Foreign Language. Through the analysis, some of the contradictions emerged between the goals the participants set for the support of dyslexic students and the lack of teachers’ knowledge and appropriate funding, the lack of inter-collegial collaboration and collaboration with the parents.

It could be noted that one methodological issue related to the approach of thematic analysis and the subjective nature of the outcomes is that of the potential of research bias. In order to address that, Engeström (2007) suggested the use of ‘mirror data’ via developmental work research approaches. For instance, Edwards et al., (2010) collected their data using interviews based on AT. The interviews were conducted with members of school staff focusing on the new roles for staff in order to prevent social exclusion. In their study, the authors used ‘mirror data’ from the initial interviews and conducted developmental work research sessions. Based on the additional data from the sessions, they conducted telephone interviews to further test the validity of the findings. A similar approach is used for the purposes of this study, in the sense that data (in the form of critical events) collected from the classroom observations was used as the basis for conducting the follow-up (reflective sessions) with the teachers using the Developmental Work Framework (see Chapter 7). Leadbetter (2004) made use of the elements of the framework to analyse data during consultative conversations between Educational Psychologists and school staff. More specifically, she focused on the role of the ‘mediating artefacts’ such as the notions of ‘what, how, why and where to’ and also, in relation to Engeström et al (1997), on levels of working, ‘co-ordination, co-operation and communication’.

3.5 Overview of the chapter and conclusion

In this chapter, the discussion is on the use of the theoretical framework of AT as a descriptive and analytical tool for the purposes of this study. A detailed account is provided in this regard, addressing the origins of the theory and the pioneers in the field of Cultural Historical Activity Theory, such as Vygotsky, Leont’ev and Luria, and the further developments of the theory in the work of Engeström. More specifically, the first generation of Cultural Historical Activity Theory, emphasising the notion of mediation, concentrated more on the individual level of activity. Engeström, inspired by the ideas of Leont’ev, further expanded the theory to address the limitations of the individual activity. As a result, the second and the third generations of Cultural Historical Activity Theory were developed, in which the first added the elements of division of labour, community
and rules/norms to the original model (including subject, tools/artefacts and object). The third generation of Cultural Historical Activity Theory has developed around the idea of expansive learning, which identifies potential contradictions and tensions within activity systems and uses them as a source of transformation and change.

The chapter moved on to the justification of the use of the second generation of Cultural Historical Activity Theory in this study, discussing how each element contributes to the context of the research. In this regard, the notions of mediation with the associated tools and mediating artefacts, along with the systemic contradictions/tensions are presented. Finally, a brief overview of the plethora of applications of Cultural Historical Activity Theory is illustrated, pointing out the diverse applications in various disciplines and, in particular, education, along with the flexibility of different aspects of Cultural Historical Activity Theory to address the issues of concern for each author. Such an approach to the applications of Cultural Historical Activity Theory offer an insight into the potential of Cultural Historical Activity Theory to be applied in research and address various aspects of issues related to education in general. Finally, the application of Cultural Historical Activity Theory, based on the pilot study example, demonstrates the potential of Cultural Historical Activity Theory to be used as a descriptive and analytical tool in research. In the following chapter, the methodology of this study is discussed with reference to AT, which is employed within a qualitative research design.
CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

The purpose of this study is to explore primary teachers’ understanding of dyslexia and how this is reflected in their professional practice when working with students with dyslexia in their classrooms. In so doing, I explore how teachers understand concepts such as dyslexia and inclusion and how these are linked to their professional practice.

As described in previous chapter, Jordan et al., (2009) examine the relationship between teachers' beliefs, their preferences for delivery mode (withdrawal or in-class support) and their interaction with pupils who have been identified as “typically achieving, at risk or exceptional”. Based on the data analysis, the authors suggest that, teachers’ beliefs maybe influenced by the school norms and culture. It could be suggested that, from a Cultural Historical Activity Theory perspective (Engeström, 1999), there is a dialectical and interactive relationship between the different elements of an activity system. For instance, teachers' beliefs (subjects) and school legislation on SEN and disability (rules) can, at the same time, have an influence on and be a reflection of each other.

Setting out these arguments, this study addresses the following main research objectives using the AT perspective:

- An exploration of teachers’ understanding of concepts such as dyslexia and inclusion in the context of their school, based on social, cultural and historical aspects.
- An exploration of how their understanding is related to the support they provide (or how they implement inclusive practice) for those students. In this regard, it aims to explore which key cultural, historical and social factors enable or limit their practice when working with dyslexic students in their classrooms.

Research Questions

1) How do primary teachers’ understand the concepts of inclusive education and dyslexia in the context of their school, based on cultural, social and historical factors?
   a. What are the differences and the similarities between teachers in the two cultural contexts: Cyprus and North West England?
2) How is teachers’ understanding of inclusion and dyslexia related to their classroom practice for dyslexic students in the two cultural contexts?
a. What is the contribution of social, cultural and historical factors to their classroom practice?

Outline of the Chapter

This chapter is divided into the following sections: First, an overview of the research design is discussed, based on the research framework proposed by Crotty (1998). The four areas of the research framework – epistemology, theoretical perspective, methodology and methods – are explained in relation to the context of this study and the theoretical framework (CHAT/AT) adopted. Then, sections 4.3.1, 4.3.2 and 4.3.3 deal with the practical aspects of carrying out the data collection process, such as the selection of participants, the settings in which the study took place, accessibility issues and the reflexivity of the researcher. Then comes the section which discusses the particular methods being used for gathering the data and finally, ethical considerations along with establishing trustworthiness in a qualitative inquiry are presented. Some limitations identified throughout the whole procedure are also discussed.

4.2 Research Design

As Goodson & Sikes (2001) suggest, the design of research is based upon a decision about which process is considered as the most appropriate to provide relevant and sufficient data on the questions being asked. For the purposes of this study, Crotty's (1998) research framework has been adopted. In particular, Crotty (1998) describes four elements that a research framework can provide in order for beliefs to be made explicit: epistemology, theoretical perspective, methodology and methods. Briefly described, ‘epistemology’ represents the way knowledge is understood; ‘theoretical perspective’ provides the philosophical foundations which will be the logic of the research process; ‘methodology’ represents the larger plan, the strategy that links the methods to the desired outcomes; and ‘methods’ represent the ways the data is gathered and analysed.

In this regard, the research framework chosen for this thesis is based on the theoretical perspective of Interpretivism, founded on a social constructionist epistemology. In order to explore teachers’ perspectives, a qualitative research design was considered as the most appropriate, employing qualitative methods of data collection such as in-depth interviews, classroom observations and follow-up discussions with the teachers (see Figure 5 below).
4.2.1 Epistemology – positioning the research

‘Epistemology’ can be defined as the set of beliefs about the nature of knowledge; that is, what can be known, and how knowledge comes to be (Cohen, Manion & Morrison, 2007). The belief about knowledge, based on which this research has been carried out, is embedded within the Constructionism epistemology. Constructivist research is described as the following:

Humans actively construct their own meanings of situations; meaning arises out of social situations; behaviour and data are socially situated, context-related, context-dependent and context rich; realities are multiple, constructed and holistic; inquiry is influenced by the choice of the substantive theory used to guide the collection and analysis of data and in the interpretation of findings; the attribution of meaning is continuous and evolving over time; social research examines situations through the eyes of the participants.

(Cohen et al., 2007, pp. 137-138)

Social constructionism, the particular perspective from which this research is carried out, develops further the notion of knowledge creation in specifying the social nature of knowledge construction. As Crotty (1998, p. 54) states, “We are all born into a world of meaning. We enter a social milieu in which a ‘system of intelligibility’ prevails. As we grow up, we learn how to understand things through the perspective of our culture; not only what things are and how they are to be understood, what to notice, what to ignore, what to value”.

*Semi-structured interviews
*Classroom observations
*Follow-up discussions
The social, historical and collective nature of knowledge that is produced through the application of Cultural Historical Activity Theory (CHAT) lends itself to the social constructionism epistemology, with its interest in social structures, relations and institutional practices. For instance, CHAT’s focus is on the interaction between the individual, systems of artefacts, which can be cultural products, and other individuals in historically developing institutional settings (Holzman, 2006). Human beings, set in genuinely historical and social perspective, are engaged with their world and making sense of it (Crotty, 1998). As such, the study’s focus is on how teachers experience inclusion and dyslexia in their own school community. What is more, this perspective is particularly influential in this research since it is intricately involved with theories on how teachers develop their professional role (collective) within social contexts.

Research carried out from a social constructionism perspective understands all meaning to be a prior construction; for this reason, it is involved in the re-interpretation and re-construction of meaning. In essence, as a researcher, I will be involved in establishing the ways in which teachers currently make sense of dyslexia, how they define and understand it, as well as how cultural and social influences might contribute to their beliefs and, subsequently, to their practice. For example, it is proposed that what the participants say, and how this is reflected in their practices in the classroom, can contribute to teachers' beliefs and attitudes towards supporting students with dyslexia in their classrooms and to their beliefs about their own competences and teaching skills. As a researcher, the attempt is to make meaning of the teachers’ experiences as these are reflective of divergent perspectives on inclusion and dyslexia.

4.2.2. Theoretical Perspective

As stated earlier, ‘theoretical perspective’ provides the philosophical foundations which will be the logic of the research process. As such, the theoretical perspective behind the qualitative research design being employed in this thesis is based on the principles of interpretivism. The interpretivism approach involves identifying “culturally derived and historically situated interpretations of the social-life world” (Crotty, 1998, p.67) which are also compatible with the principles of qualitative inquiry and the theoretical framework of AT (Roth & Lee, 2007).

Considering these arguments, it is worth drawing a parallel with the framework of AT and the example given earlier in this chapter about the interactive and dialectical relationship between the different elements of an activity system or even between different wider activity systems. Within an activity system, (e.g. the school system), there is always a community of multiple points of views and traditions and participants carry their own diverse histories. This corresponds to the second principle of Cultural Historical Activity Theory, that of multivoicedness in activity systems (Engeström, 2009). Even the activity
system itself carries multiple layers and strands of history engraved in its artefacts, rules and conventions (Engeström, 2009). In terms of interpretivism, the principle of multivoicedness within a community (Engeström, 2009) could be seen as those different worlds under formation in a group existence. For example, when teachers (individual subjects) interact with other members of the school community (other teachers, staff, Head Teacher) or with the rules of the school (SEN legislation), they shape their activities, their relations and their social life as people but, at the same time, this interaction is considered as a reflection of the social reality of the school as an activity system. This can subsequently lead to tensions and contradictions (see section 3.3) which, according to Engeström (2009), can be a source of change and transformation (re-shape) in the future (the notion of ‘expansive learning’). Given this brief example, this section attempts to illustrate how aspects of the theoretical framework of Cultural Historical Activity Theory (CHAT) are embedded within the theoretical perspective of interpretivism. Both the theoretical perspective and the ‘lenses’ of the theoretical framework of AT have informed and guided the design of this study, as presented in the following section.

4.2.3 Methodology

A qualitative research design is employed as the research strategy to explore teachers’ personal interpretations of inclusion and dyslexia and their professional practice. In qualitative research designs, researchers work with a relatively small number of cases and they are prepared to ‘sacrifice’ scope for detail (Silverman, 2013). What counts as ‘detail’ can be found in those precise particulars such as people’s understandings and interactions (Silverman, 2013). This could be also assigned to the social constructivist model of reality, as discussed in the section 3.2.1 of this thesis.

Qualitative research designs tend to describe what is going on with a specific topic, as well to present a detailed view of a topic as it takes place in its natural setting (Creswell, 2002). One of the major characteristics of qualitative research is that researchers tend to collect data in the field where the participants experience the issue or the problem under study. The professional practice of teachers was at the centre of this project and, for this reason the data collection process took place in the natural setting of three different sites: the classrooms in three primary schools where teachers are currently working. The design of the professional practice itself is concerned with the setting with links to the how and what of the activity under study. For example, questions about “how the teachers work with students with dyslexia in their classrooms” and “what kind of activities the teachers and students are engaged with in the classroom” could be addressed through a direct, face-to-face interaction with the participants and through observation of their behaviour and actions in the classroom. From a Cultural Historical Activity Theory (CHAT) perspective, the natural setting of the school and the classroom could be seen as two separate settings.
interacting with each other’s Activity Systems (AS) in which the subjects (teachers) are in a dialectical interactive relationship with the other elements of the AS, such as division of labour, community, rules, tools and the object (Engeström, 2009).

Janesick (1994) notes that qualitative research design is an interpretive art form analogous to dance, which begins with a question, and she presents research design as a sequence of decisions that the researcher will need to make at each stage of the research. The following sub-sections in this chapter discuss the decisions made at each stage of the project, including the actual data collection procedure, initial plans for the selection of participants and decisions taken throughout the whole fieldwork process.

4.3 Data Collection Procedure

In this section, the data collection process as part of the research strategy is discussed. A detailed step by step account of the data collection procedure is presented along with the decisions made, as it is of value to address some of the practical and methodological issues that emerged during the fieldwork period. In particular, the sampling strategy used for the selection of the schools and the teachers is presented and the data collection methods are discussed. What is more, throughout the discussion, some identified limitations are addressed accordingly.

4.3.1 Sampling Strategy

This section initially describes the strategy plan used for recruiting the participants and the issues of negotiation and accessibility to the schools. Any references to names of the participants and the schools make use of pseudonyms.

Qualitative researchers tend to select their participants on the basis of a non-probability sample, since they are targeting a particular group, in the knowledge that this group does not represent the wider population (Cohen et al., 2007). In the case of a small-scale research such as this one, I was interested in groups of primary class teachers. In terms of generalisability and representativeness, the aim was not to produce a statistically representative sample but rather to gain a deep understanding and provide as detailed an account as possible of the teachers (see section 4.4.2) Another consideration to be addressed is that of the limited resources (human resource, money, time) when choosing a particular sampling strategy over another (Flick, 2002). This could be based on whether the strategy seeks to represent the field in all its diversity by using as many different cases as possible or to penetrate the field by concentrating on single examples or certain sectors (Flick, 2002). The latter strategy is the one chosen for this study. Furthermore, considering the fact that the study is cross-national in nature and required that the
researcher travel in two different cultural contexts, limited resources (money and time) had an influence on the sampling procedure and the final number of schools selected; in addition, proximity issues in terms of travelling to the schools, were also taken into account.

Following a purposive sampling technique, emphasis was placed on the criteria for the selection of the schools and the teachers (Cohen et al., 2007). The criteria set for the selection of the schools and the participants are presented in table 2 below:

<table>
<thead>
<tr>
<th>Criteria for the selection of schools and participants</th>
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<tbody>
<tr>
<td><strong>Schools:</strong></td>
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<tr>
<td>• Primary schools which promote inclusive education</td>
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<tr>
<td>• Students who have been identified with and/or are being assessed for dyslexia are currently attending the school</td>
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<tr>
<td><strong>Teachers:</strong></td>
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<tr>
<td>• From diverse age groups (EYFS and KS1-KS2 in England, Grade 1st-6th in Cyprus)</td>
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<tr>
<td>• Current experience with students with dyslexia</td>
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<tr>
<td>• Literacy-focused</td>
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Table 2: Criteria for the selection of schools and teachers

**Criteria explained:**

Promotion of inclusive education: I chose to approach schools in a North West England Local Authority which is recognised as a Dyslexia Aware Authority by the Dyslexia Aware Consortium (DAC); it is suggested that a school within a Dyslexia Aware Authority provides good practice for all students (BDA, no date). In particular, the British Dyslexia Association (2005) has proposed that dyslexia-friendly schools provide inclusive practice for the support of all students, not only those who are identified with dyslexia. The dyslexia-friendly school is a whole school approach which is inclusive and proactive and it aims to identify and fulfil all learning needs (BDA, 2005). Dyslexia-friendly practices, which include multisensory and explicit activities and classroom equipment with dyslexia-friendly resources, benefit dyslexic and non-dyslexic students alike. It is suggested that “good dyslexic practice is good teaching practice” (Turner & Pughe, 2003, p. 89).

In Cyprus, the South West district was chosen as the one in which to approach schools since there was an already established professional relationship with schools there. During the academic year 2011-2012, I worked as a teacher in a primary school in the district and I developed professional links with the principal and the teachers of the school.
Within the Cypriot Educational System, local inspectors are responsible for evaluating schools and obtaining information on all schools in a particular district (Pashiardis, 2004). For each district, a team of usually three inspectors undertakes a whole school inspection (the ‘General Inspection’) (Brauckmann & Pashiardis, 2010). Online information about schools’ practice is not available. In this regard, it was important to contact the local inspector and obtain information about potential schools and the practice they provide for all students. Schools in Cyprus which promote inclusion are those in which there are diverse pupil populations, based on language and cultural background, and also an increased number of students identified with SEND. According to the 1999 Education Act, students with SEND are entitled to special educational provision, either in a mainstream or in special settings. Schools need to be equipped with resources and materials to support these learners and also to offer the dual form of provision, either in a special unit (or resource unit) or enabling them to be withdrawn from the class for individualized learning by the SEN teacher or a specialist teacher (Symeonidou, 2002). A colleague of mine acted as the key person to put me in contact with one of the local inspectors of the district (see section 4.4.3).

Students who have been identified with and/or being officially assessed for dyslexia are currently attending the school: In the UK, 10% of the population is dyslexic (BDA, no date) and it is suggested that one in five children have dyslexia (ibid). It is expected that in every school and in every classroom there will be students with dyslexia, even if they have not been officially assessed as dyslexic. In Cyprus, the exact number of officially recognised dyslexic learners in primary schools is not yet known. According to the latest annual reports of the Ministry of Education and Culture, around 5% of the primary education student population is officially identified as having special educational needs (MoEC, no date). Students with identified learning difficulties of a more moderate nature, including dyslexia (currently the largest portion of pupils accredited with SEN) are educated in the mainstream class (Mamas, 2013). As such, it was expected that there would be students with dyslexia officially assessed or being identified and/or in the process of assessment in the classrooms selected. In this regard, I included teachers who also suspected that some of their student may be experiencing difficulties with literacy.

From diverse age groups: England: EYFS, KS1 (ages 4-7) to KS2 (ages 7-11), Cyprus: Cycle A’ (ages 5.5-8), Cycle B’ (ages 8-11). One of the topics of interest in the interview schedule was that of “early identification” (see section 4.4.2). I was interested in exploring this area with the teachers, since students can start experiencing difficulties with reading and writing from an early age (DfE, 2014) and can be considered as students ‘at risk’ of poor academic outcomes.
Teachers’ current experience with students with dyslexia: It was expected that the teachers would have current experience with dyslexic learners, which would be of benefit for the follow-up discussions (section 4.4.4). In terms of the subject area, the study focused on the subject of literacy, the core subject in the primary national curriculum in both contexts (DfE, 2014, MoEC, 2012) and, it is suggested, one of the main areas of difficulty for students with dyslexia in schools.

4.3.2 Negotiating and Obtaining Access

The study was planned to take place between January 2015 and April 2015 (see Table 3 below), first in Cyprus and then in North West England. Cyprus was selected as the first context to start the data collection as Ethical Approval had to be sought both by the Manchester Institute of Education of the University of Manchester (UREC) and the Centre of Educational Research and Evaluation (CERE).

The South West district of Cyprus

As soon as both the Ethical Approvals were gained in October 2014, I contacted the key person via telephone in order to secure information about the schools in the chosen South West district of Cyprus. The local inspector provided the key person with information about the schools and I searched their websites (where available) in order to access their contact details. It was important to secure permission from the Head Teachers of the schools in advance, so that the smooth functioning of the school would not be affected during or by my involvement.

From the list secured from the local inspector, two of the schools were more easily accessible as I had a professional relationship with teachers who used to work there. However, it was not been possible to communicate with the Head Teacher of one school, due to his busy schedule and commitments during this period. Thus, I decided to follow the list and contact the next two schools, in an attempt to stay as close as possible to the criterion of ‘promoting inclusive practice’ being set for the purposes of this study. One school expressed no interest in participating in the project and the other one, despite its interest, was unable to commit to my project since it was already involved in two other current school projects.

In December 2014, I contacted the Head Teacher of the school which had agreed to take part in the project. I informed her about my project, its objectives, the sampling and the research timetable and we set an agenda for the first two school meetings upon my arrival in Cyprus.

Meeting the Head Teacher
Upon my arrival in Cyprus, I made the first school visit as arranged (19.12.2014) and I briefed the Head Teacher about my studies as a PhD student and the details of the project, including the sample, the duration of the project and the methods that I intended to use with the teachers in relation to the timeline set for each school (see Table 3 later in this section). Issues of anonymity and confidentiality were also addressed. The Head Teacher was keen on getting the school engaged in the study and she suggested specific teachers to take part. However, the aim was to recruit participants based on their own willingness and thus, a first staff meeting was confirmed (09.01.2015) at which I would give a talk to the teachers about my research.

Meeting the teachers

The aim was to include five teachers from each school in each context and in the particular school there were eighteen class teachers. During the staff meeting (12.01.15) I was given a 20-minute session in which to introduce myself, talk about my project and my role as a researcher, and to circulate the Participant Information Sheet (PIS) (Appendix 1.2) to the teachers. In order to provide information to the teachers around inclusion, I used the questionnaire adapted from the Index for inclusion (Appendix 2). The purpose of using the questionnaire during the meeting was informative and to gain a more holistic picture of inclusion in the school. By the time of my second visit to the school (14.01.15), none of the teachers had returned the questionnaires and only one of them had approached me expressing her interest in taking part in the project. In total I conducted three initial school visits in order to recruit participants. During the last school visit (19.01.15), there was no increased interest on behalf of the teachers in taking part and eventually only two of them agreed to participate.

Based on this unexpected fact, I decided to approach more schools so as to reach the five teachers needed for the purposes of the study. To this end, I contacted one of the teachers with whom I used to work. In this regard, I needed to follow a convenient sampling technique (Cohen et al., 2007). Two more schools agreed to take part – three teachers in one school and two in the other – and the total number of the participants was thus seven. However, as explained throughout this chapter, the purpose of this study was to gain an in-depth understanding of how teachers understand dyslexia and the factors that might enable or limit their practice for supporting those students. For this reason, I decided to keep only the two schools – number one and number three on the list, so as to stay closer to the criteria for school selection – and to spend an in-depth two-week research period in each site (see Table 3 at the end of this section).

*The North West England Local Authority*
In order to access schools in the Local Authority in North West England, I visited the Local Authority website. There were fifteen schools in the area that had been named 'dyslexia friendly' schools by the authority. I visited all the school websites and I contacted both the SENCo and the Head Teacher of the schools via e-mail and sent them the Participant Information Sheet (Appendix 1.2). A few days later, one of the fifteen schools responded to my e-mail and the Head Teacher put me in contact with the Deputy Head of the school who was also the SENCo of the school. We agreed by e-mail to have our first meeting upon my return from Cyprus (13.02.15). However, I had to extend my stay to Cyprus for one more week and our first meeting was rearranged for 27.02.15.

**Meeting the Head Teacher and the Deputy Head**

During the first school visit, I followed the same procedure as described earlier for briefing the Head Teacher about my study and introducing myself. We agreed to include five teachers from the Early Years Foundation Stage (EYFS) and both the Key Stages (KS1 and KS2) and to distribute the questionnaire to the teachers (Appendix 2). The first meeting ended with us drawing up an agenda for the following month (March 2015). Considering the number of the teachers and the study’s objectives, I decided to spend one month at this school (see Table 3 below). The Deputy Head agreed to take part as well as the Year 1 teacher and we arranged the first dates for the interviews and classroom observations based on her schedule. During the first meeting, the SENCo offered me a learning walk to the premises of the school to familiarize myself with it, explaining some of the school’s activities to me, showing me the classroom environment and introducing me to some of the teachers.

**Meeting the Teachers**

During the second school meeting (05.03.15), I spent the whole day familiarizing myself with the school, collecting the questionnaires, responding to questions from potential participants and meeting the teachers in person in order to talk to them about my study. By the end of the day, the Year 2 and Year 6 teachers had agreed to take part. The questionnaires were distributed in advance and the consent forms (Appendix 1.2) were given to the teachers soon afterwards. Everything was clearly explained to the teachers about their willingness to take part in the study, including the fact that they were free to withdraw from it anytime. One of the teachers (Year 6) decided to withdraw from the study at an early stage due to pressure over the forthcoming SAT exams for the Year 6 students. The SENCo decided to approach the Year 4 teacher who agreed to take part in the study. The agenda for the next school visits was arranged, taking into consideration the timetable of each teacher. Finally, the Easter holidays were also taken into account and one week was added to the schedule after the Easter break for the convenience of the Year 4 teacher. In Table 3 below, the timetable for each site is illustrated, together
with the pseudonyms given to each school and to the teachers who had agreed to take part in the study.

4.4 Data Collection Methods

As stated earlier in this chapter, the ‘methods’ represent the ways in which the data is gathered and analysed. Acknowledging the nature of this study as an interpretative empirical study, the use of difference sources of data collection was been taken into consideration (Denzin & Lincoln, 2000). At the same time, the research questions were embedded into the theoretical framework of AT, the use of which, according to Miles and Huberman (1994), can be a helpful way to make reasoned decisions about what data to gather.

There seems to no clear step-by-step procedure for studies carrying out Cultural Historical Activity Theory based research in practice. Nardi (1996) states that, for a study which relies on an Cultural Historical Activity Theory framework, a number of diverse techniques can be used such as interviews and observations (Bodker, 1996) and video and historical materials (Nardi, 1996). Considering the great diversity of applications of the AT and Cultural Historical Activity Theory in research studies (Soans, 2012; Pearson, 2009; Leadbetter, 2008; Daniels & Cole, 2002), it was of great importance to address the unit of analysis in relation to the activity that the study relied on. As such, the collective unit of analysis was teachers’ professional practice when supporting students with dyslexia in the classroom, referring to the aspects of instruction, assessment, classroom behaviour management and collaboration with other members of staff.

The data collection methods used in this study were guided both by the principles of AT and qualitative inquiry. The main source of data was the interviews with the teachers (semi-structured and follow-up discussions). In this regard, I was engaged in a pilot process with a sample of teachers in the summer preceding the main data collection process (section 4.4.1 below). Other sources, such as classroom observations with the teachers, were used as complementary methods in order to address the research questions. The use of different sources to answer the research questions contributed to the methodological triangulation of the study as discussed in the following sections.
<table>
<thead>
<tr>
<th>North West England Local Authority</th>
<th>South West District of Cyprus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Site 1: St. Andrew's Primary School (pseudonym)</strong></td>
<td><strong>Site 2: St. Neophytos' Primary School (pseudonym)</strong></td>
</tr>
<tr>
<td><strong>Dates:</strong> 05.03.15- 23.04.15 (including Easter holidays)</td>
<td><strong>Dates:</strong> 19.01.15 – 30.01.15</td>
</tr>
<tr>
<td><strong>Sample:</strong> 5 class teachers (2 EYFS, 2 KS1 and 1 KS2)</td>
<td><strong>Sample:</strong> 2 class teachers (Grade 1 and Grade 3)</td>
</tr>
<tr>
<td><strong>Methods:</strong></td>
<td><strong>Methods:</strong></td>
</tr>
<tr>
<td>• Semi-structured interviews (approximately 1 hour for each teacher)</td>
<td>• Semi-structured interviews (approximately 1 hour for each teacher)</td>
</tr>
<tr>
<td>• Classroom observations (3 initial observations, at least 4 lessons for each teacher)</td>
<td>• Classroom observations (3 initial observations, at least 4 lessons for each teacher)</td>
</tr>
<tr>
<td>• Follow-up discussions (2 for each teacher, approximately 15-20 minutes per session)</td>
<td>• Follow-up discussions (2 for each teacher, approximately 15-20 minutes per session)</td>
</tr>
<tr>
<td><strong>Site 3: St. George's Primary school (pseudonym)</strong></td>
<td><strong>Site 3: St. George's Primary school (pseudonym)</strong></td>
</tr>
<tr>
<td><strong>Dates:</strong> 02.02.15 -16.02.15</td>
<td><strong>Dates:</strong> 02.02.15 -16.02.15</td>
</tr>
<tr>
<td><strong>Sample:</strong> 3 teachers (Grade 5, Grade 3 and Grade 6)</td>
<td><strong>Sample:</strong> 3 teachers (Grade 5, Grade 3 and Grade 6)</td>
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<td><strong>Methods:</strong></td>
<td><strong>Methods:</strong></td>
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*Table 3: Timeline for each site and the data sources used*
4.4.1 Pilot Process

During the summer preceding this study, I was engaged in piloting the instruments for my data collection and using the data to test the proposed data analysis process, based on the AT framework. The purpose of the pilot study was mainly to check the feasibility of the interview schedule and the ‘richness’ of the data that the main data source would yield for analysis within the timeframe of approximately one hour as proposed. Also, it was important to check how the teachers’ accounts could be constructed, considering the information that would be gained. The pilot study included three primary teachers (two females and one male) from the two different cultural contexts in this project. The pilot report presenting the account of one of the teachers is provided in Appendix 3. The participants’ teaching experience varied from experienced to more experienced teachers (three, five and seven years accordingly). They all had in common past experience with a student who had either been ‘at risk’ of experiencing learning difficulty or officially assessed with dyslexia. The recruitment of the participants in the pilot study was based on a snowballing sampling technique and they were approached through colleagues.

The pilot process confirmed a number of choices based on the AT framework and, at the same time, offered some principles for the main study. For instance, it was more important to focus on the most recent or current experience of the teachers with students in order to address their professional practice from the perspective of the participants. In terms of consistency within the timeframe (approximately 1 hour interview) and to include questions considering all the elements of Cultural Historical Activity Theory, the interview questions were initially divided into five themes based on inclusion and dyslexia literature. Under each theme there were six sub-categories based on the six elements of Cultural Historical Activity Theory. However, there seemed to be an overlap between the questions and the categories and I thus decided to further divide the questions to correspond to the six elements of Cultural Historical Activity Theory. Finally, six main themes were developed in which there were evident links with the six AT elements (subject, object, community, division of labour, rules, and tools/artefacts). This also proved to be helpful in relation to the thematic process of the data analysis. In addition, the subject position of the teachers was further expanded to include more biographical details at the beginning of the interview.

Another point identified was the need to add more questions in relation to inclusion at the beginning of the interview, which would enrich the data and obtain a more holistic picture of the perspectives of the teachers. As explained in section 4.3.2, the questionnaire based on the Index for Inclusion (Booth & Ainscow, 2002) was given initially to the participants as a tool for the teachers to think about inclusion. Since the study is concerned with inclusive practice for students who experience dyslexia in primary schools, it was
important to gain an insight into the teachers’ perspectives on inclusion for all students, including those with dyslexia. The questionnaire consisted of indicators divided into three dimensions: inclusive culture, inclusive practices and inclusive policy (Appendix 2). The items on the questionnaire could be linked to AT elements such as the item “there is a partnership between staff and parents/carers” to the division of labour element and the items “lessons encourage the participation of all students” or “students learn collaboratively” to the object element. The teachers could tick their opinion based on a Likert scale which varied from ‘definitely agree’ to ‘need more information’.

Finally, transcribing verbatim the interviews and creating the participants’ accounts following each interview gave me the opportunity to immediately reflect upon them and to address issues of reactivity (Maxwell, 2013) such as my own responses to the interviewees’ responses.

4.4.2 Interviews

The current study proposed to generate the participants’ own descriptive accounts in which the beliefs of the teachers would be linked to their professional practice when working with students with dyslexia. The use of account can be a useful technique as “it is possible to investigate similarities and differences within the total sample of the accounts” (Cohen et al., 2007, p.386). In this study, interviews were the main source of data and they were used at different stages. Firstly, they were used in order to create the accounts of each participant. The purpose of the interviews at this stage was to get to know the participants and to gain an understanding of how teachers perceive the concepts of inclusion and dyslexia, and of possible factors that might enable or limit their practice for those students.

As illustrated in Table 3 above, the semi-structured interviews were planned to last approximately 1 hour per teacher and it was the first main method used before the classroom observations. All the interviews except one were conducted on the school premises at a convenient time for the teachers. The interviews were arranged for one of the dates on which I was visiting the schools while, in the case of the exception, it was arranged at a place and time that were convenient for the teacher. The interviews were audio-recorded and, at the same time, interview notes were created by the researcher.

Designing the interview schedule

The interview schedule (see Appendix 4.1 and 4.2 in Greek) was based on the relevant literature on inclusion and dyslexia, addressing the elements of Cultural Historical Activity Theory. The interview schedule was developed and organised on the following six themes: (1) Getting to know the participants, (2) Educational Background, (3) Understanding Inclusion, (4) Understanding Dyslexia, (5) Early Identification and
Assessment and (6) Community. These six themes were been organised according to the elements of Cultural Historical Activity Theory (CHAT) (Engeström et al., 1999). For example, I was interested in the elements of subject positioning (teachers) and community (e.g. the school community, including the SENCo, SEN teacher and/or teaching assistant, if present). The themes developed in this regard were those of getting to know the participants (e.g. their qualifications, years of teaching experience, personal and professional experience with dyslexia) and collaboration in the community (See Appendix 4.1 for more details).

The interview schedule was based on open-ended questions (Cohen et al., 2007). Open-ended questions have a number of advantages as they can be flexible and can allow the interviewer to probe so as to go into more depth if so desired or to clear up any misunderstanding (Cohen et al., 2007). I attempted in many cases to probe the participants to recall previous personal or educational experience with students with dyslexia, which served as a source to gain a better understanding of possible factors that might influence the teachers. Furthermore, in other cases, where I had seen that a statement was too broad, I was flexible on using ‘why’ and ‘how’ sub-questions to narrow it down to a specific one. At this point, the Index for Inclusion questionnaire proved to be a useful tool to further inform and address the sub-questions I asked the teachers. For example, when the discussion was around the element of ‘community’, I was able to refer to the items mentioned in the questionnaire and probe for a ‘why’ question based on them.

Another advantage of the use of open-ended questions was that it contributed to establish a rapport with the participants and to develop cooperation with them (Cohen et al., 2007). The fact that the interviews were face-to-face gave the opportunity for both the interviewer and the interviewee to identify non-verbal cues which can promote the development of the rapport (Heyl, 2001); building a rapport with the teachers during my time at the school enabled me to make truer assessments of what the teachers believed (Cohen et al., 2007).

4.4.3 Classroom observations

Classroom observations were used as the second method of data collection and the aim was to gain an insight into how teachers work and to identify ‘critical events’ (Wragg et al., 2006) that would be discussed during the follow-up sessions. One of the distinctive features of observations is that they can allow the researcher to look directly at what is happening, rather than relying on second-hand accounts (Cohen et al., 2007). In addition, observations can enable the investigator to look again at everyday behaviour that, in another case, might be taken for granted, expected or even go unnoticed (Cooper & Schindler, 2001). It is noted that the emphasis was on the classroom behaviour of the teachers when interacting with the students. I was interested in identifying specific
instances, which might otherwise have gone unnoticed and could be illustrative of a particular aspect of the teachers’ practice.

Given the timeframe set for each school (see Table 3 above), I expected to observe at least four lessons by each teacher. In doing so, the aim was to generate the participants’ accounts and it was important to build a rapport with the teachers and make them feel relaxed and comfortable with my presence in the classroom. For this reason, I conducted some initial classroom observations without the use of the observation schedule which proved to be helpful for getting to know the participants in a less formal way and to understand how they worked. I conducted three initial classroom observations (three full days) at each school. During the initial observations, notes were taken in the form of descriptions of the physical setting, activities and behaviour in order to pen portrait the participants (LeCrompte & Preissle, 1993).

**Designing the observation schedule**

For Morrison (1993), observations can enable the researcher to gather data about the physical setting e.g. of the classroom: its physical environment (class arrangement) and its organisation, the human setting, the interactional setting (e.g. interactions that take place, verbal, non-verbal) and the programme setting (resources and materials and the curriculum objectives). The areas mentioned by Morrison (1993), along with their link to the AT framework, were of relevance to this study and they were taken into consideration when the observation schedule was being designed (Appendix 4.3 and 4.4 in Greek). For example, the area of the physical setting was observed since the classroom in this study was considered as an Activity system based on the AT framework, where the physical space could be divided into rules (class rules, class size and class arrangement) and the human setting area was related to the subject (teachers) and the community of the classroom (peers, students with dyslexia, Teaching Assistants, SEN teacher). In terms of the interaction setting and the programme setting, these could be related to the interaction between the teacher and the identified student, along with the use of tools and artefacts (resources, materials, teaching strategies/techniques and methods) in the classroom to achieve a specific goal (objective).

The classrooms observations – four lessons per teacher in total – focused on literacy lessons in both contexts. Literacy is considered as a core subject in both context’s primary national curriculum, with the overarching aims of promoting high standards of language (DfE, 2014) in the following areas: spoken language, reading, writing, spelling, vocabulary, grammar, punctuation and glossary (DfE, 2014; MoEC, 2013) and the use of the language in diverse genres (MoEC, 2013). Furthermore, it is well established in the literature that many students experience difficulties in these areas, especially students with dyslexia (Reid, Soler & Wearmouth, 2014).
For the purposes of this study, the role being taken for the observations was that of the ‘observer-as-participant’ (Cohen et al., 2007). As the name suggests my role as a researcher was clearly explained to the teachers and, in the same way, the teachers explained it to their students that I was supposed to have less extensive contact with the group. During the observations, I was given a space at the back of the classroom to observe the lesson. The observations were recorded as field notes in the form of quick jottings of keywords and in descriptive form of detailed accounts of the events, behaviours and activities (LeCrompte & Preissle, 1993) in the observation schedule. The descriptive form of notes was used particularly when identifying a particular event. As Wragg (2013), states, for the observer, it is important to write down what led up to the event, what happened and what the outcome was. Also, since the observations were recorded only in field notes, a detailed account proved helpful to recall the event for the purposes of the follow-up session.

**4.4.4 Follow-up discussions**

Follow-up discussions (or reflective sessions) were the method used after the classroom observations. The use of follow-up discussions was originally based on the identification of ‘critical events’ (Wragg, 2013) during the observations. The technique of ‘critical events’ can be used as an approach which allows the observer to capture and preserve some of the essence of what is happening during lessons (Wragg, 2013). The ‘critical events’ could be things that happen and seem to be of more interest to the observer than other events occurring at the same time and, for this reason, they are worth documenting in more detail (Wragg, 2013). It depends on the observer which events to look for and, based on the difficulty to collect, discuss and analyse many of critical events (Wragg, 2013), a maximum of three events per observation sessions is suggested so as to enhance the follow-up discussions.

‘Critical events’ as an approach has been used in classroom observations in this study (Wragg et al., 1996). In other studies, events have been used in follow-up discussions about teachers’ own learning processes, so as to create awareness (Tjernberg & Mattson, 2014). In this study, they were used to gain an understanding of ‘how’ and ‘why’ teachers work the way they do, which is considered as the basis of pedagogical practice (Tjernberg & Mattson, 2014). It could be argued that, from a Cultural Historical Activity Theory perspective, it may provide insights into teachers’ motives for action when a collective goal has been set. It could then be a source for identifying possible factors that seem to enable or limit the practice of the teachers with these students. It may also be related to teachers’ emotions and attitudes towards a particular student or event, which may come into contradiction with other elements of the activity system (Engeström, 2009).
For the purposes of this study, the original plan was to conduct one follow-up discussion of up to 30-40 minutes with each teacher upon completion of the total observations (4 lessons) per teacher. However, considering the busy schedules of the teachers and the time commitment to the project, it was suggested that two more brief follow-up sessions (15-20 minutes) nearer the time of the completion of the observation session would be more beneficial for the discussion so as to avoid excessive memory decay (Lyle, 2003).

I looked for a maximum of two ‘critical events’ per observation session for each teacher. For example, I looked for events that were related to the four aspects of inclusive practice including instruction, classroom behaviour management, assessment and collaboration with other members of staff. One example in this regard concerning the aspect of classroom management is for a rule being established and then either followed or broken, which may reflect an interpersonal relationship between the teacher and the student. The events were associated with the areas being described in the design of the observation schedule and associated with the literature of inclusive practice as well (Appendix 4.3). The discussions were conducted in the form of a more dialogue-seeking conversation between the researcher and the teacher using a semi-structured interview schedule (Appendix 4.5) and the Developmental Work Research (DWR) framework (Engeström, 2007). More specifically, the questions were related to ‘critical events’ in order to gain an insight into their understanding of what happened. In doing so, a neutral language was used such as ‘Can you tell me about …?’ or ‘what do you think led up to ..?’ instead of using leading questions like ‘Why didn’t you…?’.

During the follow-up sessions, it became apparent that the teachers were also providing me with information about the structure of the lesson, the lesson objectives, resources/materials they used or techniques/strategies, background information of the students, feelings and thoughts. Since the interviews were semi-structured, I was flexible in including this information and addressing these issues during our discussions about the event. The interviews were recorded verbatim and in the form of notes and they gave me the opportunity to gain a more in-depth insight into teacher’s practice and the context of the lesson but also to understand and interpret in a more insightful way how the event had developed.

4.5 A reflective account of Data Collection

In the literature on qualitative research, the role of researchers’ reflective accounts is well established in relation to the procedures followed during the data collection and analysis stages (Denzin & Lincoln, 2012). For Flick (2009), the subjectivity of the researcher and those taking part into the research are part of the study. Researchers’ reflections on their own actions and observations in the field, their impressions and feelings become data in their own right, forming part of the interpretation and can be documented in the research
diaries (Flick, 2009). For the purposes of this study, my research diary proved to be a helpful tool for recording my beliefs and thoughts. My role as a researcher was the ‘underlying’ philosophy during data collection. For example, I attempted to disclose all the assumptions and beliefs about ‘dyslexia’ and ‘teachers’ practice’ that I brought to this research in the research diary, before I started the data collection process in order to avoid researcher bias. In addition, I disclosed my observations in relation to how the rapport with the participants was built and my role as a researcher and communication with the participants. In this regard, some examples are presented and discussed below.

In terms of power relationship and rapport building, my role as a PhD student was acknowledged and perceived by the Head Teachers and the teachers in all schools. For example, in both Cypriot schools, during the first interview, the teachers kept emphasising the fact that I had expertise in the area of dyslexia or they kept reminding me that they might misunderstand the term ‘dyslexia’. However, using my current knowledge of dyslexia and my professional background as a teacher I managed to successfully engage them in further discussions about dyslexia. The fact that I had been an active listener for them, appraising their knowledge and their role as teachers, proved to be an effective way to balance this rapport between researcher and teachers.

Another aspect worth reflecting on was that of the intercultural communication between the researcher and the participants. In the Cypriot context, the communication was facilitated in a more efficient way. I was able to engage with the teachers in context-dependent discussion about the students. For instance, I noted that the teachers tended to refer to students with learning difficulties and/or dyslexia as ‘little children’ instead of ‘pupils’ despite their developmental age. The words seemed to carry empathetic and charitable connotations regarding the difficulties the students might be experiencing in schools. Considering the fact that as a Cypriot myself I have the cultural background knowledge of the Cypriot schools, it could be implied that charity model is also evident in discussions with teachers around inclusion and their practice with students with SEND. This was also emphasised in similar study in the Cypriot context, in which the author contends that charitable notions of disability along with medical views of disability are more prominent in Cypriot primary teachers’ views on inclusion and SEN (Mamas, 2012).

Taking this into account, I was able to more easily access and understand the meaning of this description by the interviewees and how it could possibly influence their practice when working with these students.

In the UK schools, it proved more difficult to engage myself in discussions outside the lesson or in other context-dependent discussions, especially during my first visits to the school. The teachers were reluctant to approach me during lunch breaks to get to know me better or to discuss with me. However, the fact that I spent a longer period of time at this school facilitated communication in the later stages in a more friendly and relaxed way. In addition, constant discussions with my supervisor and some of my colleagues to
gain information about the UK context proved very helpful to get a better understanding of the cultural context of the school and the participants.

Finally, the data was collected, in the native language of each context – Greek and English respectively. The instruments for the Cypriot teachers were translated into Greek by the researcher. However, it was proved to be a challenging task to provide the exact meaning of some of the words based on the context of each country. Such difficulties are commonly identified in studies which include inter-cultural competence to communicate effectively with the participants (Shah, 2004).

4.6 Ethical Considerations

It is suggested that ethical considerations pervade the whole process of research, including the stages of access and acceptance, appropriateness of the design, methods, confidentiality, the anonymity of the participants and the analysis and dissemination of the findings, which must be negotiated with relative openness, honesty, accuracy and scientific impartiality (Cohen et al., 2007). The ethical considerations described below are derived from the Ethical Guidelines for Educational Research (BERA, 2011) along with the ethical guidelines of the University of Manchester and the Ministry of Education and Culture in Cyprus:

1) Access to and Recruitment of the participants

Official permission from the Head Teachers to undertake the study at the school was needed. Soon after the ethical approval had been gained from the University of Manchester and the Centre of Educational Research in Cyprus (CERE), the schools were approached via a recruitment letter (Appendix 1.3) sent to each school’s e-mail address or via telephone calls in the case of Cyprus. An established professional relationship with a key person facilitated access to the schools in Cyprus (section 4.3). The teachers were recruited via an introductory meeting, including an overview of the purpose of the study, the proposed methodology and their contribution to the research. Their voluntary participation in the research was clearly explained to them. When the teachers had voluntarily agreed to participate, verbal consent was obtained. In other cases, where teachers were not recruited at the introductory meeting, the Head Teachers approached the teachers.

2) Informed consent and right to withdraw

Written informed consent (Appendix 1.1) was sought from all the participants before I entered their classrooms. In all cases, the right to withdraw at any stage of the data collection process without reason was highlighted. In two instances, participants decided to withdraw from the study.

3) Confidentiality and anonymity
The participants were fully aware of the intended purpose of the study and that quotes from the raw data might be used for reporting the findings of this thesis and also for the dissemination of the findings to a wider audience. The participants were informed that all quotes from the raw data would be used anonymously and they consented to the particular use of the data. Finally, confidentiality was ensured when the researcher was engaged with the analysis of the data by using coding and pseudonyms to identify the participants.

4) Data storage

Data was recorded on a digital voice recorder and transferred to a password-protected memory stick for storage. It was stated that the collected data would not be shared with any third party apart from my supervisor.

4.7 Conclusion

This chapter has explored the research methodology employed in this study, including aspects of the research framework, the epistemology, theoretical perspective, research design approach and the data collection methods. It has provided a detailed account in which a step-by-step process is presented and discussed in order to guide the reader through the process of data collection. In addition, the methods used for data collection were presented with illustrative examples to demonstrate how each method contributed to the study. The purpose was to provide an ‘audit trail’ and contribute to the rigour of the study as a qualitative design study (Creswell & Miller, 2000). By establishing an audit trail, I have attempted to provide a clear documentation of all research decisions and activities through a detailed account as well as in the appendices. In the following chapters, the discussion focuses on the analysis of the data, using the hybrid thematic analysis approach and the ‘lens’ of the second generation of Cultural Historical Activity Theory.
CHAPTER 5: DATA ANALYSIS

5.1 Introduction

The research questions of this study are explored through a social constructionism paradigm approach, adopting a qualitative research design. According to Denzin and Lincoln (2008, p.3) qualitative research “attempts to make sense of or interpret in terms of the meanings people bring to them”. As such, this study used qualitative methods of data collection (semi-structured interviews, classroom observations and follow-up sessions) to purposefully gather in-depth data that can offer rich insights into teachers’ perceptions of dyslexia and inclusion and understand the meanings they attribute to their role for supporting dyslexic students.

Qualitative data analysis provides ways of discerning, examining, comparing and contrasting and interpreting meaningful patterns or themes from data (Miles & Huberman, 1994). What is considered meaningful is based on the particular objectives of the research study. A growing number of research evidence suggests that good practice in qualitative data analysis requires a sustained effort to refer back to the study’s objectives. Generally speaking, qualitative researchers engaged with the dynamic process of qualitative analysis should incorporate a return to the aims, the research questions and the conceptual framework of the research (Veal, 2006). For the purposes of this study, this process is based on the theory used to frame the study and is directly linked to the research questions. In particular, Cultural Historical Activity Theory is used as the ‘lens’ to guide this study; the research questions were developed to elicit answers that could be related to Cultural Historical Activity Theory while, at the same time, following the principles of the qualitative research paradigm. In doing so, the theoretical framework of AT, the research questions and aspects of the literature review (see sections 2.2.1, 2.3, 2.4.1, 2.5) were used to develop an initial analytical framework (Appendix 5) that assisted the first steps of the data analysis. This will be further discussed later in this chapter. The use of the analytical framework gave the researcher the opportunity to “sensitise concepts, issues, questions and processes” that are relevant to the research aim and are illustrated through the analysis of the data (Patton, 2002, p.439).

Qualitative data analysis can be a mixture of inductive and deductive processes (Patton, 2002). In this study, both inductive and deductive strategies of analysis were used to demonstrate rigour in the process of analysis (Fereday & Muir-Cochrane, 2006). More specifically, at the beginning, the analysis took a theory-driven deductive approach which explored the initial theoretical concepts and ideas based on the framework of analysis. It then took a data-driven inductive approach, identifying the emergent themes and issues that the participants discussed during the interviews (data-driven approach). This
combination of theory-driven \textit{(a priori)} and data-driven approaches is considered common practice in qualitative research (Miles & Huberman, 1994; Fereday & Muir-Cochrane, 2006) and reflects a flexible approach to data analysis (Patton 2002; Braun & Clarke, 2006). A more detailed account the systematic process of data analysis used in this study is provided in the following sections.

5.2 Data preparation and transcription

All data from the interviews and follow-up discussions with the teachers was audio-recorded using a digital recorder. The use of audio recordings can contribute to the production of highly-detailed and accurate transcripts since they can give the same or different researchers the opportunity to examine the recordings unlimited times (Silverman, 2000). This proved to be easier for the process of retrieving information and analysing the findings of the study. All the transcriptions were done by the researcher herself and each hour of digital recording took approximately six to seven hours to be transcribed.

During the data collection process, the audio-recorded material from each interview and the follow-up discussion was listened to on the same day and some initial notes were made which proved to be of benefit to further facilitate the process of analysis and interpretation. For instance, some notes included teachers’ feelings, their past and current experiences and events that had taken place in their classroom. Along with these notes, reflective notes of the researcher in terms of interaction with the research participants, characteristics of the teacher’s approach and engagement with the process of the interview were also written up in an attempt to allow the researcher to gain a better understanding of the data during the first stages of the data analysis. Upon completion of the data collection, all the interviews and follow-up discussions were fully transcribed, using the Olympus DSS Transcription Module. The Olympus DSS transcription module is a foot pedal-controlled transcription software which can facilitate the transcription of digitalised audio-recorded files using the functions of rewind, pause, and stop by the use of the foot pedal provided. Soon after each transcription, the transcript was carefully checked for (verbatim) accuracy against the original digital recording. Furthermore, the accuracy of transcripts was checked and verified by five interviewees who requested to review the transcript of their interviews. The anonymity and confidentiality of the data collected through the interviews was guaranteed by giving each participant a number (e.g. Teacher 1) and an associated pseudonym (e.g. Grigoria) and deleting any possible identifiable details immediately after transcription.

The importance of the transcription process is highlighted as it can enhance the familiarisation of the research with the data (Riessman, 1993). It is considered a key phase in the analysis of the data (Bird, 2005) and is characterised as a research act since
“the level and detail of the transcription affects the type of analysis that can be undertaken” (Pope, Mays & Popay, 2006, p.64). It could be mentioned at this point that, in this study, the transcription of the interview data has included instances of repetition, ‘ums’ and ‘ers’, pauses or laughter since they are regarded as of importance in the interpretation of the speech (Pope et al., 2006). Even though the verbatim transcription was a lengthy process, it is worth acknowledging that it was a beneficial one. For instance, by carefully listening, writing and checking the interview data, it became a more familiar process, which allowed the researcher to immerse herself in the data. As Braun and Clarke (2006, p.87) state, “It is vital that you immerse yourself in the data to the extent that you are familiar with the depth and breadth of the content.” In doing so, a systematic reading of the transcripts was conducted and some first impressions and interesting points were noted before the engagement with the formal coding and initial ideas. These notes were important for facilitating the coding phase of the analysis.

Considering the fact that the present study was conducted in two cultural contexts, the transcripts were retained in the Greek language in the case of the Cypriot teachers. Greek is the official and dominant language of Cyprus and, for this reason, the data was collected, transcribed and analysed in Greek. This decision was based on a number of practical issues and benefits for the quality of the findings. The large volumes of rich data yielded from the interviews and follow-up discussions, along with the time barriers for completing the study, were the main reasons for translating into English only the extracts that would be discussed and presented in this thesis. This will also contribute to the accountability of the research. More significantly, the decision was based on the fact that each language has its own metaphors, expressions, cultural norms, words and idioms, which cannot be precisely translated; as such, an attempt to translate the whole dataset in advance might have undermined the accuracy of the data and not represent accurately the participants' opinions and views. The purpose was to have a clear picture of the data in order to code the transcripts without losing any important information that emerged from the language itself and the implicit meanings of the participants' answers. Since in qualitative enquiry the researcher is the primary “measurement device” and has the whole responsibility for conducting a high-quality study (Miles & Huberman, 1994, p.7), researcher's bias can be one of the most serious threats to validity (Johnson & Christensen, 2004). For this reason, the decision was taken to retain the transcripts in Greek, thereby minimising the mediation of the researcher as well as the danger of bias.

5.3 The analytical framework for data analysis

According to Boyatzis (1998), two important concepts need to be taken into account when using a framework for primary data analysis: the unit of analysis and the unit of coding.
More specifically, the unit of analysis is defined as “the entity on which the interpretation of the study will focus” while the latter is concerned with “the most basic segment, or element, of the raw data or the information that can be assessed in a meaningful way regarding the phenomenon” (Boyatzis 1998, p.62). For the purposes of the current study, the unit of analysis is the teachers’ professional practice as a collective activity and the unit of coding is the interviews (initial interviews and follow-up discussions) and the field notes taken in classroom observations for each teacher. As Boyatzis (1998, p. 64) notes, the two concepts need to be related in order that “the unit of coding should have a theoretical justification, given the phenomenon of interest and the unit of analysis, and should provide an opportunity to establish and observe a “codable moment”. As such, the theory used in research can guide particular observations (coding) within the unit of analysis. It is noted, that, in this study, the analysis started as theory-driven guided by AT and then progressed with data-driven observations of the data from each interview and observation (or unit of coding). This combination of approaches during data analysis, using both theory-driven and data driven observations, is commonly referred as a hybrid approach (Fereday & Muir-Cochrane, 2006); the purpose of the hybrid approach (see sections 4.6.4, 4.6.5) is to provide sufficient opportunity for “codable moments” (Boyatzis 1998, p.65).

5.3.1 Linking Cultural Historical Activity Theory and data analysis

It has been already discussed elsewhere in this thesis (Chapter 2 and Chapter 3), that the theoretical framework of AT and particularly the six elements of the second generation of Cultural Historical Activity Theory were used as a descriptive and analytical tool in this study. In addition, the Developmental Work Framework (DWR) (Appendix 4.4) was used as the analytical framework for the reflective sessions (follow-up discussions). More specifically, the six elements – subject, object, tools/artefacts, community, division of labour and rules – were used to guide the analysis during the first phase of the thematic analysis. In particular, the ‘Initial Codes Manual’ (Appendix 5) was developed based on all the theory-driven codes. The manual illustrated each of these codes by name, definition and descriptions based on the theoretical constructs and the theoretical framework as discussed in Chapters 2 and 3 accordingly.

According to the Cultural Historical Activity Theory framework, subjects are those individuals who are working towards an object, which will eventually lead to the outcome; the subjects were primary teachers whose professional practice was explored. In terms of the tools/artefacts, these can take different forms, depending on the activity involved; for instance, the tools were identified directly by me through the observations, interviews and follow-up discussions and they are relevant to the professional practice (collective activity)
of the teachers. For instance, teaching and learning materials and techniques/methods used by the teachers were included as important tools in their classroom practice. In addition, conceptual and psychological tools were used to address the teachers’ beliefs.

The disability models were used as conceptual models to explore the teachers’ perspectives on understanding concepts such as dyslexia and inclusion. What is more, the object based on the use of the conceptual models was a useful element with which to explore teachers’ understanding of dyslexia and inclusion. For example, an emphasis on the object was noted when teachers took a more categorical approach to inclusion, using terms such as ‘autism’, ‘dyslexia’, ‘Down syndrome’ or referring to dyslexia by using medical terms such as ‘syndrome’ ‘disorder’ and ‘problem’. This approach was based on a similar study conducted by Pearson (2009) on trainee teachers exploring their conceptualisations of Special Educational Needs and Disability. The study made use of the elements of the second generation of Cultural Historical Activity Theory as the framework for the coding of the trainee teachers’ responses. In addition, when the Developmental Work Research model was used for the initial coding phase on teachers’ professional practice, the objects of the activity were considered the immediate motives of the activity. For example, when the aspect of the differentiated instruction is analysed as part of the professional practice, the object could be related to the lesson objectives set for the class which the teacher is working towards (e.g. the students have to solve a problem in teams). In the case where the aspect is the collaboration with other members of staff, the object is to divide the groups in class.

The outcomes can be described as the purposes of the actions, such as “to raise pupils’ awareness of issues such as acceptance of diversity” or “to raise the academic standards of the class” or “to work for students’ well-being”. Other elements, such as the community, rules and division of labour were also used during the analysis stage. The subjects engage themselves in an activity which is embedded in a range of relations with other aspects in an activity systems triangle, such as community, rules/norms and division of labour (Roth & Tobin, 2002). In a primary classroom, the community implies the teacher, support staff, the pupils, any other professionals and student teachers if present but it can also imply the wider community such as parents, external agencies and educational psychologists, which may have an influence on the classroom practice. In terms of the rules, these are related to the explicit and implicit regulations and they can be supportive of or constraining to the practice; these include ‘time pressure’, ‘curriculum objectives’, ‘lack of cooperation with the parents’, ‘cooperation with the SEN teacher’, ‘the presence of the TA in the classroom’ and ‘class size’. At this point, it is worth mentioning that when some of the rules are considered as ‘constraints’, this can may create tensions and contradictions in an activity system which can lead to innovation. As Engeström (1999) notes, the contradictions within an activity system can emerge as problems or breakdown,
which can only be examined by gaining an understanding of the entire activity system. For example, one of the teachers in the Cypriot context (Yianna) referred to her decision to further discuss with his parents the case of for including Dan (a student with Moderate Learning Difficulties who spends more time at the unit) in the class, since his presence even for a limited time in the regular class creates tensions affecting classroom behaviour management. The teacher felt that Dan could benefit more by spending more time in class with his peers. This led to a further discussion with the parents and the Head Teacher who agreed to this action.

In addition, the setting in which the activity takes place was also taken into consideration; as Merriam (1998, p. 238) states, “in order for a reader to vicariously experience a phenomenon, the writer must transport the reader to the setting”. As such, the nature of the setting in which the actions take place can have an influence, either in an encouraging or discouraging way, on thinking and action (Grossman, Smagorinsky & Valencia, 1999). A rich description of the setting such as the school or the classroom in Cultural Historical Activity Theory can provide readers with the opportunity to gain an insight into the phenomenon under study and to draw meaningful interpretations (Silverman, 2005).

### 5.4 Thematic analysis approach

The qualitative data of this study, including interview data and observational notes, was analysed using a thematic analysis approach (Braun & Clarke, 2006). Thematic analysis is a method “for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a data set” (Braun & Clarke, 2012, p.57). As may be noted, by focusing on the meaning across a data set, the researcher is able to see and make sense of collective or shared meanings and experiences by identifying what is common to the topic of interest (Braun & Clarke, 2006; 2012). Thematic analysis is, then, the analytical approach that involves the systematic development of codes and themes (Boyatzis, 1998).

According to Miles and Huberman (1994, p. 56), codes are defined as the “tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study”. The process of coding includes the identification and recording of “one or more discrete passages of text or other data items (e.g. parts of a picture)” which can exemplify the same theoretical or descriptive idea. The process of coding gives the opportunity for data reduction and simplification, data expansion (making new connections between concepts), transformation (converting data into meaningful units), reconceptualization (rethinking theoretical associations), and making connections between ideas and concepts along with the examination of how data supports, contradicts or enhances current research or existing theory (DeCuir-Gunby, Marshall & McCulloch, 2011).
The codes connected can represent themes and patterns that reflect important ideas across the data sets and they are related to the research questions (Fereday & Muir-Cochrane, 2006). As Braun and Clarke (2006, p.82) note, a “theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set”. As such, theme prevalence is considered a key aspect when the themes appear in each data item (the unit of analysis of the interview) and across the entire data set (all interviews). However, in this process, the researcher’s judgment is more important and decisive in determining the themes, since “there is no hard-and-fast answer to the question of what proportion of a data set needs to display evidence of a theme for it to be considered a theme” (Braun & Clark, 2006, p.82). It depends on researcher’s level of flexibility on what is considered important and the degree of importance that is demonstrated. In this study, the following four questions were used as a helpful tool for deciding what should be considered as important in the data set: “What is important in the data?”; “Why is it important?”; “What can be learned from it?” and “So what?”. In addition to this, thematic analysis is not about simply describing the themes that occurred but rather examining how the themes are interconnected, leading to the development of taxonomies or classifications, as well as models and diagrams that demonstrate the connection between the themes (Pope et al., 2006). As noted at the beginning of this section, thematic data analysis can be theory-driven, data-driven or hybrid (Boyatzis, 1998; Braun & Clarke, 2006; DeCuir-Gunby et al., 2011). In the current study, the ‘hybrid approach’ (Fereday & Muir-Cochrane, 2006) was adopted for data analysis, which started as theory-driven and progressed to data-driven coding and analysis. The detailed step-by-step process of the hybrid thematic analysis in this study is presented in the following section.
Phase 1: Development of *a priori* codes based on CHAT's six elements (Subject, object, rules, division of labour, community, tools/artefacts). Use of DWR for the analysis of critical events.

Examples of *a priori* codes:
- Subject's beliefs, shared object, collaboration with teachers, rules, tools and artefacts (conceptualising dyslexia)

Phase 3: Carrying out theory-driven coding
Collated data from the interviews and field notes to each *a priori* code.

Example of *a priori* code ‘Subject beliefs’ based on interviews:
“As a teacher I am really interested in progress, I see my students in terms of development, how they progress and for me that means success, to see each one of them taking steps forward. I believe in progress for everyone, even if a student who is considered to be a more severe case of SEN” (Yianna, fifth grade teacher).

Phase 4: Reviewing and revising theory-driven codes based on CHAT e.g. shared object, embedded rules, collaboration with teachers, subject's beliefs
Additional coding (data-driven) inductive codes are assigned to the data:
- e.g. collaboration with parents, teacher's emotions

Phase 5: searching for themes
Collating codes into potential themes based on the CHAT components.
E.g. Collaboration in the community, Inclusion as a shared object, conceptualizing dyslexia as an artefact

Phase 6: Reviewing themes
Development of thematic 'maps' of the analysis (provided in Chapter 6). Presentation of the components of CHAT and their subthemes.

*Figure 5.1* The illustration of the integrated process of combining thematic analysis and CHAT
5.4.1 The hybrid step-by-step process of thematic analysis

It is noted that the phases involved in a thematic analysis process need to be applied flexibly, based on the nature of the study and the data collected. For example, in this study in order to conduct a methodological and systematic analysis of the interview data and the observational notes, a synthesis of the thematic analysis guidelines identified in the relevant literature was used (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). The hybrid approach, including seven interwoven phases, is presented in the following table:

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description of the Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Development of <em>a priori</em> codes</td>
<td>Determining important theoretical areas that can be used as initial codes to organize the data (Boyatzis, 1998). Use of theory-driven coding that links to the theoretical framework of the study.</td>
</tr>
<tr>
<td>2. Familiarization with the data</td>
<td>Transcription of data and field notes, reading and re-reading the data, noting down initial ideas (Braun &amp; Clarke, 2006)</td>
</tr>
<tr>
<td>3. Carrying out theory-driven coding</td>
<td>Coding data in a systematic fashion within each interview and the field notes and across the entire data collating data relevant to each <em>a priori</em> code (Boyatzis, 1998; Braun &amp; Clarke, 2006).</td>
</tr>
<tr>
<td>4. Reviewing and revising codes and carrying out additional data-driven coding</td>
<td>Reviewing and revising theory-driven codes in the context of the data (Boyatzis, 1998). Additional coding is done at this stage, which is not confined by the <em>a priori</em> codes and inductive (data-driven) codes</td>
</tr>
</tbody>
</table>
are assigned to the data (Fereday & Muir-Cochrane, 2006).

5. Searching for themes
Collating codes into potential themes, gathering all data relevant to each potential theme (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006)

6. Reviewing themes
Checking if the themes produced are related to the coded extracts (Level 1) and the entire data set (Level 2) as well as developing the thematic ‘map’ of the analysis (Braun & Clarke, 2006) so as to determine the credibility of the themes (Fereday & Muir-Cochrane, 2006).

7. Producing the report
The final opportunity for the analysis in which vivid compelling extract examples are selected, final analysis of selected extracts, relating back the analysis to the research questions and the relevant literature and producing a scholarly report of the analysis (Braun & Clarke, 2006).

Table 4: The phases of hybrid thematic analysis used in this study


In this study, the process of thematic analysis started by developing six succinct a priori (theory-driven) codes (Phase 1), which are linked to the main important concepts, and their relationship as these were identified during the literature review (Chapters 2 and 3) (Boyatzis, 1998). The initial development of the code manual (see Appendix 6) took place prior to searching for these codes in the primary data, and it represents the basis for organising an initial coding of the interview data and the observational data (see Phase 3 above). More specifically, the codes were developed as tentative, reflecting the research questions of this study and the initial propositions, which are linked to the literature of
dyslexia and inclusive education. The codes were developed based on Boyatzis (1998) and identified by:

• The code label or name

• The definition of what the theme concerns

• A description of how to know when the theme occurs

An example of the six initial codes developed is presented as follows:

- **Subject**: Subject position (educational/professional background, initial beliefs about inclusion, teaching experience)
- **Tool/artefact**: Understanding of dyslexia (definition, contributing factors)
- **Rules**: Identification and assessment of dyslexia (role of the teacher)
- **Tool/artefact/objective**: Understanding of inclusion (definition, challenges, barriers)
- **Community/division of labour**: Collaboration (with other members of staff, parents)
- **Tools/Rules/object**: Inclusive practice (instruction, assessment, interaction, planning)

The development of one of the first theory-driven codes (“Understanding of dyslexia”) is discussed in more detail below. The particular code was developed based on the relevant literature on dyslexia, in which a long debate is evident over its origins and definitions. Dyslexia, as a complicated concept, is understood from different points of view and it has been associated with the medical model of disability, the social model of disability and the three-level causal model as developed by Frith (1999). It is suggested that the models are related to belief systems (Pearson, 2009) and they could be seen as conceptual tools/artefacts (Engeström, 1999). What is more, based on the causal model, the biological basis of dyslexia and the mediating role of the environment are emphasized, where the children’s experiences in school and at home mediate the development of their literacy skills.

As such, for this particular code:

- **Code label**: Understanding of dyslexia

- **Definition**: Definition of dyslexia as understood by teachers, considering relevant factors (genetic, environmental)

- **Description**: The way teachers define dyslexia in relation to the model of disability, considering models as belief systems (Pearson, 2009) and in Cultural Historical Activity Theory terms as tools/artefacts
Phase 2 included familiarisation with the data and noting down initial ideas for analysis. Microsoft Word proved to be a useful tool and, in particular, the Review function, where comments can be added in the right-hand margin of the text, was helpful during this process. It should be noted that, in this phase, a complete coding as a process was followed (Braun & Clarke, 2013). The aim was to identify anything of interest or relevance to answer the research questions and, in this sense, an excerpt of data or the field notes can be coded in many ways so as to fit the purpose (ibid). An example of initial coding using Microsoft Word of the definition of dyslexia is provided in Table 5 below:

Table 5: Initial coding using Microsoft word

For this reason, initial ideas, thoughts and reflections on the data, which were given more explicitly (at a semantic level) but also those expressed more indirectly (such as at a latent/interpretative level) were noted down. Background information and subject codes (years of teaching, qualifications, gender, age, etc.) along with numbers (e.g. Teacher 1) were also applied to the document transcripts. This gave me the opportunity to number the transcripts in which a code was identified next to the corresponding codebook. Also, it was a helpful way of quantifying the participants’ answers in order to identify the prominent themes across the whole data (e.g. the number of teachers that favour the medical model of dyslexia) and to make necessary cross-checks with the participants at a later stage. It should be noted that this was the primary list, which guided the coding process including the six elements of the second generation of Theory. This list was expanded when engaged with the emergent coding (Phase 4). For example, some of the initial codes were expanded (e.g. the code ‘Conceptualising inclusion in the context of the school’ was expanded to include the sub-code ‘inclusion through subjects' personal beliefs and emotions’), re-labelled where necessary (e.g. Understanding of dyslexia into ‘conceptualising dyslexia as a tool/artefact’) and some others were labelled into codes which, initially, were preset as sub-codes (e.g. sub-code ‘Collaboration in school’ into
‘Collaboration as an essential component of the community’ as a separate code). Two separate codebooks were developed initially: one to accommodate the predetermined data and the other one for the emergent codes.

The third step of the thematic analysis approach was concerned with theory-driven coding (Phase 3). At this point, the transcripts were imported into Nvivo 11 and it proved to be a good opportunity to double check the initial ideas and the initial coding system, which was developed in Microsoft Word, by refining, merging or deleting coding as necessary. Using Nvivo 11 in this phase made the whole coding procedure viable and quicker in terms of being able to make use of the coding tools (e.g. the quick coding bar and Code Selection at New Node). Initially, the time spent on the first transcripts was significantly more since both the initial codebooks (“Predetermined Codes” and “Emergent Codes”, see Appendix 6) were in their initial stages and still under development. The data from both the interview data and the observational notes was coded in a systematic manner within the transcripts and field notes by collating data relevant to each a priori code (Boyatzis, 1998; Braun & Clarke, 2006). Coding, classifying and labelling the data in this phase were based on observations made to determine the significant points that the participants emphasised in relation to the theory-driven codes. As mentioned already, each code was used as a label attached to an excerpt from the interview data or a section of transcript (text) from the observational notes to demonstrate its importance as a theme and/or concept.

The next three phases of the thematic analysis (Phases 4, 5 and 6 as outlined in Table 4) were conducted as an iterative process. More specifically, during Phase 4 the process included reviewing and revising the theory-driven codes in the context of the interview data and observational notes. The emphasis was placed on the appropriateness of the code labels, the definitions of the codes and also on how the codes were applied or were going to be applied to the data (Boyatzis, 1998; DeCuir-Gunby et al., 2011). As Boyatzis (1998) notes, the code labels need to be conceptually meaningful, clear, concise, and compatible with the collected data of the study. The codes need to be “close to the data” or include the constructs that were being identified in the responses of the interviewees and in the field notes. The reliability, utility and applicability of the codes to the new data was achieved by closely reading each interview transcript line by line and the field notes as transcribed into Word documents, applying the initial codes to the text in order to identify meaningful units of text (Boyatzis, 1998; DeCuir-Gunby et al., 2011). At this stage, the analysis focused on consistently observing, labelling and interpreting the codes. The importance of the process at this stage is emphasised, since “it affects the potential utility of the code and the research findings that result from the use of the code” and subsequently the “potential for replication, extension, and generalizability of the research” (Boyatzis, 1998, p.144).

At this stage, in parallel with the review of the theory-driven codes, further coding was undertaken as inductive (data-driven) and codes were assigned to the segments of the
data that illustrated a new idea or a concept, as observed in the interview transcripts and the observation notes (Fereday & Muir-Cochrane 2006). As mentioned at the beginning of this chapter, the thematic analysis approach of this study was a combination of the continuous refinement of the initial codes along with the development of the new data-driven codes (Boyatzis, 1998; Ezzy, 2002). This process increased the depth of analysis and the refinement and clarity of understanding the data. The aim was to successfully allow the codes to emerge in order to address all the sections of the data set adequately and to answer the research questions.

Phase 5 of the data analysis included the process of sorting and collating codes by identifying potential patterns, categories, themes and relationships so as to explain the findings. The process of discovering themes, patterns and relationships in the data was achieved by linking the theory- and the data-driven codes (Boyatzis, 1998). In doing so, possible similarities and differences among the diverse sources of data, areas of interest, areas of consensus and potential conflict emerged; the cluster of themes were directly related to the research questions. Throughout this phase, the analysis of the relevant data involved an iterative, non-linear process in which the identification of key concepts, themes and their relationships needed to be confirmed or disconfirmed (Fereday & Muir-Cochrane 2006). Nvivo 11 proved to be a useful tool during this phase, as brief memos, annotations, and diagrams were created to visualise and explain possible links between the nodes. For example, in this study, a memo was linked to the node ‘barriers to inclusion’ and, within it, the sub-code ‘lack of collaboration with parents’ was developed. The memo linked to the node recorded the researcher’s thoughts about the concept of barriers to inclusion and gave ideas for further analysis by asking reflective questions such as “In what terms could the sub-code ‘lack of collaboration with parents’ be seen as barrier?” and “How can this possibly influence teachers’ practice in the classroom?”. Constantly asking, reflecting and recording the ideas relevant to the concept allowed the possibility to connect the concepts of ‘tensions/contradictions’ and the elements of Cultural Historical Activity Theory such as ‘division of labour’ as presented through the theoretical framework of AT with the activity of the teachers’ practice, which can potentially lead to the concept of ‘innovation’ (Engeström, 1999). As such, Nvivo 11’s ‘memos’ and ‘annotations’ features were helpful for summarising what had been learned about the concept and reflecting on specific parts of the source (Bazeley & Jackson, 2013). As Patton (2002) suggests, such an approach during this stage of analysis takes the analysis to a more complex level, generating both indigenous and analyst-constructed typologies, making a unique contribution to the findings of a research project.

One of the benefits of making use of the hybrid thematic analysis process was the combination of theory-driven and data-driven codes, which allowed for the coding of the identified themes or concepts that are related to the theory but also to those that emerged or evolved from the primary data itself (Fereday & Muir-Cochane, 2006; Thomas, 2006;
DeCuir-Gunby et al., 2011). This approach gave me the opportunity to refine both codes and themes, determining their credibility (Fereday & Muir-Cochane, 2006) and, at the same time, to organise and re-organise them in “free nodes” or “tree nodes” (hierarchical and parallel coding) (Phase 6). Critical thinking and reflexivity were necessary during this stage (Ezzy 2002). They were simultaneously employed to confirm that the codes sensitive to the data they contain (i.e. the data coded to each node) and that each thematic grouping of codes was meaningful and concise. During this phase (Phase 6) emphasis was placed on the refinement of codes and themes at the level of the collated data extracts (all the collated extracts for each theme) and at of the individual themes in relation to the data set as a whole. The refinement of the themes focused on the identification of the essence of what each theme was about, in line with the themes overall, and the decision about what aspect of the data each theme captured (Braun & Clarke 2006). It should be noted that the collated data extracts of each theme were reviewed and organised into a coherent and internally consistent account. At this point, the collated data extracts were checked for a second time for consistency in order to validate the conclusions drawn from the themes (Bazeley & Jackson, 2013). As such, part of this activity involved the identification of sub-themes (themes within a theme) at various levels, which give structure to large and complex themes and demonstrate a hierarchy of meaning. According to Braun & Clarke (2006), the process of coding data and generating themes could be an endless one. In this study, the data analysis was conducted until data set was included in the analysis and the process of coding had become a routine which led to saturation. At this stage, a fairly good understanding was gained of what the diverse themes were, how they fit together and what the overall story was that they could tell about the data.

The final stage of the data analysis (Phase 7) included the write-up process of the findings and the discussion chapters (Chapters 6 and 7). In particular, the process included the selection of vivid extract examples, the final analysis of the selected extracts, relating the analysis to the research questions and literature and, finally, producing a scholarly report of the analysis (Braun & Clarke 2006). The aim was to present a concise, coherent, logical and insightful account of the data by providing sufficient evidence of the themes within the data, supported by rich data extracts (interview quotes and observation notes). The selected data extracts were compelling examples, capturing the essence of the point illustrated. The data in the discussion chapters is presented alongside the participants’ profession (teacher), the pseudonyms of the teachers and the associated numbers. For example, Teachers 1-5 were the Cypriot teachers and Teachers 6-10 the British teachers. The purpose of indicating the origin of the data extracts in this manner was the contextualisation of the data which allowed enhancing transparency as to where the data came from.

Braun and Larke (2006, p.94) suggest that throughout the final stage, questions including
“What does this theme mean?” “What are the assumptions underpinning it?” “What are the implications of this theme?” “What are the conditions likely to have given rise to it?” “Why do people talk about this thing in this particular way?” “What is the overall story that the different themes reveal about the topic?” be used to guide the process; these questions were used to write up the discussion chapters. Ezzy (2002) describes this process is known as ‘selective coding’ in which the emphasis is on examining relationships between the core code and other codes and comparing the coding scheme developed with the pre-existing theory. As such, the interpretive analysis in this phase entailed illustrating relationships between the patterns of meaning in teachers’ responses, together with the observational notes made by the researcher and the relevant academic literature, including other theoretical studies and discussions about teachers’ beliefs and professional practice in relation to the practice of inclusion and the concept of dyslexia.

5.5 Ensuring validity and reliability in qualitative research

Constructs of validity and reliability can be applied to different types of research and the way they are addressed varies, based on the approach used (Cohen et al., 2007). The data collected for the purposes of this study is qualitative and the following principles have thus been taken into consideration:

**Descriptive validity:** This is related to the notion of truth in research – what actually happened. It can be addressed in terms of the “factual accuracy of the account” (Winter, 2000, p.4) and completeness, including the natural setting of the source of data and how the data was collected. In this respect, a detailed description of the natural setting in each context is provided, along with the process for the recruitment of the participants and the methods used for data collection (see sections 4.3 and 4.4). The data was collected using digital audio-recorders and detailed notes in the research diary.

**Interpretative validity:** This refers to the ability of the research to catch the meaning, the interpretation and intentions that the data has for the participants themselves on their terms (Cohen et al., 2007). As such, threats to this principle are presented in the following aspects: the role and influence of the researcher, generally known as *researcher bias* (Maxwell, 2013) could affect the quality of the study, not only during design process but also during the analysis stage (Guba & Lincoln, 2008). For instance, the researcher’s main ideas and preconceptions in areas such ‘support for students with dyslexia’ and ‘teachers’ role and responsibilities’ are based on personal experiences from a different cultural context, which may influence the study and the interpretation of the findings. In order to minimize researcher bias limitations, I used reflexivity as a strategy, based on my
preconceptions and personal beliefs. In doing so, the use of the research diary as a tool, as described above, proved to be very important in disclosing them and being able to reflect upon them. Another strategy used was that of methodological triangulation, for which interviews, observations and the follow-up discussions were utilised.

Another aspect to be taken into account was the use of a preconceived framework for data collection and data analysis such as AT. Again, this was addressed by maintaining levels of reflexivity during data collection by following a step-by-step process of data analysis. This included a systematic process of looking for ideas that were relevant and important to the interviewees. More specifically, the use of a hybrid approach to thematic analysis (Fereday & Muir-Cochrane, 2008) enhances rigour in the study and the detailed discussion of the data analysis process illustrates the transparency of how the overarching themes were developed. In addition, the data interpretation remained directly linked to interviewees’ words, as demonstrated by the use of excerpts from the interview data to support the overarching themes (Chapters 6 and 7).

Finally, in order to establish interpretative validity, as strategy of member-checking, peer debriefing or respondent validation (Bryman, 2012) was used. In this study, member checking was used in the form of ‘mirror data’ (Edwards et al., 2010) using the Developmental Work Research Model (DWR). Teachers were able to cross-check the data through the analysis of their responses when they were asked to reflect upon their practice (Chapter 7).

**Theoretical validity:** This principle refers to the theoretical constructions that the researcher brings to the research, including those of the participants of the study (Cohen et al., 2007). To this extent, the current study is based on the AT framework, which explains the phenomenon under study. Threats to this validity can occur through not considering alternative understandings or explanations of the data (Maxwell, 2012). The potential for this to happen, considering aspects such the concepts of historicity, artefacts and subject position did exist. It was addressed by following the reflexivity strategy and the researcher being active in engaging in reading group discussions about alternative explanations of the theory. In doing so, constructive comparisons with the literature were made, which helped to clarify the notions and obtain a more in-depth understanding of the data.

**Generalisability:** This principle may be viewed as how the theory generated can be useful in understanding other similar situations (Cohen et al., 2007). It can refer either to *internal generalisability*, which means to generalize a conclusion *within* specific groups or communities, such as teachers and/or primary schools in this study, and to *external generalisability*, which extends beyond that group or community (Bazeley & Jackson, 2013). For example, in this study, the development of the theory to give an insight into
primary teachers’ beliefs and practice for students with dyslexia can be extended to other cases as well (Yin, 2011). To address this principle, this study has provided a rich account including the process of selecting the research participants, a detailed description of the population studied and the contexts in which the study took place. These strategies to establish internal generalisability are evident in section 4.3 (Data Collection Procedure) in which a thorough discussion for selection of the schools and the participants is presented.

Reliability: It is argued that reliability in qualitative research is a contentious issue (Cohen et al., 2007) since this assumes the possibility of replication. Studies on the premises of naturalistic studies and qualitative studies are characterised by the uniqueness of the situation. However, that is not to say that qualitative studies do not attempt replication in generating, refining, comparing and validating constructs (Cohen et al., 2011). According to LeCrompte & Preissle (1993, p.334), such replication can include the following: “The status/position of the researcher; the choice of informants/respondents; the social situations and conditions; the analytic constructs and premises that are used; the methods of data collection and analysis.”

The current study attempts to establish an audit trail which includes the purpose of the study and the theoretical approach used, a detailed and thorough account of the selection and recruitment of the participants, clarifying and explaining the research design decisions by clearly describing and explaining the data collection methods (Chapter 4) and analysis techniques (Chapter 5) and then reporting the research findings (Chapters 6 and 7). Providing a detailed account of the research methodology was considered a key strategy for establishing reliability in this study and minimising any possible limitations related to it.

5.6 Conclusion

This chapter has offered a description of the data analysis approach used in this study. More specifically, aspects such as the analytical framework for data analysis and the hybrid step-by-step process of thematic analysis in relation to the framework for data analysis were presented along with some illustrative examples. Finally, the chapter has also addressed aspects of validity and reliability in qualitative research. Having set up the data analysis process of the study, the following chapters present the findings. More specifically, Chapter six discusses the overarching themes developed and extracted from the data then Chapter seven focuses on the analysis and interpretation of the accounts of four teachers, which address teachers’ professional practice in relation to their beliefs about inclusion and dyslexia.
CHAPTER 6: TEACHERS’ PERSONAL INTERPRETATIONS OF INCLUSION AND DYSLEXIA IN THE CONTEXT OF THEIR SCHOOL

6.1 Introduction

The present study has employed a qualitative design for data collection and analysis, as described in the previous chapters. In this chapter, the research findings of the study will be presented and discussed, while reflecting on sub-themes based on the CHAT framework which is the primary analytical framework in the current study. The discussion of the findings, drawing themes from the theoretical framework of CHAT, considers the dialectical relationship between the subject and the collective object that drives the activity of teaching and supporting students with dyslexia forward. It is suggested that the way teachers implement inclusion in practice in their classrooms is not only influenced by systemic contextual factors, such as the ethos within their own schools as well as the wider educational system’s approach to inclusive education, but equally importantly by their understanding of inclusive education. The sub-themes developed in this chapter are not mutually exclusive but should be regarded as a dynamic interaction with one another: contextual dilemmas; interactive and social model approaches to the understanding of the learning needs of dyslexic students, which may in some cases contradict their practices. Each component of CHAT is presented along with their sub-themes in order to demonstrate the link between the themes and the sub-themes.

The themes are addressed in order to provide answers to the study’s research questions:

1) How do primary teachers’ understand the concepts of inclusive education and dyslexia in the context of their school, based on cultural, social and historical factors?
   a. What are the differences and similarities among the teachers in the two cultural contexts: Cyprus and North West England?

2) How is teachers’ understanding of inclusion and dyslexia related to their classroom practice regarding dyslexic students in the two cultural contexts?
   a. What is the contribution of social, cultural and historical factors to their classroom practice?

The identified contextual challenges can be related to several activity system levels and they have a direct effect on the way teachers understand complex concepts, such as dyslexia and inclusive education, and how their understanding is related to the collective activity of classroom teaching. For instance, these activity system levels address issues at the local-, meso- and macro-system levels and include a lack of physical, financial and
human resources on school and district levels, big class sizes, a lack of adequate initial and continuing teacher education programmes and curriculum constraints that continue to play a role in classrooms in mainstream schools in Cyprus and North West England. Even though the overall findings illustrate that contextual issues such as policy, structure and school’s culture can shape the broader school context in which inclusive education is implemented (Sikes et al., 2007), it is suggested that teachers, as the subjects of an activity system, through their personal understandings in a dynamic interaction with contextual issues play a catalytic role in the way inclusion is implemented in the context of the classroom.

In the following sections, the findings are discussed in relation to the framework of AT in an attempt to answer the research questions of this study.

1) How do primary teachers understand the concepts of inclusive education and dyslexia in the context of their school, based on cultural, social and historical factors?

   a. What are the differences and the similarities among the teachers in the two cultural contexts: Cyprus and North West England?

1) The conceptualisation of inclusion in the context of the school

1a) Defining inclusion as a shared object:

Drawing on AT, the object drives forward the activity of supporting dyslexic learners in the class and it is seen as the desired collective outcome which in this study was the successful inclusion of all children into mainstream classrooms in the three schools respectively.

One sub-theme that emerged from the data was the fact that the UK teachers referred to inclusion as providing equal opportunities for all children. For example, James, a Year 4 teacher at St Andrew’s Primary School notes:

“Inclusion basically is treating everyone equally, regardless of where they come from, their background, their religion; it is about treating them the same in terms of work and everything. And in terms of disability, they are all pretty much the same, regardless.” (James, Year 4 teacher, UK)

In a similar vein, Gillian, the nursery teacher at St Andrew’s Primary School reports:

“Every child has an entitlement to learn, no matter what their learning style is, no matter what their home environment is, no matter what their culture is, no matter what their prior experiences are, no matter what the personality of their learning
preferences are, so it is all about making sure that every child matters, that every child has the same experiences, has opportunities, has the same opportunities because they might not all learn from the same experiences, because all they are learning in different ways, so it is about making sure that provision is a wide provision” (Gillian, EYFS teacher, UK).

Both teachers emphasize the need for treating everyone equally, despite specific characteristics of students such as their learning style, their home background and prior experiences and disability. This echoes research that defines inclusion as a broader concept, which is concerned with diversity in terms of needs, abilities and characteristics rather than only special educational needs (Waitoller et al., 2009).

Some of the teachers, through their definitions about equal opportunities, seem to take responsibility for all children or they are thinking about their role for those children. For example, Louise, a Year 2 teacher, mentions:

“\text{I would define it [inclusion] as all children with different abilities having the same opportunities within the classroom. Lots of things to display in the classroom, like visual timetables I used that, with all children regardless... I would perceive their needs as not different from the other children’s and that give them a sense of security}” (Louise, Year 2 teacher, UK).

Olivia is the Cypriot teacher who referred to equal opportunities in her definition of inclusion. She specifically defined inclusion as:

“\text{Inclusion is that of all children, with and without learning difficulties, in an environment which offers equal opportunities for learning. [...] we (teachers) can try to integrate them in a more equal way to the lesson, so as not to feel that ‘I cannot do this’ “}(Olivia, third Grade teacher, Cyprus).

As can be noted above, both Louise and Olivia have also included their role as teachers in their definitions, in terms of what they need to do or what they are doing in their classes to accommodate the needs of those students. In AT terms, this can be seen as the contribution of the individual subject towards a goal-oriented activity such as that of classroom practice for providing equal opportunities for learning. AT (as derived from Leont'ev's conceptualization) considers human subjectivity as both stemming from and existing within activity processes (Stetsenko & Arievitch, 2004), in which a purposeful (object-related) activity is the principal form of human life (Stetsenko, 2005). The way humans develop is based on the active transformation of existing environments and the creation of new ones through human activity (Oswald, 2014).
This is further supported by the literature, which emphasises teachers’ responsibility, and efficacy beliefs that all their students can succeed. In particular, research studies on teaching efficacy have suggested that teachers who are confident about their ability to impact positively on their students can shape their attitudes, teaching behaviours and practices accordingly (Bandura 1997; Tschannen-Moran & Hoy, 2001, 2007; Tschannen-Moran, Hoy, & Hoy 1998). For example, teachers who are efficacious tend to assume greater responsibility for meeting the needs of their students. They believe that all students are teachable and reachable and can succeed, and that their learners’ difficulties can be addressed through appropriate teaching methodologies and practices (Bandura, 1997; Pas, Bradshaw & Hershfeldt, 2012; Soodak, Podell & Lehman, 1998). Another study conducted by Engelbrecht, Nel, Nel and Tlale (2015) indicates that teachers’ personal interpretations of concepts such as inclusion, in interaction with contextual factors, can determine the way inclusion is implemented in classrooms as well as how they support learners.

Other teachers in this study have addressed the definition of inclusion as a shared object of social acceptance. More specifically Jane, the SENCo of St Andrew’s Primary school reported:

“From my working community, these students have Special Educational Needs and specific special needs and, in some cases, they are entitled to access the school in their community and to be accepted by their peers and I am not saying that their peers would know those differences. For example, there is a little girl in reception who has cerebral palsy, she is in a wheelchair and she is not verbal at the moment. The children are not aware of those differences, though” (Jane, SENCo, UK)

She continued:

“We use that as a positive start, pointing out to the children that she is one of us and that’s why in our school we do the things we do, [...] we do more the ‘family feel’ so whatever your issue is, you are involved. So, I mean, whatever their differences are, their needs… I have a little boy who has diagnosis of ADHD and he finds sitting and listening very challenging but he is still a [class’ identity name] superhero; he is still one of us, which is a support to his additional needs. Because I feel the school should reflect society; in society there will be people with differences and complex needs. The school should reflect society” (Jane, SENCo, UK).

It is noted in the field notes that the “student with ADHD was spending most of his time in the class, taking part into the class activities and he has been a superhero like his peers.
He also seemed during the literacy lessons to be grouped with the lower ability group, in which there were students with EAL, travellers and the whole group was supported by the teaching assistant” (Transcript 12, Year 1, Field notes).

Aliki, a First Grade teacher at St Neophytos Primary School (Cyprus) reported:

“For me, inclusion is for all children despite their abilities, skills, learning difficulties, etc. and I believe that this [inclusion] is very important so that these children can be accepted and can live more easily in a society of acceptance. Because if the kids do not learn to accept those other kids that have a problem, then it will be difficult for them to accept them if they [children with SEN] will be citizens of the country” (Aliki, First Grade teacher, Cyprus)

As can be noted, both teachers have a similar approach to their understanding of inclusion in terms of social acceptance. More specifically, they highlight the importance of those children being accepted by their peers and being entitled to access to their school. What should be noted is that teachers think of the school as a reflection of the society to which all students belong and students need to be treated equally, despite their differences. Such an approach echoes research related to the human rights model of disability and to the social inclusion of people with disabilities, which was emphasised by the United Nations Convention on the Rights of Persons With Disabilities (Harpur, 2012; Symeonidou, 2015). It is also worth mentioning that, even though both teachers seem to take a more medical approach to describe a child’s difficulties (using terms such as ‘diagnosis’ and ‘they have a problem’), they still think inclusion as embracing diversity and accepting people despite their differences.

Aliki also made reference to the fact that children are not often aware of those differences:

“I remember that when I used to take my two daughters to their swimming lesson, there was a little girl with Down Syndrome and they were all playing together, without the label that ‘this child is different from us’. I mean, children are not very aware of such differences; we are the ones who label other children and make our children think, ‘Oh this is somebody who is different from us’” (Aliki, First Grade teacher, Cyprus).

This sense and culture of acceptance has been well documented and observed in Aliki’s class: “She paired up the students with difficulties in the Greek language, because they were from a different cultural background and had behavioural difficulties, with more able ones to support them in the class. There seems to be culture of acceptance and children seem to be interacting with each other without spotting differences or making comments about the language or the cultural background of the other children; if one of the children
who are struggling with the Greek language makes a mistake, their partner tries to support by pronouncing it correctly” (Transcript 15, First Grade).

Aware that adults are those who may label children based on their differences and cultivate more negative attitudes towards them, both Aliki and Jane seem to be taking responsibility as subjects in working towards the social acceptance of those children in the school. Jane has also taken the opportunity to use those differences as a positive starting point in her school. One commonality among Aliki, Jane and Yianna is that they interpret inclusion in terms of social acceptance; their emphasis is on the social benefits of inclusion.

What is more, all teachers, including Jane and Aliki, interpret inclusion as a concept that is concerned with all children, despite their different abilities, skills, and learning needs. Teachers from both contexts address inclusion in terms of a shared object with the emphasis on the social inclusion and acceptance of the children and the equal opportunities for participation in the learning process. These two main objectives, along with the subject’s role in implementing and taking an active part in the process, seem to be the main understanding of inclusion by some of the teachers in this study.

**1b) Defining inclusion as a shared object constrained by embedded rules**

This sub-theme is concerned with the aspect of a shared object of inclusion, which is constrained by embedded rules. The constraints can create tensions and contradictions when working towards the overall objective of inclusion within an activity system. The concept of contradictions or tensions refers to possible clashes within the elements of an activity system or between activity systems (Kuuti, 1996). Engeström (2000, p. 964) states that they are usually an indication of ‘developmentally significant systemic contradictions’, which have the potential for change within the activity. In other words, contradictions can lead to innovations within activity systems when the tension is resolved.

It is important to underline that the participants in each school came from different cultural backgrounds and often had different professional and/or personal experience of the purpose/understanding of inclusion and dyslexia. Teaching and classroom practice are often shaped by such experiences, belief systems, society’s values, contextual challenges and school regulations and rules. It is suggested that the interaction of these factors shapes teachers’ interpretations of inclusion.

Aliki, First Grade Cypriot teacher, referred throughout her interview to the placement of more severe cases of students in the special unit. She reported:

"In the case of a student who is a severe case, the case of an autistic child, the units should exist anyway. Not only to help those children to progress"
academically but, on the other hand, it is very difficult for these children to be in the classroom along with their peers; there are too many hours for them... It is difficult for their classmates too. If an autistic child is making a noise and disrupting the class, it will be difficult for other children to concentrate during the lesson. Nor will the teacher know how to handle the situation. Thus, I am suggesting that a few hours in the (resource) unit, which will **be part of the school, on the school premises** [her emphasis] might be a solution for inclusion” (Aliki, First Grade teacher, Cyprus)

Aliki, as discussed in the previous sub-section, was one of the teachers who defined inclusion as an objective in terms of social acceptance and she seemed to emphasise the need for those children to be socially accepted by their peers as this would affect them later in their life as citizens of the country. At a first glance, there seems to be a tension between her initial definition and her opinion of inclusion in practice in the school context, in which the solution is the placement of more severe cases, such as children with autism, in the unit for a few hours per day.

Drawing on AT, it could be suggested that Aliki theoretically approaches the definition of inclusion as a shared object with emphasis on the social aspect of inclusion but, when it is specifically addressed in the school context, she seems to consider the existence of the unit as the solution for particular categories of students. The immediate object seems to be the academic progress of both the student with autism and their peers. Classroom management, behavioural difficulties and interruption of the class, along with the lack of knowledge of the teacher of how to handle such situations, act as **constraining rules** towards the achievement of the objective.

As mentioned earlier in this section, concepts such as inclusion are multidimensional and can be understood in relation to other contextual challenges, which are in dynamic interaction with one another within an activity system. Aliki stated:

“...I think there are many issues when it comes to this [inclusion]... I mean, OK, I support inclusion but I believe it is a very difficult thing [...] we always see classes that have kids with issues, who are a challenge to be handled by the teacher... If there are 20 children or 22, 23 in your class and, at the same time, there is one child with a problem – it might be a learning problem, it might be a behavioural one – that distracts the other children’s attention and the teacher has to devote time to this [child] by ‘taking’ time from the other children's (learning) time.” (Aliki, First Grade teacher, Cyprus).

This quote again describes a tension between Aliki’s overall attitude towards inclusion and her personal belief that there are difficulties for a teacher to successfully implement
inclusion due to embedded rules and regulations. Such examples of rules, identified in the quote, could be the class size, the staff/student ratio, the limited individual time devoted to each student and the lack of a teaching assistant in the class to support some of the students.

Across teachers, it is evident that there are challenges to be faced when it comes to inclusion. For example, Olivia is concerned with the pressure of time in her particular profession in relation to students who need additional support. Olivia referred to the tiredness and exhaustion felt when attempting to achieve this:

“You (as a teacher) are always in a rush; this is so tiring and exhausting sometimes, not only for us but also for the children. I personally feel that I am like an athlete in a race, which is a wrong attitude, because it is your responsibility not only to educate children but also to give them joy through learning. If I constantly ask them ‘write this quickly, we need to hurry up’ where is the joy in learning? We are constantly in a stressed mood and you transfer your stress to them” (Olivia, Third Grade teacher, Cyprus).

She continued:

“We have to tackle many obstacles and barriers; we have a quite inflexible educational system and a national curriculum that does not allow you to do many things with it to accommodate it to the needs of your students. But these children need additional support and you don’t have enough time to give it” (Olivia, Third Grade teacher, Cyprus).

The quote above describes the tension created between the rules of the limited time and the curriculum objectives and her perceived responsibility for educating all children. Yianna, a Fifth Grade teacher, also addressed these factors in her interview and in the follow-up discussion:

“I would say that the curriculum itself, the way it is now, is considered as a barrier. If you think about the objectives we need to attain by the end of the academic year, the very limited time, especially for the core subjects, the class time given to achieve these class goals, it is very difficult” (Yianna, Fifth Grade teacher, Cyprus).

Through the quotes of the teachers, another rule, which is embedded within the activity systems of the schools, is that of the national curriculum of each country and the objectives that the teachers need to achieve within the academic year. The Cypriot teachers, for example, referred to the inflexibility of the national curriculum, which cannot be adapted to accommodate the needs of individual students in the class. It is well documented in the literature that, in Cyprus particularly, the education system is highly
centralized and the curriculum is guided by the Ministry of Education and Culture (Angelides, Charalambous & Vrasidas, 2004; Pashiardis, 2004). The Ministry of Education and Culture (MEC) has control over the curriculum and provides the textbooks and other resources which are needed in schools (Angelides et al., 2004). Changes in the development of the national curriculum in Cyprus have occurred since 2008, based on international calls for change in policy documents related to inclusive education. The Inclusive Education Advisory Committee (IEAC) evaluated the proposed New National Curriculum (NNC) based on its terminology, underlying philosophy, and the content (objectives, materials, suggestions for activities and the methods of assessment) (Symeonidou & Mavrou, 2013). The NNC has been implemented in all state schools in Cyprus since the academic year 2010-2011. The implementation of the NNC was concerned with the education of disabled children and it was designed to accommodate disabled children within the philosophy of a ‘human and democratic school’ (ibid). The philosophy of a ‘humane and democratic school’, which respects diversity and the need to accommodate the needs of all students, is also underlined in official documents of the Ministry (REF documents, MOEC, 2008) and the National Curriculum (Mavrou & Symeonidou, 2013). However, it is observed that teachers still experience difficulties in achieving the curriculum objectives within the limited time, at the expense of accommodating their students' needs.

This is also the case of another Cypriot teacher, Stavros, a Sixth Grade teacher:

"Ideally, I think that it [inclusion] could be achieved through a collaborative culture within the school [...] However, this is not always easy to achieve, since schools have so many other responsibilities and commitments and, in essence, all the directions and instructions come from the Ministry [of Education]. For example, this year we’ve set three school goals following the guidelines of the Ministry. One is related to raising academic standards in maths and literacy [...] as a school, we are working towards achieving this; dyslexia and learning difficulties are set as a subcategory under these [academic standards]" (Stavros, Sixth Grade teacher, Cyprus).

Here, Stavros expressed his view with regard to how he envisions inclusion in the context of his school, something that clashes with the responsibilities and commitments of the school towards the objectives set by the Curriculum. While it is evident that teachers think of inclusion as a concept that can be implemented through different practices, there are embedded rules which seem to constrain and act as barriers towards achieving it.
1c) Inclusion through subjects' personal beliefs and emotions

The previous two sub-sections explained how teachers understand inclusion in terms of a shared object and how this is embedded within rules. The object based on teachers' interpretations is embedded within rules which can be seen not only in the micro-system of the school but also in wider systems, such as that of educational system in each context. Contextual influences at different levels interact with each other in a dynamic way, which can allow the facilitation of a better understanding of teachers' interpretation of inclusion (Engelbrecht et al., 2015). AT takes an approach that moves away from the individualistic notions of human nature, intrinsic to the individual, and emphasizes human essence as the “totality of all social relations” (Stetsenko & Arievitch, 2004, p 483). The subject is in a dialectic approach to the object of an activity and is positioned within the social-cultural contexts that are interwoven with them (Stetsenko, 2005).

When individuals are working towards the object, this has a transformative effect on both the individual and the wider environment. In this regard, the teachers in this study give personal interpretations of the concept of inclusion, which is in a dialectic approach to the object of the activity (in the context of this study, teachers' professional practice) and drives the development of human subjectivity. How the subjects are positioned in the activity system of a school and of a classroom can create a multiplicity of positions and perspectives, which are both dynamic and independent. Subjects bring their own different histories to the activity system, which can create a source of tension and contradiction (Roth & Lee, 2007). Teachers' beliefs and feelings towards inclusion and their ability to support all learners in the class are identified as another sub-theme for the understanding of inclusion, as presented below.

In his interview and follow-up discussion, Stavros, a Sixth Grade Cypriot teacher, refers to his personal understanding of inclusion as creating a culture of acceptance and collaboration:

"I believe it [inclusion] is about creating a culture of acceptance and collaboration, to make [students] feel happy and satisfied with themselves. I will support them as much as I can but my emphasis won't be on the technical side, e.g. to learn a few things; it will be on supporting their needs. For example, if a student approaches me and feels that he needs to go out of the class for five minutes, I will let him do so because I will be paying attention to his needs. It is the personal interest you demonstrate, the special interest in a student. This is what I think they need: a personal understanding of their needs” (Stavros, Sixth Grade teacher, Cyprus).

Stavros believes that inclusion could be seen as means of creating a culture of acceptance in which the students should feel happy in the class. He continued by explaining his beliefs about emotional support:
“What I try the most to do in class is to support those students emotionally and psychologically. I build on that because I believe that, if a student’s emotional ‘world’ is improved, then this will have an effect on their academic performance too. I believe that, because of the labelling they get in schools, these students feel inferior; if someone gives them the opportunity to believe in themselves and to feel that their problem is no longer a barrier in their lives, even if they lack the knowledge but have confidence and self-esteem, they can become great professionals, they can succeed […] these are my personal beliefs as a teacher” (Stavros, Sixth Grade teacher, Cyprus).

Stavros believes in his ability to emotionally support his students as a teacher and make them believe in themselves. He refers to students with learning needs as the ones who have a ‘problem’, indicating a possible conflicting view of inclusion in relation to learners' difficulties but he seems to take responsibility for his students in order to support their needs and enhance their self-esteem. This was also recorded during the school visits to the particular class:

“There seemed to be an equal participation in the lesson. The teacher was quite interactive with his students; he encouraged all the students to express their opinion and there seemed to be a friendlier atmosphere and learning environment in the classroom. The students felt confident in raising their hands to express their opinion. For example, Angeliki (a student with Learning Difficulties) was keen on participating in a reading comprehension task and giving her own answer, which wasn’t the most relevant to the teacher’s question, but the teacher encouraged her to develop her answer by asking her further questions rather than offending her or discouraging her in front of her peers.” (Transcript 12, Sixth Grade, 15.02.2015 field notes).

It is suggested that teachers’ beliefs in their ability and their high expectations of their students can influence their academic achievement and school experience in various ways. For example, teachers who consider themselves as competent and efficacious educators tend to implement more innovative instructional strategies and approaches in the classroom and for classroom management (Caprara et al., 2006), they take responsibility for students with special educational needs (Jordan et al., 2003; 2009), they successfully manage classroom problems (Chacon, 2005), they enhance students’ motivation (Arbreton, & Anderman, 1993) and they increase their self-esteem (Borton, 1991). Finally, teachers’ efficacy beliefs can also contribute to the promotion of the students’ own sense of efficacy, encouraging their involvement and participation in classroom activities and tackling their difficulties (Ross, Hogaboam-Gray & Hannay, 2001).
In this regard, two more teachers, Louise and Victoria, expressed their beliefs about the significance of emotional support and well-being to their students, acknowledging the importance of their sense of belonging, being part of the class and feeling equal and happy.

Louise, a Year 2 teacher at St. Andrew’s primary school, addressed the need to build students’ confidence in learning in the classroom:

“I do feel that a lot of one’s attention is needed to build the confidence in learning, you know. It is the key to making progress isn’t it? I very much feel that I nurture my children to learn; you just give them all the nurture they need and they feel they are confident to do things […] because we build this relationship where they are confident, they are happy, they put their hand up when they need to know something, they ask, I think this is one of the biggest moves to their progress” (Louise, Year 2 teacher, UK).

This quote was based on a follow-up discussion in which observational notes were made with regard to the learning environment of the class; the teacher was interacting with all her students in a friendly way: “Louise seems to build a friendlier rapport with her students. A student approached her to ask a question but she challenged him to ‘have a go’, to try himself first and then she helped him find the answer’ (Transcript 20, 21.04.2015).

Victoria, a Reception Class teacher, reported:

“I believe it is more about getting a balance really and one thing we know about Fen [a student with ADHD/SpLD] is that she is a happy little girl and I think that inclusion is straight away when a child is happy. If she wasn’t, then we would not be meeting her needs but she is a happy little girl. That was amazing because, when she started, it took her a long time to settle, she was very upset and she now feels like a part of the class and the other children see her as part of the class and they are friends. That’s the key, really” (Victoria, Reception Class teacher, UK).

All three teachers emphasized the students’ feelings and the emotional support that the teacher can give students in order to motivate them and give them confidence to participate in the lesson. Drawing on AT, teachers seem to place emphasis on the subject, which includes their role and responsibility towards the support of those students. All teachers seem to be working towards the shared object through the use of different tools (for example, their approach towards the students or the ‘have a go’ technique in the case of Louise). Such an approach challenges the idea that subjects are passive ‘recipients’ who adapt to their environment but rather positions them as active agencies, competent to change themselves and, consequently, the environment in which they are interacting.
From what they say (above), it could be suggested that the teachers believe inclusion is about providing support to the students to meet their needs, to make them happy and to feel equal with their peers in the mainstream classroom, by accommodating the environment in order to achieve it.

One of the areas identified in supporting all learners with inclusion is that of promoting not only academic, practical and social aspects of learning but also to emotionally support all learners as part of effective teaching in heterogeneous classes (Engelbrecht, 2013).

Stavros explained his role in this regard for supporting dyslexic students in his class:

“To be honest with you, since there are SEN teachers for this [support of dyslexic students], it is their responsibility. My role in class is to differentiate the lesson and to support them in other ways, not to have that specialized role in this regard” (Stavros, Sixth Grade teacher, Cyprus).

Stavros’ perceived role of the SEN teacher seems to be influenced by different factors which are interwoven within an activity system. For example, for both teachers, SEN teachers are considered responsible for SEN students since they have the specialized role to support them. Such an approach is based on belief norms that seem to be established within the Cypriot educational system and imply segregation approaches towards students with SEN. More specifically, research studies conducted by Angelides et al., (2006) and Angelides (2008) illustrate that teachers view their role as that of ‘regular’ teachers while there are ‘special’ teachers for SEN students, since the education of these students was traditionally provided in special schools, until the introduction of the 1999 Education of Children with Special Needs Act (N. 113(I)/99). Such an approach may be attributed to teachers’ attitudes, to the culture of the school (Angelides & Stylianou, 2005) and to the historical context of the development of the concept of inclusion in the Cypriot context (Symeonidou & Phtiaka, 2009). However, in the case of these teachers, their shared understanding of the role of the SEN teacher also seems to be influenced by existing practices and rules with regard to the in-service training teachers receive in Cyprus. Relevant in-service training for students with SEN seems to focus primarily on SEN teachers, who are considered the ‘experts’ on such issues. Grigoria, reported:

“I was looking for seminars related to dyslexia but in recent years, at least, I did not come across anything. If there were, though, they [the Ministry of Education and Culture] used to address them only to SEN teachers, not to us. For example, when we are informed about seminars and workshops, the description we get is ‘seminar on learning difficulties for SEN teachers’ or ‘ADHD workshop for SEN teachers’. The Ministry sends newsletters to the school, indicating who needs to attend the seminars” (Grigoria, Third Grade teacher, Cyprus).
Olivia, in a similar vein, expressed her view:

“We need more practice-based workshops really, on how to support these students […] I would be interested in going to them but if there are any, the SEN teachers are the ones who usually attend them” (Olivia, Third Grade teacher, Cyprus).

The above quotes describe a situation in which there is a tension between the values of inclusion, as highlighted in official government documents (MoEC, 2008), and the categorical approach that is reflected in the in-service training for teachers in schools. In the Cypriot context, it seems that such seminars do not emphasize inclusion and most of them focus on particular categories of students, e.g. those with Learning Difficulties/dyslexia, ADHD and autism which is concerned only with the SEN teachers. Cypriot teachers are in need for more practice-based and informative seminars on how to support SEN students in practice. In addition, this approach seems to highlight the responsibility of SEN teachers for those students, which may imply also segregation approaches that contradict the concept of inclusion.

It is also worth noting that teachers also expressed their feelings about their job and their students in the interviews. Research studies conducted within the framework of cultural-historical Cultural Historical Activity Theory have noted that emotions, along with the concept of motivation, play an integral part in human activity in general. More specifically, it is noted that Leont’ev (1978), in his work on Activity, Consciousness and Personality, refers to the dialectical role that motives and emotions play in activity. In essence, how individuals perform at work is mediated by the way they feel. This relationship is not unidirectional, given that the way people assess their performance is also mediated by the way they feel. For example, Olivia referred to the feelings of pressure that she experiences in her profession. She reported:

“I used to work with mixed ability groups in my class but I have to move on with the average students – not the talented ones or the slow ones but the ones that are able, the average ones. Unfortunately, the slow ones fall behind and that makes their inclusion less successful, despite the various stimuli that we sometimes provide during lessons. There is so much pressure to achieve the curriculum objectives and such limited time to give everyone an equal opportunity to participate and this is tiring and exhausting for us as teachers. You feel stressed all the time” (Olivia, Third Grade teacher, Cyprus).

Olivia seems to share a similar understanding of how inclusion cannot be successful in terms of equal participation, due to the pressure the teachers experience. Based on the different contexts that the participants come from, the factors might be different, as in the
case of Cyprus, where it could be the inspectorate and the pressure from the Ministry to achieve the curriculum objectives by the end of the academic year. However, teachers, experience pressure, stress and exhaustion from their work. The way they feel seems to have an influence on the object, forcing teachers to move on with the average students while the less able ones fall behind, as Olivia points out. Such feelings of tiredness and pressure may have mediated the way Olivia interacts with the object, which, in this case, is also to achieve the curriculum objectives rather than the equal participation of all students in the class.

Other teachers, such as Stavros and Gillian, spoke of the challenges, love and enjoyment, which seem to mediate the work of both of them in a positive way. Stavros said:

“Sometimes I feel it is a challenge working with those students in the class, because that makes me ‘go out there’ and search for other ways to help them. And when you manage to help them and see them being confident and satisfied with themselves, you definitely love your job” (Stavros, Sixth Grade teacher, Cyprus).

Stavros spoke of the challenge that triggers him to take action and search for better ways to support his students in order to achieve the objective of making them feel confident and satisfied with themselves. His emotions mediate the way Stavros feels about his job when he feels that he achieves the object. From the above quote, it seems that his emotions mediate his performance in a positive way.

Gillian, an EYFS teacher stated:

“I really enjoyed the Early Years. I was sent to all the relevant INSET and other courses and so I have 20 years of teaching experience and 6 years in nursery but I do love my job in EY because it is that sense of wonder, it is that sense that everything is brand new to them you know… play and also the nature element where they need that support and so on... They all have the same experiences and they get to learn brand new things” (Gillian, EYFS teacher, UK).

Gillian also expressed emotions of love and enjoyment towards her profession as it seems that through Early Years the students learn through play and they have the same experience of learning. This also seems to reflect her initial interpretation of inclusion, that every child is entitled to learn, regardless of their differences, and that they should all have access to the same experience of learning. In both quotes, the teachers seem to have more positive emotions towards their profession and towards inclusion.

2) **Collaboration as an essential component of inclusion (Community)**

This sub-section discusses collaboration in the community, which was identified as another important element during the interviews and follow-up discussion with the
teachers. Most of the teachers referred to the importance of collaboration with other members of the school staff but also with external agencies. It is suggested that collaboration, leadership and family engagement could be seen as important factors linked to the successful implementation of inclusion (Cook & Friend, 2010). However, difficulties in collaboration can be understood in relation to other interactive factors, such as the socioeconomic status of the parents, professionals’ attitudes and the school’s own attitude towards cultivating collaboration among teachers. Such factors can create tension in the activity system of the classroom when working towards the shared object. The tensions can be resolved through effective leadership, which encourages constructive communication with other professionals and collaboration with other teachers and members of staff, such as the SEN teacher in the form of co-teaching (Friend & Bursuck, 2012; Friend, Cook, Urley-Chamberlain & Shamberger, 2010).

2a) Collaborating with teachers and other members of staff

Collaboration with teachers and other members of staff has been emphasized as an important factor in meeting the needs of students. The development of an inclusive school depends on the efforts of multiple stakeholders involved in the school’s system (Villa & Thousand, 2005). As Victoria, the Reception Class teacher and Gillian, the Nursery teacher at St. Andrew’s school, mentioned:

“For example, this year we have a child with visual impairment that I never came across that before so I’ve had a really good conversation with the nursery teacher, obviously, because she had taught other students with VI for years, so she had some really good ideas on how to deal with this condition and then, obviously, we had the authority to bring the visual impairment team which is really supportive… so I know I am meeting the child’s needs at the best I can when it is shown that it is not a barrier to learning” (Victoria, Reception Class teacher, UK).

“Well, we are doing a lot more now. It is just getting school together really. We do something called ‘foster meetings’ so all the teachers and the lead teacher of the Early Years managers get together so we have half-term meetings where we talk about issues around children’s learning needs and the development in our school” (Gillian, EYFS teacher, UK).

Aliki, a First Grade teacher at St. Neophytos’ School, referred to the collaboration with the other two First Grade teachers, with regard to the students who experience difficulties during the First Grade:

“I think it is too early to label children at this age for the difficulties they experience in literacy. We have decided that during the academic year, the three teachers of the First Grade arrange a meeting, discuss which children we believe present
some first signs of struggle with literacy and we have agreed that one of us will take all the students for some hours per week. For example, we identified six. One teacher will get those six and we, the other two teachers, will take responsibility for the rest of her class, 10 or 11 students each. Thus, our classes will become 30 or 32 for some hours per week” (Aliki, First Grade teacher, Cyprus).

In AT terms, all the teachers seem to be supportive of communication and collaboration with other teachers within the school community while working towards the shared object. From their quotes, it is evident that all teachers acknowledge the importance of meeting their students’ needs (shared object) in their class, which was also emphasised in the teachers’ personal beliefs in the case of the UK teachers; the agentive nature of the subjects is evident as they have taken the initiative to approach their colleagues and communicate with them in order to become more knowledgeable about their students’ needs. In the case of Aliki, the teachers use their collaboration as a prevention strategy to avoid labelling children due to their difficulties at this age. Stavros was one of the teachers who had identified the lack of a collaborative nature in his school (St. George’s). He explained:

“I came to realise that what is missing from our schools is a collaborative culture, what is called ‘collaborative practice for inclusion’ in the school. I believe that we would be more successful if we could identify and figure out methods and approaches to help these students through such practice. However, teachers work in isolation, on their own, there is no common vision in every teacher to try to help these students, to the best of their knowledge” (Stavros, Sixth Grade teacher, Cyprus).

The particular teacher emphasised the need for collaboration among the teachers in the school community. He refers to the lack of a collaborative culture in the school which could benefit and support these students. When Stavros was asked for the underlying factor in this matter, he explained:

“I think there is no collaborative culture or strategic plan if I can call it that, to cultivate collaboration among teachers, through co-observations or co-teaching or collaborative projects. I think schools are too busy and committed to all the other responsibilities that the Ministry gives them, so there is no room for other things” (Stavros, Sixth Grade teacher, Cyprus).

Teachers’ perceptions of the successful implementation of inclusion in the school context are in contradiction with the constraint rules embedded in the Cypriot education system in terms of academic outcomes and its inflexibility to give additional time to school to engage in other activities. These examples drew on teachers’ experience and the lack of a
collaborative culture in the Cypriot context; they seemed to value collaboration with other teachers in the school community and thought that this could act as an enabling rule for the successful implementation of inclusion. What is more, they addressed the need for collaboration with the SEN teacher. Victoria, the Reception Class teacher mentioned:

“Jane (SENCo) is very supportive, really. She gives feedback in staff meetings and to individual teachers. As teachers, we feel we are not skilled enough to deal with some aspects of SEN because it is new to us, Jess will help and she will ask for the source and she knows the people to get in contact with. She is very good at that. If we feel we need more training or anything we will ask Jane. She is very supportive”.

Victoria, emphasised the collaboration with the SENCo in terms of getting feedback and new information related to particular aspects of SEN. Valeria referred to her lack of ability to deal with some aspects of SEN and expressed the view that the SENCo is the person who has the knowledge to provide her with such information. This collaboration is expected to contribute towards achieving the shared object of meeting the needs of the students.

In the Cypriot context, Grigoria, a Third Grade teacher, also referred to the collaboration she experienced with the SEN teacher in the last academic year:

“You can get information about those students through the SEN teacher if you are interested in learning ways to better help your students in the class. Especially if the other person [SEN teacher] works in a responsible way, they will discuss it with you, as happened to me this year. For example, I have a student with Hearing impairment (HI) and the SEN teacher approached me and told me about this case. She even brought some documents for me about HI” (Grigoria, Third Grade teacher, Cyprus).

Grigoria, like Valeria, valued the responsible manner of the SEN teacher in being proactive and providing her with information on aspects of SEN.

This seems to contradict Aliki’s experience with the SEN teacher:

“Everyone does their job individually, really. If you build good rapport with the SEN teacher, you might collaborate; otherwise nobody is willing to communicate with anyone else. It didn’t happen to me. I may have been chasing her during lunch breaks to have a AT with her about George’s case and she was not willing to discuss it with me” (Aliki, First Grade teacher, Cyprus).
The above quote indicates the tension created in the community between two of its members, the teacher and the SEN teacher. Aliki expressed her disappointment with the lack of communication between her and the SEN teacher and the work that everyone does individually. It is suggested that this tension may have possibly created a feeling of frustration, which could have driven Aliki’s action in taking the initiative of approaching and discussing further her concern about particular students with the parents or obtaining information on her own in some cases: “I decided to approach and talk to the parents on my own to get more information” (Aliki, Third Grade teacher, Cyprus). This echoes previous research which identifies teachers who take responsibility for all their students as those who hold ‘interventionist’ beliefs about them (Jordan et al., 2009). In addition, research evidence has also demonstrated that, in Cyprus in some circumstances, the relationship between SEN teachers and classroom teachers is tentative and there is lack of sense of collaboration (Liasidou, 2007). This could be attributed to historical factors, such as the existence of two separate curricula before the recent implementation of the New National Curriculum System in the Cypriot Education System. Historically, there was one curriculum which derived from the Ministry of Education and Culture, (Mavrou & Symeonidou, 2013, Mamas, 2012; 2013) and the other one was derived from the department of Special Education within the Ministry of Education and Culture (MoEC, 2013). In St. Neophytos’ school, during the school visits, it was observed that the SEN teacher used both. Such a recent change in policies about inclusion, implemented through the NNC, may have created the tension between the two members of the school community.

Teachers also consider collaboration with other staff members as valuable in terms of the division of labour for meeting the needs of their students. They believe that their contribution in terms of one-to-one support is of great importance, in terms of provision and in achieving the object of meeting their students’ needs. For example, Victoria and Jane mentioned:

“Honestly the one-to-one support is knowledgeable about where [student with Statement] Steve is because they spend all day, every day, so they are very good, they would say, ‘I think this is appropriate. I would do this with Steve’ around that topic. They are very valuable; they know these children better than me! [laughs]” (Victoria, Reception Class teacher, UK).

“Oh definitely because, I mean with some children, like the one with cerebral palsy, a lot of her support – her adult support – is one-to-one because her needs are so very complex and she is so very different from her peers. However, sometimes
you have an adult who is attached, if you like, to a child with identified SEN and with identified Statement” (Jane, SENCo, UK)

It is been noted that, during the school visits, Victoria’s class was divided into three or four smaller groups according to the subject, for one of which the Teaching Assistants were responsible. The division of labour was evident in the particular class due to the large class size, as Victoria explained to me in her follow-up discussion. In particular, she explained that, “Four Teaching Assistants are present in the class, and there are three or four smaller groups in which one is the lower ability group and the one the TA takes over, the second one is a more middle group and another TA takes over and the third one is the high achievers who work with the teacher. The other TA is in one-to-one support with the student with autism.” (Transcript 25, Reception Cass, field notes, 14.03.2015)

The presence of the teaching assistants (TAs) enables the division of the class into smaller groups which can be an enabling rule towards achieving the object. A systematic review of the impact of adult support staff on pupils in mainstream schools, (Alborz et al., 2009), demonstrates that the use of teaching assistants can give the opportunity to engage pupils in more practical activities and to spend more time working in smaller groups. Additionally, their presence in the classroom offers a sense of support and less stress for the class teacher since the class-related workload is reduced. It could be underlined that such division of labour, where TAs work with small groups within the whole class, seems to promote a more inclusive ethos within the class (ibid). However, relevant studies also address the issue of training and the required knowledge and skills to support children and young people with a range of complex needs, both physical and intellectual, and to promote inclusion and participation in schools (Moran & Abbott, 2010). In the UK, a profound change has been observed in the number of TAs, which comprises a quarter of the workforce in mainstream schools and 32% in the nursery/primary sector (DfE, 2012). TAs are considered an essential component of practice in school, especially for the inclusion of pupils with Special Educational Needs (SEN) in mainstream schools and the delivery of curriculum interventions for low achieving pupils (Webster, Blatchford & Russell, 2012). However, their role is complicated in relation to teachers and teaching and particularly to the inclusion of pupils with SEN. Research evidence conducted by Webster (2014) on the role of teaching assistants pointed out that TAs are mainly responsible for pupils with Statement and that they are positioned by the teachers as ‘experts on the child and their SEN’, even though TA’s have similar weaknesses in knowledge and training. Such evidence raises questions about the arrangement of TAs and pupils with SEN in terms of the statements, the hours spent in the class with the TA, the one-to-one support and how the pupils’ needs are being met in mainstream settings (ibid).
On the contrary, there was an identified lack of TAs in classrooms in the Cypriot Education System (CES) and teachers emphasised the need for TA arrangement in their classrooms. For example, Yianna, the Fifth Grade teacher at St. George’s school, stated:

“I believe that there could be less workload for the teacher, which would also be of benefit for the high achievers. For example, if the class was divided into two groups, and one group was struggling, the TA would take that group while the other group would continue with the teacher. Therefore, the lesson would be differentiated to fit the needs of the students. It [differentiation] is difficult to achieve with only one teacher” (Yianna, Fifth Grade teacher, Cyprus).

Grigoria referred to the strategic plan implemented in her school (St. Neophytos) during the academic year 2014-2015 (Human Resources Development Authority plan, no date) in which an unemployed novice teacher was employed on a nine-month contract as casual support staff in their school.

“That plan was so helpful [her emphasis] really for us. For me, personally, when [novice teacher] Christina was in the class she was very helpful, especially during independent study time; she was able to help all the students because we had divided the class into two groups of 11 students each [...] she devoted that individual time that each student needs really, especially the ones who struggle. It would be of great help to have Christina in our class on a permanent basis” (Grigoria, Third Grade teacher, Cyprus).

In Cyprus, the paraprofessionals who work as assisting personnel in schools with children identified as having special needs, are usually called ‘companions’ and their role seems to be complicated and vague within the CES. Historically, the employment of paraprofessionals has existed for some time and dates back to the establishment of special schools in Cyprus. The Cypriot government, in an effort to respond to international calls to implement inclusion in schools, has employed paraprofessionals to ‘accompany’ students with more severe and complex needs (e.g. behavioural difficulties, physical disabilities) following the legislation in which additional support is needed beyond the provision of Special Needs teachers (Angelides, Constantinou & Leigh, 2009). As such, the role of the paraprofessionals is seen in terms of both the education of the students and of their social needs and social care. It is noted that the employment of additional personnel in centralized educational systems, including the CES, come with an additional cost to the government and, thus, many schools opt to make arrangements for additional personnel especially for students who experience difficulties in learning (Angelides et al., 2009). Grigoria addressed this in her interview:
"We don’t even have the additional hours we used to for the support of those students; however, in order to do that, there is a need for extra teaching personnel. But because of the financial crisis, I guess, we won’t have those [hours] or the personnel" (Grigoria, Fifth grade teacher, Cyprus).

This creates a tension between the need for teachers to support these struggling students and the government’s rules for not providing for such support for financial reasons. Even though such tension can be hard to resolve, due to external factors, it does enable insights into boundaries and embedded values for the support of students with additional needs in the CES.

2b) Collaboration with parents

From the discussion so far, it is evident that teachers favour collaboration among teachers and staff members within the school community, as well as the division of labour within a collective goal-directed activity such as their professional practice. In this sub-section the discussion is about collaboration with parents, which was discussed extensively throughout the interviews and follow-up discussions with the teachers. The lack of collaboration was raised as an issue of concern, especially in the UK context.

Victoria, a Reception Class teacher, addressed this issue:

“I think a lot of our parents are working parents; they are not at home, so they think ‘I work full time and it is really hard’. I don’t know... They don’t value education so much. The children probably grow up in families where their parents never work with them. We have this problem all the time” (Victoria, Reception Class teacher, UK).

Gillian, EYFS teacher said:

“Maybe because parents have children at a very young age, that might be a factor as well for being disengaged. They had them too young, before they were ready to become adults themselves. Certainly I’ve taught children in the last five years, like a pupil I got in year 2 so their parents have children in my class, and this is how it is. So that’s probably a factor – they were not to be ready to become parents. We have lots of single parents who will have a child with one father, a child with another father…” (Gillian, EYFS teacher, UK)

Both teachers share a similar understanding of parents’ engagement and describe the value of parents’ participation in the education of their children. They seem to value them as important members of the community, who can contribute to the successful implementation of inclusion but, at the same time, they refer to cultural factors, such as parents’ socio-economic status, single parent families, and the lack of educational
background, which act as constraining factors to achieve the object. The importance of getting the parents engaged is emphasized through the SENCo’s understanding:

“Their role is very important because... let’s take, for example, the little girl who struggles with spelling and all we see is a really pleasant girl going home with her anxieties. I wouldn’t know she was feeling uncomfortable with her spelling if her mum didn’t say, ‘She got upset with that at home’ or if one of the teachers didn’t know what exactly was going on. So we do need that one thing of partnership between the parents and the school” (Jane, SENCo, UK).

Research studies identify the parent-teacher relationship as important for the successful implementation of inclusive education in a diverse context. More specifically, studies by Griffiths, Norwich and Burden (2004) and Norwich, Griffiths and Burden (2005) have shown that parents who are seen as partners are the ones who are actively involved in decisions, they share responsibility and contribute to the provision of their students' needs. The quotes above underline the partnership that teachers need with parents, who are passive and distant from the school.

3) Conceptualising Dyslexia as a tool/artefact

3a) Understanding dyslexia through the models of disability

The previous two sub-sections dealt with teachers’ personal interpretations and conceptualization of inclusion in the context of their school. Even though teachers come from different cultural contexts (a factor that has been taken into account), it is worth noting that there are many commonalities on how teachers understand inclusion and how they position themselves as subjects expressing their emotions and beliefs. In this sub-section, the discussion will be around the second concept explored, that of dyslexia. Again, the theoretical framework of AT is used as the analytical tool to explore the concept. Teachers’ understanding of dyslexia is mainly explained through the model of disability, adding weight to previous studies which have used models of disability to explore constructs such as disability, Special Educational Needs (Pearson, 2009) and inclusion (Mamas, 2012; 2013) in different cultural contexts. However, it is worth noting the contribution that Cultural Historical Activity Theory makes in this study to the exploration of the concept of dyslexia, shedding light on the intersection of more than one model in the teachers’ descriptions and the positioning of the subject in this regard.

Grigoria and Stavros, in the Cypriot context, interpreted dyslexia using more medical-based terms such as ‘disorder’, ‘brain problem’, ‘dysfunction’ in their descriptions. In particular:
“Dyslexia is a confused term. For me Learning difficulties is dyslexia so I would define it (dyslexia) as a disorder that has to do mainly with memory. For example, they cannot memorize much information but if it is about something that does not have to do with memory – it could be an intelligence thing, let’s say – they can find it” (Grigoria, Third Grade teacher, Cyprus).

“For me dyslexia, is a brain problem of the student in which a few things are in the wrong position. I think of it as something to do with how some brain functions are set up. It is like a dysfunction, which exists in some brain cells. I think it is genetically based […] it is more about memorizing I think, possibly attention deficit plus poor working memory” (Stavros, Sixth Grade teacher, Cyprus).

Aliki, referred to dyslexia as a difficulty in reading and writing:

“I would say that, in dyslexia, there is a big difficulty with a child’s skills in reading and writing, where a child’s reading is not consistent with his/her writing. He may confuse letters, add more letters or miss them, there might not be the right syntax in a sentence, or they may even have difficulty in orientation and comprehension. In generally, I would say that if a child is in the 5th Grade, his/her level might be the same as those children in the 1st or 2nd Grade. I mean, there is a gap between the child’s cognitive level and age level” (Aliki, First Grade teacher, Cyprus).

Grigoria’s and Stavros’ quotes seem to be directed at the medical model of disability, describing dyslexia as a disorder, which is concerned with the aspect of memory and has a genetic basis, emphasizing the object as of biological origin and the child’s pathology, such as a ‘brain problem of the student’ and ‘they cannot memorise’. Aliki’s description emphasizes the cognitive level of a student with dyslexia, which is lower than their peers’ and she also refers to the observable behaviours of children’s performance in reading and writing. When teachers were asked to describe their current or past experience with a student with dyslexia, they provided information both about the elements of object, such as a biological basis, heredity and about the community, such as the family environment and social factors:

“I am not certain if it [dyslexia] is related to heredity or possibly to the wider environment, either of the school or of the family, but I believe that there should be an association with heredity, yes it must be. I also think that there could be an organic issue, biological, you know” (Aliki, First Grade teacher, Cyprus).

“He can become very aggressive, he doesn’t really have friends, nobody plays with him during breaks; he very easily gives up when he struggles and he starts
disturbing everyone around him” (Grigoria, Third Grade teacher, Cyprus).

Stavros, in a similar vein, discussed the family environment:

“They are half-Greek, I mean Greek is maybe a second or additional language for them. Their parents are working so many hours, they are twins in the same class and maybe she is comparing herself with [twin brother without LD] Andy who is doing better, I can’t really tell. Maybe their parents don’t have the time to study with them at home because of their work? I suspected, initially, that this may also be a problem of perception, really” (Stavros, Sixth Grade teacher, Cyprus).

Stavros went further into considering family factors, such as the family environment, the language background and some personal characteristics of the student which are within the social aspect of his school life, such as aggressiveness, giving up and disrupting the class, or comparisons with the twin brother who has no learning difficulties. Considering the element of community, it could be suggested that teachers, despite their initial definition, think about other factors that contribute to the difficulties students experience in class. Such an approach is related to the causal modelling framework (see section 2.3) (Frith, 1999) in which there is a three-level interaction among the biological, cognitive and behavioural and the mediating role of the environment.

The example of Grigoria's and Stavros' understanding of dyslexia using illustrative data extracts is provided below in figure 6.1:

<table>
<thead>
<tr>
<th>Environment</th>
<th>Biological:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘brain problem’,</td>
</tr>
<tr>
<td></td>
<td>‘genetic basis’</td>
</tr>
<tr>
<td></td>
<td>‘brain dysfunction’</td>
</tr>
<tr>
<td></td>
<td>‘memory disorder’</td>
</tr>
<tr>
<td>‘Working class family’</td>
<td></td>
</tr>
<tr>
<td>‘Greek as an additional language’</td>
<td></td>
</tr>
<tr>
<td>“lack of friends”</td>
<td></td>
</tr>
<tr>
<td>Cognitive:</td>
<td></td>
</tr>
<tr>
<td>‘Poor working memory’</td>
<td></td>
</tr>
<tr>
<td>‘Intelligence’</td>
<td></td>
</tr>
<tr>
<td>Behavioural</td>
<td></td>
</tr>
<tr>
<td>‘cannot memorize’</td>
<td></td>
</tr>
<tr>
<td>‘Aggressive’</td>
<td></td>
</tr>
<tr>
<td>‘giving up’</td>
<td></td>
</tr>
</tbody>
</table>

Figure 6.1: The causal modelling framework for dyslexia using examples of data extracts
Using the above framework, it is helpful to observe teachers’ understanding of dyslexia as it relates to these factors as well as to the perceived role of the environment. However, the elements of AT give an insight into other factors such as the rules, tools used and the subject.

Stavros is seen as an illustrative example in this regard, in his interview and follow-up discussion:

“I first heard about dyslexia when I was at University and I have to admit that I don’t have much knowledge of dyslexia [...] I get to know dyslexic people who are now dentists, photographers… and their dyslexia is no longer a problem but in the CES it is [a problem] because we deal with these students in a conventional way, testing only their knowledge in literacy, maths and science. Schools do not try to differentiate their lessons according to the students’ abilities, talents and skills” (Stavros, Sixth Grade teacher, Cyprus).

Stavros expressed his position as a subject, admitting that he lacks knowledge of how to support those students but, at the same time, he underlined the constraint rules related to the education system and the current assessment system. This description is related to aspects of the Social Model of Disability (SMD) in which social and cultural forces, such as the current assessment system in the CES, act as a social barrier for dyslexic students to achieve academically. In addition, the rules can be seen as environmental barriers (Oliver, 2009) according to the SMD but, more importantly, the elements of AT can give an insight into embedded rules, which can be constrained and reflected in teachers’ professional practice; this will be addressed in the following chapter (Chapter 7).

In the Cypriot context, research evidence suggests that teachers tend to hold medical/individual and charitable notions of inclusive education and special educational needs, in which dyslexia falls under the umbrella term of Moderate Learning Difficulties (MLD) (Angelides et al., 2009; Mamas, 2012; 2013). Some teachers tend to follow a categorical approach to Special Educational Needs and they believe in certain prerequisites for the integration of a particular type of student into the mainstream school (Symeonidou & Phtiaka, 2009). Mamas (2012) has further suggested that the medical model is also prevalent in teachers’ everyday teaching practice and strategies, and at the same time is being used as a framework of ‘defence’ and ‘excuse’ to support students, due to teachers’ ‘perceived inability’ and lack of responsibility to educate all students.

Table 6 below is an example of an analysis of teachers’ understanding of dyslexia in both contexts:
<table>
<thead>
<tr>
<th><strong>Domain</strong></th>
<th><strong>Dyslexia</strong></th>
</tr>
</thead>
</table>
| **Subject** | • Lack of knowledge to support  
• Emotional support  
• Difficult to deal with  
• Use of dyslexia-friendly practice  
• Knowledge based on the qualifications |
| **Object** | a) Genetic Factors : Brain disorder, heredity, brain dysfunction  
b) Student Characteristics in learning:  
  - Difficulties:  
    - Decoding words  
    - Poor working memory  
    - Letter reversal  
    - Writing and spelling difficulties  
    - Spatial awareness  
  - Strengths:  
    - Talented in Arts (Theatre)  
    - Talented in ICT  
    - Smart/intelligent  
    - Reading ability  
c) Within the child factors:  
  - Aggressive  
  - Lack of motivation (giving up)  
  - Insecure  
  - Miserable  
  - Hyperactive |
| **Tools** | 1) Visual timetables  
2) Coloured paper  
3) Cream paper  
4) Differentiation |
| **Community** | a) Peer/Class community:  
  - competent readers and writers as everyone else  
  - marginalized and lack of friends  
  - disruption of the class  
  - lack of self-esteem/class stress  
b) Family community:  
  - single-parent family  
  - poor family literacy background  
  - working families (Low SES)  
  - Parenting issues  
  - Greek as an additional language  
c) School community:  
  - Dyslexia-friendly school policy  
  - Lack of home-school relationship |
| **Division of Labour** | SENCo/SEN teacher  
Need for specialist |
| **Rules** | a) Class rules  
  - Pair-up with more able peers |
Table 6: Example of an analysis of teachers’ understanding of dyslexia using CHAT

In the UK context, Victoria, a Reception Class teacher, described dyslexia in terms of the role of a supportive learning environment such as the dyslexia-friendly school:

“A child who is struggling with literacy skills, especially with reading and writing, sees the words on pages differently from us. We are dealing with them to get access, allowing them to be competent as writers and readers as everyone else” (Victoria, Reception Class teacher, UK).

Based on this, dyslexia is presented mainly through the element of the object, emphasising the difficulties in relation to literacy skills such as reading and writing and the students’ performance in them. At the same time, she referred to rules, tools and community such as access to information and allowing the students to be competent as writers and readers as everyone else. The latter could also be associated with Victoria’s beliefs about inclusion as ‘meeting the needs of all students’ and ‘treating students equally” (see section 1a). This is also evident in the following quote:

“Because it got them teaching to read the same way as everybody else but giving them tools to make it easier and adapted” (Victoria, Reception Class teacher, UK).

Again, Victoria, emphasised the objective of treating all the students equally, teaching them the same way as everybody else but using the necessary tools for adapting to the needs of students and making it accessible to them. She continued:

“So we use visual timetables in the class to help them, just for routine, We are a dyslexia-friendly school, so it was the advice given to us. I didn’t really know about the visual timetables – we have coloured slides. Dyslexic people find it difficult to pick up the print so we have coloured slides rather than the older ones we used” (Victoria, Reception Class teacher, UK).

Victoria referred to resources and materials used (as tools) that are part of the Dyslexia-Friendly Pack (rules) introduced into schools with the Dyslexia-friendly Quality Mark status. The Dyslexia-Friendly Pack (DFS), as developed by the British Dyslexia
Association (2009), addressed aspects of systemic environmental changes which can reduce the barriers to learning that dyslexic students often deal with in the classroom. This was also observed during school visits: “There are visual timetables in all the classes and the school is equipped with visual signs even in the lunch area. In most of the classrooms, teachers use cream coloured paper. There were classrooms in which white paper with black print was used for the purposes of writing activity” (Transcript 3, Field notes, 03.03.2015).

In her interview, Victoria went on to say that, apart from the provision placed in schools, an important factor that can contribute to students’ difficulties, concerned parenting. Parenting issues were also addressed in Victoria’s interview and follow-up discussion:

“Parenting is important really but they think it is our job. ‘You are the teacher, not us, so why bother?’ But at the end of the day they are asking me to teach their child and I have told them, ‘We send things home for practising skills and you know that practice makes them better around the skills they were taught’. I tried to get that across to the parents: anything that goes home goes to keep it fresh for them” (Victoria, Reception Class teacher, UK).

Victoria, shares a similar understanding with other teachers when it comes to the impact that parents’ lack of engagement has on students’ learning. The tension between parents and teachers seems to rest on parents’ expectations about the teachers’ responsibility to educate their children:

“It can impact on students’ learning, We can see a lot of our children who’ve got special needs in reading are not reading at home, because they do not put the practice on, and as a teacher you can only spend so long reading with every child. If I could one-to-one reading with every child every day it could be fantastic but I can’t!” (Victoria, Reception Class teacher, UK).

In this quote, Victoria expressed her emotions towards this tentative relationship that exists between parents and teachers while, at the same time, she referred to constraint rules such as the lack of individual time within the class for each student. While teachers seem to encourage and seek parental involvement, as suggested in the relevant Dyslexia Friendly Pack (Riddick, 2006), the current tension creates contradictions within the activity systems of classroom and home-school collaboration.

Louise, a Year 2 teacher, was one of the teachers who explained her own experience with a parent who lacked understanding of her child’s needs:

“She embraced it really because she knows Ella [a student with dyslexia] isn’t like the other children and she [the mother] tends to…sort of… point at us, she runs to
me to blame for Ella not being like the other children as opposed to... you know, parents are not always that accepting of... In the past, I felt quite smashed for putting that, but in the past she’s been crying to me that ‘Ella is working below, she is significantly below, she needs support to help her to progress’ and I was like, ‘I do, I do’, and she was likely to shout” (Louise, Year 2 teacher, UK).

Aliki, a First Grade teacher at St. Neophytos school, also referred to the lack of understanding on behalf of parents, based on her professional experience:

“I happened to work with a child with ADHD and dyslexia and I decided to talk to the parents when I first started identifying the signs. I remember that, in the beginning, they got upset and they bothered, then they searched for it and they accepted it in the end. But I can remember in the beginning how the dad was shouting at me. When things calmed down, the mum came to school and apologised and said I was right” (Aliki, First Grade teacher, Cyprus).

In both quotes, it is evident that a tension was created between teachers and the parents of these students when the teachers talked to them about their children’s needs. In both cases, the teachers reported that the parents initially demonstrated a lack of understanding about how their child could be different from its peers in terms of their ability and seemed to get upset with the teachers for that. When the teachers were asked what the underlying factors for such reactions might be, Louise responded:

“It is not everyone’s priority [their child’s education]. It is a working class community, you know. I have a few children in there where you know what is going on outside the school and it has massively impacted on their writing. Family things. Or some children are just a bit miserable, I’ve got a child whose parents were in prison and things like that and that impacts on them. I do throw positive lights on them. Some children come and discuss and they feel safe; they do feel safe in school. It is quite a mixed area: you’ve got quite a lot private schools and pockets of severe deprivation” (Louise, Year 2 teacher, UK).

Louise referred to possible factors that are related to the cultural context of the community such as the deprivation of the area and the SES background of the parents. Jane, the SENCo of the school, also referred to the particular factors:

“I can tell the deprivation of the area. The parents are not really able to contribute further to extracurricular activities (e.g. trips) and even to those in the schools (parents’ evenings) in some cases” (Jane, SENCo, UK).
This section describes teachers’ perceived role in the process of early identification and assessment.

Teachers position themselves as subjects in the activity system of assessment and they describe their actions and decisions as soon as they identify the first signs of a student who, they suspect, may have dyslexia until they follow the official process for referral and screening of the student in the Cypriot and UK contexts accordingly. Other important aspects of the assessment process are those of the whole-school policy, the role of the parents, the linkage with teaching, the role of other professionals and professional development and training (Reid, 2016).

One important aspect identified and discussed by the teachers with regard to the process was the role of the parents and the aspect of labelling. On the one hand, there were parents who were concerned that if their children were labelled as ‘dyslexic’ they would be stigmatized, and on the other hand, some parents insisted on moving on with the process of assessment for securing additional help for their children. The concept of labelling is discussed through the elements of AT to gain an insight into how teachers perceive the label of dyslexia in relation to parents’ concerns and expectations.

In the Cypriot context, Aliki, a First Grade teacher at St Neophytos School, described her own experience after suspecting one of her students and deciding to talk to the parents, explaining the parents’ reaction:

“I think in the particular case, the parents had not been informed by the previous teacher and it was a shock for them […] but in general I think parents are afraid of labelling their child. If you tell them that their child has a problem, they think it will be stigmatized for a lifetime. I think It has to do with society’s belief about that” (Aliki, First Grade teacher, Cyprus).

This was also addressed by two other teachers, Olivia and Grigoria:

“When I spoke to his mother, she said she did not want to get into the process of referral through the official school procedures. I think this is because of the labelling thing really and how it was about to be discussed in the school community, you know… it was a village school, it was a more closed-minded community, so she decided to search on her own, independently” (Olivia, Third Grade teacher, Cyprus).

“I guess for parents it’s hard when you tell them, ‘You know your child has learning difficulties, or dyslexia or poor working memory’. Automatically they will assume
that their child is mentally retarded, that severe. So, I guess that in this case they may prefer to label their child as having ADHD or being hyperactive. That’s how it is accepted in society I think” (Grigoria, Third Grade teacher, Cyprus.)

In the above quotes, there is evidence of contextual tensions relevant to the ‘politics’ of labelling children as dyslexic in the Cypriot context, which could be characterised as a closed-minded society. Due to the existence of two separate educational systems, the special and the mainstream, it could be suggested that the notion of ‘others’ (Slee, 2010; Allan, 2010) was constructed. For example, ‘others’ referred to people that did not ‘fit’ society’s idea of normality, such as people with disability. In this regard, labelling impacts negatively on people’s lives by stigmatizing them and they are treated according to that label. What is more, it is well documented in the literature that Cyprus is one of the countries lacking openness towards aspects of diversity in language, ethnicity, religion and disability (Phtiaka & Symeonidou, 2009).

For many parents, dyslexia is an unknown concept, which results in anxiety and, consequently, effective communication between school and parents is important for gaining parental support in this regard (Reid, 2016). Aliki was one of the teachers who, in her interview, seemed to take responsibility for informing parents and discussing the matter with them. She said:

“I guess, this is the importance of communicating with parents; you have to explain to them, show them understanding, build the relationship and point out to them that there is collaboration, that you are not enemies but rather ‘partners in this’. Vasilis’ [student with dyslexia] parents eventually thanked me for talking to them” (Aliki, First Grade teacher, Cyprus).

On the other hand, there are parents who are in need of a dyslexia label for their child, intentionally approaching teachers at school for this. In the UK context, both Victoria and Louise, mentioned this:

“They really have a bouncy child or they may have a not well-behaved child and they are trying to explain it by saying, ‘Oh, the child might have ADHD’ they label it themselves. Sometimes it is just parenting. We’ve had parents who are advised to go to parenting courses to help to manage their child” (Victoria, Reception Class teacher, UK).

In this quote, the systemic tension is at the level of the home-school relationship for the purpose of labelling. Victoria’s understanding of the labelling is that parents seek excuses for not taking responsibility for their children at home. Reflecting Victoria’s responses in sub-section 2c ‘Collaboration with parents’, the parents believe that teachers are responsible for the education of their children. Victoria continued:
“I don’t want to think that it is common knowledge that a parent wants to have their child labelled with ADHD or any other condition that makes a learning and social situation hard for them; maybe it gets to a point where there is neglect or an issue and we might take steps further to involve social services” (Victoria, Reception Class teacher, UK).

Victoria’s understanding of the labelling of dyslexia is illustrated in figure 6.2 below. Louise was another teacher who addressed the issue of labelling in her interview:

“The mum is so desperate, since she has such a beautiful girl, for her to be the same as everybody else and she knows it. I think her mum is really trying to put a bit of a label on her and she should be assessed but I think that as soon as she gets to 7, Jane (SENCo) is very aware of her and she has her in her educational plan there” (Louise, Year 2 teacher, UK).

Parental concerns are often expressed when they feel that their child’s needs are not being met or where there is no official diagnosis of dyslexia (Reid, 2016). According to Victoria and Louise, parents’ intentions and motives to put a label on their child might differ. One the one hand, the label could be the outcome of the screening process in order that teachers take greater responsibility for the education of their children and, on the other hand, to secure access to support services so as to become like everyone else.

There has been a long debate over the concept of dyslexia labelling with regard to its usefulness for the person itself and for ensuring access to specialist support and obtaining appropriate help. It has been recognised that securing additional support through specialist services is an important step in dyslexia support (Reid, 2016). However, the essence of identifying students’ learning needs at an early stage is not to label but rather to identify those at risk of developing literacy skills (Reid, 2016).

Gibbs and Elliott (2014) have, however, discussed the influence of dyslexia labelling as a socially constructed term adherent to prejudicial beliefs or assumptions, which undermine teachers’ preparedness to engage fully with inclusive education. The authors discuss the potential challenge and value of assigning certain labels to describe the difficulties that some students experience (ibid). They suggest that labels such as ‘dyslexia’ may not be beneficial to a teacher’s belief of efficacy of teaching these students in their class. In addition, Honstra et al, (2010) suggest that such judgments of individual students and group stigmatization and stereotyping by teachers can result in lower teacher expectations of these students. It could be argued that, in this study, most of the teachers emphasised the need to be able to identify the signs for struggling students and some of them took action by approaching the parents to discuss their concerns with them. Teachers' motives
are directed at the following outcomes: to ensure that provision is in place in order to meet their needs or to modify instructions or tasks in their practice.

Grigoria, a Third Grade teacher, stated:

“I think an official statement would be of help to me about the way I treat this student. For example, if I am aware that he is dyslexic, I won’t be expecting or I won’t be mad at him when he is not able to memorize his seven times table like the others. It is mainly about how to treat them. You won’t underestimate them but you will differentiate things to their own pace. I won’t be wondering what the problem is if I have an official statement for a student” (Grigoria, Third Grade teacher, Cyprus).
Figure 6.2 Example of analysis of parental engagement based on illustrative data extracts using CHAT (Victoria)

Teacher’s understanding of dyslexia, teacher’s observation of student’s behaviour in class, homework

Student’s behaviour
- Bouncy child, not well behaved
- to discuss with parents

Outcome
- Labelling, Parents
  - “may be he gets to a point where there is neglect or an issue and we might take steps further to involve social services”
  - “to have their child labelled with ADHD or any other condition that makes learning and social situation hard for them”

Rules
- Lack of individual time at school, labelling as making their learning hard, Lack of support at home (Constrained rules)
- “lack of individual time in class for 1:1”
- “lot of SEN children with special needs in reading are not reading at home”

Division of labour
- SENCo, EP, Teacher, parents

Parents’ expectations, Parents’ lack of responsibility
- “Teachers’ responsibility”
- “not practice with them at home”
- “poor SES background” “working class community”

Community

Instruments/Tools/Artefact

Subject

Victoria, Reception class teacher

Frustration
- “I tried to get that across the parents”
- “they think it is our job, you are the teacher”

Enabling rules:
- “appropriate help”

‘Securing specialist support to get appropriate help’

“lack of individual time at school, labelling as making their learning hard, Lack of support at home (Constrained rules)
Grigoria underlined that the official statement would have helped her to treat a student with learning difficulties in a different way. In AT terms, teachers refer to tools such as the differentiation of the lesson to the students’ pace and the teacher’s approach towards those students, e.g. ‘I won’t be mad’ ‘I won’t be expecting’. The latter, however, should be treated with caution, since it may imply teachers’ lower expectations of their students, which can consequently influence the curricular and instructional opportunities provided for these students (rules). Grigoria’s practice is explored more in depth in the following chapter.

Victoria, the reception class teacher addressed the issue as follows:

“Sometimes it depends on the child. Obviously, we have to keep a track on them. A label informs us about a child’s needs. If we feel as a school that we can’t meet their needs any longer, then we will talk as a school about what they need to do then. I mean, we have meetings every year about the level of Statement. They are going to be called Health and Care plans, I think, but they have a Statement for children with quite special needs and every year we have a review meeting” (Victoria, Reception Class teacher, UK).

In this quote, Victoria referred to a whole school approach in meeting the students’ needs (outcome). An official statement provides information about the case of the student and the teachers will monitor their progress based on that. The evidence of progress (rules) will be used by the school to take decisions if they are meeting students’ needs or not.

From these quotes, it is evident that both teachers need an official statement for working towards the needs of students in different contexts. What could be observed here is that there seems to be a collective attempt in Victoria’s school (St Andrew’s) to meet their students’ needs, in contrast to St Neophytos, where Grigoria is concerned with her approach as an individual towards the student.

James, a Year 4 teacher, referred to signs in relation to the chronological age and reading age and writing skills of the students:

“I think reading is the trigger really and then, in the writing, you will see the d’s and b’s if there is anything like that [...] I think I would be looking for somebody who is behind in their reading age; that would trigger alarm bells for me. If they are 8 years old and then their reading age is 6, I think there could perhaps be something holding them back [...] For anybody behind where they should be in terms of their average age, I will look at different reasons why and one of them could possibly be dyslexia. Sometimes in the words, sometimes in numbers, sometimes in letters back to front… so I’m looking out for things in the work and then, as early on as
you can, as a school trying to do a screening test for dyslexia” (James, Year 4 teacher, UK).

Both teachers seem to emphasize the object, identifying the discrepancy between students’ expected academic progress and their chronological age. Both teachers refer to cognitive factors for identification in this regard while, when they describe the signs, at and the same time they underline their lack of knowledge of dyslexia:

“I am sure that there are more signs to look for but, you know, teachers don’t know a lot about dyslexia in depth, they spot one or two signs. I think if they are way behind where they should be, that’s a sign for the teachers to ask Jane (SENCo) if they can do something about it. That’s the usual thing. If they are off track for their age, there is usually an underlying concern so that would be one of the things Jane would rule out”.

In this quote, James referred to his communication with the SENCo, who is the responsible person for screening students in the school. Historically, in the UK, a specialist teacher or an educational psychologist is the responsible person for the assessment for dyslexia (Reid, 2016). In the activity system of the assessment process, the SENCo, as a member of the community, acts as the mediating person to discuss a student’s progress and how their difficulties can affect their performance in the classroom (objective) along with screening the students. In a similar vein, Olivia, in the Cypriot context, refers to her communication with the SEN teacher when she first observed the signs of her student in the class:

“I remember I was on the fifth grade and there was a very problematic kid. He seemed to be tired during the lesson, he couldn’t respond [to teaching], he was not paying attention. He would read a passage and it was as if he was reading a totally different one. He couldn’t concentrate for a long time. I am not a specialist, to be honest, but I felt that I needed to talk to the SEN teacher about the case” (Olivia, Third Grade teacher, Cyprus).

Olivia described the difficulties of the student, not only in relation to his literacy skills but also to his behaviour in class (object). Her understanding of dyslexia also takes into account aspects of the student’s behavioural difficulties in the classroom environment, which alerted her to take action and to approach the SEN teacher (division of labour). Jane, as the SENCo of St Andrew’s primary school, talked about one of the cases that she screened, taking into consideration other environmental factors and the student’s cognitive level:

“He [a student with dyslexia] was very articulate, his parents gave him lots of opportunities for visiting museums at the weekend but he couldn’t write a sentence, his spelling was poor and he couldn’t acquire spelling rules at the
phonics and graphemes. It didn’t fit with his broader picture of cognition so I said to his parents, ‘I suspect this but certainly I can’t assess him until he is seven’. And when he was seven I did this screen test and yes, he was actually severe’. (Jane, SENCo, UK).

3c) Positioning the subject in in-service training for dealing with dyslexic students

The previous sub-section explained how teachers as subjects understand the concept of dyslexia (tools/artefact) addressing the shared object of identifying students with dyslexia in the context of the school. Teachers’ perceived understanding of the object of dyslexia labelling is embedded within the values of the school system and wider systems, including cultural and social factors. Through the interviews and follow-up discussion with the teachers, embedded rules in support of dyslexic students, knowledge of dyslexia and teachers’ engagement and need of in-service training were discussed in detail. Teachers position themselves in relation to their role in supporting those students in their classes, expressing their emotions about service training. Stavros, a Sixth Grade teacher mentioned:

“To be honest with you, since there are SEN teachers for this [support of dyslexic students], it is their responsibility. My role in class is to differentiate the lesson for them” (Stavros, Sixth Grade teacher, Cyprus).

Stavros, as described earlier in this chapter, was one of the teachers who believe that dyslexic students need specialist support to progress academically. The quote describes the tension between Stavros’ beliefs about providing emotional support to all students in his class (see section 1a) and the embedded rules in the CES that SEN teachers are responsible for supporting these students academically. The tension could have been resolved by providing training to the teachers on aspects of inclusion, both theoretical and practical. Stavros continued:

“However, if I wanted to have training on these issues, I would like to learn more about how to provide more individualized support to the students in the class, more practice-based things. I think, yes, on these terms I would like to” (Stavros, Sixth Grade teacher, Cyprus).

Aliki and Olivia, in the Cypriot context, explained their thoughts in a similar vein:

“I would like to get more information not only on what it [dyslexia] is but also to gain more practical information, for example, how I can support this child? OK, I
may suspect that a child has learning difficulties or dyslexia but does it indeed have dyslexia? If yes, what I can do as a class teacher to support the child in my class? What kind of activities can I use? I feel that I need more practice-based training” (Aliki, First Grade teacher, Cyprus).

Aliki positioned herself as an agentive subject who takes an interventionist role towards teaching all her students in her class. Jordan et al (2009) in their study discussed the role of interventionist teachers who consider how their students can best learn. It could be implied that this is what drives Aliki to needing more practice-based training (rules). She said:

“I think you will feel more confident if you attend more specific seminars, observe and learn things. There are also workshops offered by the educational parties (e.g. left/right politically driven parties in education) but they are optional and offered for two days at the beginning of the academic year. If the seminars are concerned specifically with SEN issues, then the SEN teachers are the ones to attend them first.” (Aliki, First Grade teacher, Cyprus).

Systemic, contextual tensions between the CES and the activity of training create ‘troubles’ in the relationship between the subject (teacher) and the shared object (support provided to dyslexic students). For example, Aliki’s beliefs about inclusion, such as ‘social acceptance’ and her beliefs about her competence in supporting all students are challenged by embedded rules such as class size, students with challenging behaviours, a lack of support staff in the class and a lack of practice-based training.

In the example provided in figure 6.3 below, the systemic tensions are addressed in the activity of in-service training for Olivia and Aliki:
Figure 6.3: Example of analysis of the activity of in-service training using activity theory (Aliki and Olivia)

**Instruments/Tools**

- Teachers' knowledge on dyslexia, teacher's observation of students' performance, teaching strategies and approaches

**Characteristics of dyslexia, students' description**

- 'A big difficulty between his reading and his writing'
- 'Confusion of letters, misspelling', 'difficulty in orientation and comprehension', 'difference between cognitive level and reading level'

**Enabling rule**

- Teachers' intervention: role to support the students
- What can I do as a class teacher to support them in my class
- Willingness to engage into further practice-based training

**Outcome**

- Support to dyslexic students in the classroom (practice-based)
  - 'What can I do as a class teacher to support them in my class?' (Aliki)
  - 'What can I do in my class in this case? I can see the pupils, what does this mean? If a dyslexic student tries to write simple words in the paper, what do I need to do?' (Olivia)

**Rules**

- Constraint rules:
  - 'lack of teaching assistant in classroom'/big class size' (Aliki)
  - Lack of practice-based training on dyslexia and teaching strategies (Aliki)
  - 'optional training' 'training on this issue for SEN teachers' 'pressure of time to cover curriculum objectives' 'educational reform'

- I think the latest educational reform has confused us. All of us attended seminars based on this, and we were very frustrated. We have the pressure to cover as many objectives as we can, in a limited time and without having received any relevant training on those (Literacy, Maths) (Olivia)

**Division of Labour**

- Lack of teaching assistants in classrooms
  - EP, SEN teacher

**Subject**

- Aliki, first-grade teacher at 'Neophytos' school
- Belief on building a culture of acceptance
- Belief that inclusion is very difficult to be successful
- Belief on the need of special units within mainstream schools for severe cases

**Object**

- Olivia, third-grade teacher at George's school
- Belief on inclusion as a shared objective for equal opportunities to learning
- Belief that inclusion is very difficult to be achieved in schools nowadays

**Community**

- Political drives parties (right/left party)
- Ministry of Education and Culture
- Pedagogical Institute (PI)
Olivia, a Third Grade teacher, said:

“I happened to attend a couple of seminars offered by the Pedagogical Institute which are optional but they were more general on these issues […] I feel we need something more specific on how to support these students” (Olivia, Third Grade teacher, Cyprus).

Olivia expressed her concerns about the tension between the need for training on the subject and the embedded rules in relation to training that seem to act as a barrier to teachers’ decision to attend the seminars: (e.g. optional, educational reform, literacy based, pressure to cover objectives)

“I believe that a class teacher would choose to go to a seminar on Literacy, for example, especially nowadays that they [MOEC] put pressure on us to achieve higher results in Literacy and Maths and they changed the objectives for these subjects. […]and then you also have to pay attention to a particular child. Along with the pressure to cover all these objectives, you cannot provide individualized support to that one child “(Olivia, Third Grade teacher, Cyprus).

These quotes describe the constraint rules that are embedded in the activity system of training, especially from the wider community such as the Pedagogical Institute and the Ministry of Education. At the same time, there is a tension between teachers' initial beliefs about inclusion while working towards the shared object of supporting dyslexic students in their classrooms (Figure 6.3)

These findings aligned with similar studies of teachers' preparedness to teach all students in inclusive classrooms and their attitudes towards inclusion in the Cypriot context (Symeonidou & Phtiaka, 2012; Symeonidou & Phtiaka, 2009). The interviewees in the studies expressed their preference for practice-based training; teachers sought to improve their teaching skills and pedagogical strategies as they expressed emotions of insecurity and fear to work effectively with students with SEN due to their lack of adequate knowledge. It could be argued that the use of AT elements (Figure 6.3), including the constraint rules described above, can be an important factor that influences teachers' decisions and preference for more practice-based training in this regard.

Victoria, a Reception Class teacher at St Andrew’s school, on the other hand, addressed this challenge in the following way:

“I feel that at this point, no, I think I’ve had quite a lot of experience of autistic children, not for diagnoses. I also know a lot about dyslexia to make sure to put the right strategies in place to support those children […] but I will be really looking to get funding to have one-to-one teaching for the children from the authority when
they call the SEN panel. So, if there is an issue with the child, I can’t just go over and ask for funding” (Victoria, Reception Class teacher, UK).

Victoria preferred not to receive further training, while throughout the interview and follow-up discussion she referred to the strategies used and the programme ‘Read Write Inc’ (Ruth Minskin Training, no date) which is used as a whole school approach to teach literacy in KS1 and KS2. The teachers mentioned that they had received training on using the particular books and approach in their classes (tools/rules). At the same time, she referred to the lack of additional funding, as a constraint rule, which, from her point of view, could be used for securing additional support to meet the needs of students.

The notion of support in relation to dyslexic learners is approached in various ways by the teachers in both contexts. It has been identified in the literature that support can be seen in terms of resource allocation, based on the specific needs of the students, the extra hours of teaching or additional personnel (Reid, 2016). Indeed, most of the teachers referred to one of those approaches when they were asked about their understanding of support for those students.

It is suggested that the support provided to students need to be about beliefs, attitudes, materials and the need to utilise effective communication between all involved in the education of children. Peacey (2001) contends that appropriate support in terms of materials, strategies, beliefs and culture are equally important as they can enable people to build and grow and create an inclusionary school. In this regard, the purpose of training is crucial, especially for teachers and particularly in the area of dyslexia. As Reid (2012, no page) points out, there is “no ‘off-the-shelf’ ready-made answer or programme that suits all dyslexic children”. Therefore, teachers need to be flexible in the development of teaching strategies and approaches, which can contradict Victoria’s approach towards training as mentioned above. It is suggested that training for teachers should not necessarily be highly specialised but should include aspects of awareness of the difficulties associated with dyslexia, identification and support through curriculum planning (Reid, 2012). The teachers in this study felt that they lacked training opportunities to enhance their knowledge of dyslexia and identify the students, while an important issue of concern was that of support in the class.

6.2 Conclusion

This chapter has addressed the first research question of this study, related to teachers’ beliefs about inclusion and dyslexia. Throughout the chapter, the multidimensional aspects of concepts such as inclusion and dyslexia have emerged. Teachers’ understanding of inclusion as an ideal desired outcome is highlighted, including aspects of social acceptance, equal participation in the learning process and social inclusion. At the same time, teachers were aware of embedded rules in local contexts, such as in the
context of their schools. Such rules are the lack of material resources, additional support staff in classrooms and big class sizes. At a wider systemic level, the teachers were able to describe tensions at the level of the current educational system, curriculum objectives, a lack of in-service training, a lack of parental engagement and cultural aspects of the label ‘dyslexic’. The factors as illustrated seemed to influence teachers’ perceived ability to teach in classrooms with heterogeneous groups of students and their feeling about their job and the students. The discussion of the findings, drawing on the AT framework, highlighted the importance of the social and historical aspect of gaining an insight into teachers’ personal interpretations of such concepts. In the following chapter, the discussion of the findings is concerned with the second research question on teachers’ implementation of inclusive practice in their classrooms. Developmental Work Research (DWR) is used in this regard, drawing on the themes and sub-themes used in this chapter to create the teachers’ accounts.
CHAPTER 7: ENACTING INCLUSIVE PRACTICE IN THE ACTIVITY SYSTEM OF THE CLASSROOM

7.1 Introduction

Having presented the discussion of findings with regard to teachers’ beliefs about inclusion and dyslexia (Chapter 6), this chapter concentrates on the accounts of four teachers – two from each cultural context – and their professional practice. The purpose of exploring the accounts in more depth is to gain an insight into how teachers’ understandings and beliefs can be linked to their practice of including dyslexic learners in their classrooms. The following teachers were selected for the accounts: Yianna from St. George’s School, Grigoria from St. Neophytos’ School and Gillian and James from St. Andrew’s School. The rationale behind the selection of the particular teachers is on the basis of ‘extreme cases’; on the one hand, there are teachers whose views of inclusion are positive and, on the other hand, those whose views are less positive or negative. The views of the teachers were collected through the semi-structured interviews and analysed using the CHAT framework. In order to decide the four teachers the criteria of ‘positive views’ and ‘less positive views’ on inclusion were used along with the need to include two teachers with positive views and two with less positive views from the two contexts accordingly. In order to decide upon the four cases, constant discussions with my supervisor proved helpful in gaining a more in-depth understanding of the teachers’ views. The chapter begins by presenting teachers’ accounts, including their professional profiles and their viewpoints on inclusion and dyslexia. The chapter then focuses on teachers’ professional practice, addressing four aspects: modify instruction, assessment, and collaboration with other members of staff or parents and management behaviour (Malinen et al., 2013). The method used was based on classroom observations and the identification of ‘critical events’, which were in one or more of the four aspects of inclusive practice. Throughout the accounts, the analysis of aspects of teaching practice and of the ‘critical events’ was based on Developmental Work Research (DWR) as illustrated in 7.1 below. Cultural Historical Activity Theory via DWR provided an opportunity for the teachers to reflect on their practice (Engeström, 2007). This also proved a useful way of cross-checking the data with the teachers and gaining an insight into their understanding of their work and the tensions revealed. In doing so, DWR was utilised to present the findings in this chapter as ‘mirror data’ through which, as a researcher, I was able to reflect back to the participants in each school (Edwards, Lunt & Stamou, 2010).
The teachers’ responses to the analysis presented in the reflective sessions with them (follow-up discussions) allowed me to further check the findings in relation to the dynamics at work in the school and in the classroom. The sessions with the teachers could have been utilised to resolve tensions and facilitate change in practice where necessary, engaging the teachers in the process of expansive learning (Engeström, 2009). However, this was not possible within the current research due to time limits and the design of the study. The particular limitation is discussed further in Chapter 8.

7.2 Teachers’ accounts

Yianna

Yianna is a Greek-Cypriot Fifth Grade primary school teacher at St George’s primary school and she has 18 years of teaching experience. The school is one of the biggest in the district (N=281) and half of the students that attend the school are from diverse cultural and language backgrounds. She has a Bachelor of Education degree, a Master’s Degree in Educational Leadership and she recently obtained her PhD in Education. She has no personal experience of dyslexia in her family and friends’ environment. The class size is 24 and Yianna has experience of students with learning difficulties in her class. The academic year 2014-2015 was the first time she had experience of a student attending a special unit (Dan, a student with ADS and with the characteristics of dyslexia; official Statement as having Moderate Learning Difficulties). Mary is another student, whom
Yianna suspected of experiencing learning difficulties but who has not been officially assessed yet.

Yianna seemed to be one of the teachers who embraced inclusion, in terms of equal participation and social inclusion:

“Inclusion means that students with different abilities re together in the same classroom. And when I say ‘different’, I mean different in terms of the level, the performance but also their unique characteristics, their charisma.”

Yianna is positive towards inclusion and she believes that students, including Dan, can benefit socially in the regular class since, for her, inclusion is about co-existence despite students’ different abilities and needs. She mentioned:

“Dan won’t progress academically; his academic level is very low, he still needs that individual support in the unit but he has so much to gain from being in the class”.

Yianna acknowledged the importance of individual support for the academic progress of the student but she explained how the student can benefit in the regular class as well:

“As a teacher I am very interested in progress. I see my students in terms of development, how they progress and, for me, that means success. I believe in progress for everyone, even a student who is considered to be a more severe case of SEN […] Dan is making progress, he is independent, he has a sense of belonging to the class and this is what I think the social benefit is, that sense of independence. He has even learned to follow the classroom rules.”

Yianna positioned herself as an agentive teacher who is confident in taking responsibility for all her students. She is also confident in her own ability to support all the students in her class, expressing her belief in progress as success. She later narrated her experience of when she was first told that a student with Moderate Learning Difficulties would spend a few hours per day in her class:

“I must confess that, initially, I was very concerned and sceptical since I did not know anything about this [MLD]. But we have such a good relationship I feel love for this kid”.

She continued:

“I think what contributed to my initial feelings was that I did not feel ready for it. I mean, maybe because of the lack of relevant previous experience, but again, you are a teacher you work with children, you have experience in schools. I personally
have the interest, I have the motive for this. And I have the personal philosophy that I want somebody to gain something, anything, in order overcome some of the difficulties”.

Yianna started her description by expressing her emotions in relation to this fact. A gradual progress in her emotions was observed, starting from being sceptical to being motivated to search on her own. The role of emotions is discussed in Cultural Historical Activity Theory studies (see Chapter 6 as well). They are considered as psychological functions that signalize the personal sense of an individual’s own and other’s actions, making emotions constitutive for activity regulation as a whole (Leont’ev, 1978). Emotions are an indication of the relation between the goals or the results of one’s actions and the activated motives; they demonstrate the relation by “triggering an action readiness of how the person can react to the elicitor of the emotion in order to satisfy the motives” (Holodynski, 2013, p. 5). Yianna’s feelings of concern and a lack of readiness to undertake responsibility for Dan triggered her action to search and learn more about the case. The ultimate purpose of her actions was to be able to include the student in her class, giving him the opportunity to make progress. Her interest in the case, along with her motive guided by her own interest, also led her to approach Dan’s parents. The collaboration with the parents is illustrated in Figure 7.2 below.

Yianna described her decision to approach Dan’s parents to discuss the case. She specifically expressed her belief that parents are collaborators and she seems to be encouraging in inviting parents to school so as to meet them and build a rapport with them:

“In general I would say that I encourage the parents to visit me at school. I want to get to know each parent in person. This year I set myself the goal of meeting every single parent by Christmas time, to talk about everything, not only school issues. I want to build a good relationship with the parents because I believe they are partners with us, collaborators”.

When Yianna met with the parents, they reached agreement that it would be more beneficial for the student to be in the class more hours per day (rules). This is evidence that two sides of the community can collaborate towards achieving the collective shared object (outcome) illustrated in Figure 7.2.
Yianna said:

“Soon after our discussion [with the parents], we decided to increase his hours in the regular class [...] Initially I suggested this [to spend more hours in the class] during his consultative assessment, let's say. The Head Teacher was there, the SEN teacher, myself, the parents and the educational psychologist. The parents agreed with me. There was no reason for him to be spending only an hour per day in my class, when I need 30 minutes to calm him down in order to concentrate [...] so we decided to try this approach with him, off the record. Officially, he spends most of his day in the [special] unit”.

At the same time, the quotes describe the tension between teacher’s attitudes and beliefs about inclusion and the embedded rules of the school (the student should spend a considerable amount of time in the special unit). The DWR acted as an effective tool in this regard, as I was able in the analysis to identify the tension in the particular activity system [meeting with the multiagency team] in which the teacher, as an agentive subject, decided to make a change. Yianna acted in an innovative way in order to resolve the tension. The expected outcome can be explored through the notion of innovation in the particular activity system. Innovations are regarded as the changes that take place in an activity setting and can eventually change the outlook of the activity system (Russell, 2002). It should be noted that the notion of innovation has been explored more extensively within the third generation of Cultural Historical Activity Theory in networks of interacting activity systems. Engeström (2001) notes that, in interacting activity systems, multivoicedness can be a source of trouble and innovation, demanding actions of translation and negotiation. Even though it is not within the premises of this study to explore the interaction of multiple activity systems in depth, it is worth discussing the source of innovation which demanded action on behalf of the teacher. This action influenced the activity system of the classroom and the ‘critical event’, which is explored in detail later in this section. It could be argued that the source of innovation in the particular case is related not only to Yianna’s beliefs about inclusion but also to her ability as a teacher to support Dan in the classroom. It is suggested that a belief in one’s abilities can be a powerful tool for influencing one’s motivation to act, the effort made in the action, persistence in that effort and resilience when tackling setbacks (Tschannen-Moran & Johnson, 2011). Consequently, Yianna expected to be successful by including Dan in her class, instructing him along with the rest of the classroom; this motivated her to put more effort into resolving the tension and to prepare and deliver the instruction of the lesson as discussed in figure 7.3.

Yianna described the design and plan of her lesson, bearing in mind the needs of the particular student and those of the whole class:
“As a group, they did not learn to work in teams over the years and Dan needed to develop his social and team skills. To be honest, in terms of academic progress, I think he could be benefitted more in the unit, but it really depends on the internal motives of the student doesn’t it? [...] However, for me, to learn to work in teams, to work with others is not only social benefit. It is a learning process, for one to be able to follow classroom rules, to co-exist with other 20 students, to be able to listen to the teacher’s instructions [...] and I expect this from all of my students, not only Dan.”

Having clear rules and expectations enabled the teacher to design her lesson by differentiating the lesson in terms of grouping. She explained her decision:

“I choose to differentiate either in terms of assessment, e.g. the progress they make, or in terms of how they work because it is important to point out their [students with SEN] contribution and this is not in written work really. I mean, the outcome of the group work won’t be a written piece of work but rather it could be something creative.”

The term ‘differentiation’ seems to have entered the lexicon of the particular teacher, which demonstrates teachers’ evolving views (Pearson, 2009) and the way in which this could possibly interpreted in practice is discussed below.

Yianna took a social model disability approach towards the understanding of her students’ needs in order to design her lesson. More specifically, she considers students’ strengths such as creativity instead of their difficulties in writing, which may act as barriers to the learning process. Given Yianna’s definition of dyslexia as “the learning difficulty in which the children struggle to do a few things and basically has to do with writing,” she designed the lesson to be more practical and creative.
Figure 7.3: Example of analysis of critical event using DWR

Subject
1. Whose perspective?

- Parents as collaborators
- None of the students (with LD) need to stand out of the others in the class
- Inclusion is about coexistence of the students with different abilities in the same classroom
- Collaboration with other members of staff and with psychologists, drama therapists etc (wider community)

Constraint rules:
1. Lack of collaboration, work is an individual level; 2. group did not allow students with MLD to express themselves; Mary withdrew, Dan has become the clown, teasing others
4. What supports or constrains the work?

Enabling rules:
1. Sense of group work helps Dan to be part of a team
2. Creativity in group work
3. 'Differentiation in grouping, method of instruction'

Yanna: EdD, MA, PhD in Education
- Primary teacher, 5th Grade, 15 years of teaching experience
- Experience of students with literacy difficulties and autism but not with identified dyslexia/LE
- Not a personal experience of dyslexia or with relatives in the family environment
- Interested in learning more about dyslexia

Subject positioning (beliefs)

1. Whose perspective?

Tools:
- Observational notes and reflective diary, webcam model researcher

Teacher’s knowledge on dyslexia, teacher’s beliefs on inclusion and herability, teacher’s instructional method (experiential learning)

Tools/artefacts
3. What is being used?

Teacher: 1. To improve students’ team skills, 2. To solve a problem, to collaborate, to contribute to the team.

“[…] The purpose is to solve a problem of a fictional scenario. And in order to solve it they had to take roles, to collaborate, to contribute individually in the group”

1. To include Dan (student of the unit) and Mary (students with Learning Difficulties) into the process of team work
2. To give all students the opportunity to participate into the lesson
3. To be able to develop their social skills, to learn to work in groups

“[…] the today’s workshop was concerned with the aspect cooperation, to make advantage of their strengths and characteristics and solve a problem”

Critical event: Dan’s disengagement from group work, disturbing class (student’s behaviour)
Lesson: Part of experiential learning workshops, once every 15 days (during Greek literacy lesson)

Expected outcomes:
1. To include Dan (student of the unit) and Mary (students with Learning Difficulties) into the process of team work
2. To give all students the opportunity to participate into the lesson
3. To be able to develop their social skills, to learn to work in groups

“[…] the today’s workshop was concerned with the aspect cooperation, to make advantage of their strengths and characteristics and solve a problem”

Object
2. What are people working on?

Teacher, whole class, Dan

“They lack of cooperation as a team, it is one of the problems that they experience as a class”

Community
5. Who else is involved?

No SEN teacher present,
Peer work: students struggle to divide work,
Individual work rather than as a team

Division of Labour
6. How is the work shared?

Rules

"Context"
In terms of the ‘critical event’ identified in relation to teachers’ practice, the teacher provided the students with a fictional scenario to work as a team; the scenario was based on a story in which the team was trapped on an unfamiliar island and dangerous natives were planning to put them in prison. The students were asked to plan their escape as a team, assign roles to themselves and finally take action to save their lives. Yianna, at the same time, took a more interactive approach by accommodating the environment to the needs of her students. In fact, during the lesson, “The teacher created a friendly and less structured environment, she moved the desks away, so that the students had space to move around in, she provided them with lots of materials and resources (maps, highlighters, A3 papers, a flashlight) to organise their plan of escape from the island” (Transcript 33, field notes, Fifth Grade, 05.02.2015).

The ‘critical event’ identified by the researcher in the particular lesson, was that of Dan disturbing the class during the teamwork and teasing his classmates during a modified instruction (experiential workshop). During the reflective session, I asked Yianna to discuss the event. She explained:

“Today they struggled to achieve the team goal, which is one of the problems of this class. I am aware that there is a collaboration issue in the class and again, this is one of the reasons I decided to do these workshops with them. Dan and Mary struggle in particular, if you observed them, especially at the point where they had to express their opinion to the group. I don’t think the team gave them the opportunity to express their opinions or the people who had a more leading role in the team were not very democratic. Dan reacted to this. I think he expected to be more active and he was not given the chance. He is aware of his weaknesses. I think that his opinion may not be listened to and accepted by the group, and so he reacted in that way. It does sound to me as if he did it in a completely conscious way. He has low self-esteem in general”.

The above quotes describe the tensions created by constraint rules such as the lack of collaboration among the students and in the classroom, including leading personalities, Dan’s low self-esteem and his behaviour in disturbing the classroom. Considering these barriers as affecting the success of the lesson and eventually the equal participation of all students in the learning process (expected outcome), Yianna was asked to reflect further on her practice and how this could probably be resolved. Throughout the discussion, the conditions for the successful implementation of inclusion in practice became evident, along with one more innovation:

“Inclusion is a difficult thing to achieve but while it cannot be achieved easily, it is not impossible. It could be successful under certain special conditions. For example, teachers should have the possibility to accommodate their lesson to the
different groups and to the different abilities of their students, to differentiate their lesson and to have the time or the additional time to work or to prepare themselves. Furthermore, under these circumstances, it would be helpful to have a teaching assistant present in the classroom or co-teaching with other teachers”.

Some of the conditions that Yianna referred to could be regarded as barriers to the successful implementation of inclusion in practice in her class. These may be summarised as the lack of a teaching assistant, the lack of additional time and the possibility of accommodating the lesson to the group’s needs most of the time. These conditions can be seen as barriers to inclusion within an activity system and can refer to the elements of division of labour and rules accordingly. In terms of rules, the lack of additional time could be explained by the inflexibility of the Cypriot national curriculum, which is controlled by the Ministry of Education and Culture. More specifically, the Cypriot education system is characterised as highly centralised (Pashiardis, 2004). The innovation identified throughout the reflective session with Yianna, which can be seen as a possible solution to the lack of teaching assistant in the class, is the arrangement she made with Elsa (SEN teacher) on co-teaching. The particular innovation was discussed in the reflective session as a possible solution to the division of labour in lessons and referred to the collaboration with other members of staff. Yianna explained:

“I happened to co-teach with Elsa before; we did some workshops together. It just happened really, we did not plan it, but it was convenient one hour per week because, at that time, she would withdraw one of my students, so I suggested to her that once every two weeks we could use that hour for co-teaching. We collaborate with the SEN teachers. I consider them as members of the staff. I seek the advice of the SEN teachers on an everyday basis, [...] I take our collaboration for granted. I mean there is an everyday collaboration; for example, if I observe a particular behaviour in the class, I will ask the SEN teacher about it. I want her opinion on that. I believe they are staff members as well, since they are collaborating with us”.

Co-teaching is suggested as an instructional model which can contribute to the success of inclusive education. One of the models of co-teaching is based on general and Special Education teachers working collaboratively within mainstream classrooms to teach students with disabilities and those at risk of academic difficulties (Murawski & Lochner, 2011; Sileo, 2011). One factor that is considered as critical to the success of this model is building a professional collaboration between the two sections of the school community prior to the co-teaching experience (Ploessl, Rock, Schoenfeld & Blanks, 2010; Trent et al., 2003). In her account, Yianna seemed to have a strong belief in other members of staff as collaborators (division of labour). It could be suggested that Yianna’s
interventionist role in the successful implementation of inclusion in practice is evident. In particular, she is a teacher who took responsibility for all the students in her class – she took the initiative to include Dan in the class for more hours than it is arranged, based on the rules of Dan’s Statement, she sought information about particular cases of students and she also arranged to co-teach with a SEN teacher twice per month. This approach is supported by this literature, which emphasises the role of teachers who have interventionist beliefs in teaching all students, such as the need to adapt their instruction so that all students are able to participate; they seek more information about their students from parents and colleagues, they seek to work more collaboratively with teaching assistants and other members of staff and they might be more systematic about keeping track of their students’ progress (Jordan et al, 2009).

Throughout her account, it is evident that Yianna’s beliefs about inclusion and her ability to teach all students in the class have positively influenced her practice. This was explored through the use of DWR as the framework for the reflective session in which the teacher differentiated her instruction by using an experiential workshop. The expected outcome was to give the students an equal opportunity for developing their team skills while contributing as individuals to the group at the same time. Yianna was able to reflect upon her practice, identifying what ‘went wrong’ during the planning and design of the particular lesson. She referred to classroom rules such as the big class size for such a workshop and the limited time to organise this type of workshops more often. The students seemed to be used to more conventional methods of teaching in the class. Other factors were the lack of a teaching assistant or a SEN teacher in the particular session (division of labour), which Yianna attempted to resolve by arranging co-teaching activities with the SEN teacher twice a month. Other factors in the wider activity system could be seen as the inflexibility of the curriculum and the lack of additional time to be devoted into each student individually. Drawing on AT, Yianna seems to have taken an agentive role with her initiative to make a judgment about the benefit to the student, which led to the action noted above. According to Yamazumi (2007, p 22) the “agentive layer in human contexts focuses on the human potential for agents with initiative to create intellectual, emotional and moral judgments in their own name as intentional transformative actions.” Such specific agentive actions are based on identified contradictions and can function as the source of development. This could lead to expansive learning as a form of transformation of activity (Engeström, 1987). The concept of ‘expansive learning’ is not explored in the current study but it is worth noting the concept of innovation, which was identified in Yianna’s account based on the systemic tensions described above.
Grigoria

Grigoria is a Third Grade teacher at St Neophytos school in a South West district of Cyprus and she has 12 years of teaching experience. The school is large in size for the area (N= 221) and most of the population are native Greek-speaking students. The school is located in an area populated by mainly Greek Cypriots and is considered to provide good practice for all students. Grigoria s obtained her BA degree in Primary Education and her Master’s degree in School Leadership. In her class, there are 21 students, including one with hearing impairment, one who is in the process of referral for dyslexia and one student whom Grigoria suspects of experiencing learning difficulties but he has not been officially assessed.

Grigoria is one of the teachers in the Cypriot context who appeared to be less positive towards the concept of inclusion. In fact, she believes that ‘inclusion is difficult to achieve’ and approaches the idea of inclusion in a more categorical way, questioning the benefit of inclusion for all children:

“Inclusion means the presence of children with learning difficulties in the regular class along with other children. For children with mental retardation, Down Syndrome and autism, inclusion means being in the regular class for only some hours a day and, in some circumstances, a paraprofessional (teaching assistant) or an SEN teacher to be present too. [...] It has happened to me to have a child with mental retardation or with autism in my class, accompanied by a paraprofessional and they were simply shouting, disturbing the class. I really question what the benefit was for these children to be in the class.”

In particular, her interpretation of inclusion seemed to be related more to aspects of segregation, whereby certain categories of students should spend more hours a day in the regular class than others, who are considered ‘more severe cases’. At the same time, she referred to the need for a paraprofessional or an SEN teacher to be present in the class for those children. Drawing on recent studies conducted by Avramidis and his colleagues (Avramidis et al., 2000; Mamas & Avramidis, 2013), teachers tend to feel more comfortable and confident to teach students with moderate learning difficulties (e.g. dyslexia) in the regular class than other students with more severe disabilities (ASD). In addition, a more recent study by Angelides et al (2009) of Cypriot primary schools noted that teachers may be familiar with the term ‘inclusion’ based on the latest policy implementation but they still favour the segregation of particular categories of students in the unit. The role of paraprofessionals for those students is referred to as ‘accompanying’ the students and take care of their care needs rather than their learning needs (ibid). Grigoria was asked to elaborate further on her own understanding of inclusion:
“Sometimes it’s hard, because you need to do additional work for those students and they need special treatment [...] And you need to pay attention to the one, while at the same time, your time to do all the other necessary things is very limited”.

In Grigoria’s description, the use of medical-based vocabulary is evident, including the ‘need for special treatment’ which may infer to the pathology approach. At the same time, there are observable systemic tensions in the form of constraints, such as the limited time to pay attention to a student with ‘additional’ needs at the expense of covering curriculum objectives. On the one hand, teachers are pressured to cover increased amounts of material as a demand of the teaching profession and, on the other hand, they may feel they lack the ability and competence to support students with challenging behaviours or they feel that they are not adequately trained to support these students in their classes (Savolainen et al., 2012). A research study conducted by Angelides et al (2009) in the Cypriot context indicates that, while some teachers might be familiar with the concept of inclusion, they still favour segregation approaches to specific categories of students. The study suggests that this may be based on the lack of in-service training on inclusive education and that teachers believe they cannot support these students in their classes (Angelides et al., 2006). Another study in the Cypriot context demonstrates that, apart from the lack of in-service training opportunities for class teachers, the training is also based on a medical deficit approach (Symeonidou & Phtiaka, 2009). More specifically, the studies reported that Cypriot teachers’ specific understanding of inclusion is based on training which emphasises the difficulties internal to the learners, while more specialized training is related to Special Educational Needs teachers. Within such approaches, teachers tend to attribute to the learners in their classes fixed characteristics, which are beyond their expertise and ability to support. However, it is suggested that there is a positive relationship between teachers’ beliefs about their ability and competence and attitudes towards inclusive education (Savolainen et al., 2012). Teachers who feel competent and efficacious can manage the teaching of diverse students in their class.

Another tension identified in Grigoria’s personal approach is her reference to those students who need ‘special treatment’, which may imply the need for specialist support staff. During the discussion, Grigoria said:

“I think the sense we get in our [education] system is that the Special Educational Needs (SEN) teacher is the expert to deal with them [the additional needs of the students]. We have a sense that we, the class teachers, can do a minimum amount in class but most of the job is done by a SEN teacher.”

In this quote, a systemic tension at the wider level of the education system is identified, along with the perceived role of the teacher at the subject level. More specifically,
Grigoria, referred to the sense class teachers have about their responsibility for students with SEN. Historically, teachers and SEN teachers have acted on separate and divided systemic levels, in which SEN teachers taught SEN students in special schools using a separated National Curriculum (Phtiaka, 2000). Even after the implementation of the 1999 Education Act for Children with Special Needs (113(I)/1999, many students with SEN were educated in special schools or in ‘special units’ integrated into the mainstream school and the SEN teacher was responsible for them. Indeed, during school visits, I observed that the student with Hearing Impairment in Grigoria’s class received one-to-one support from the SEN teacher, who was also present during lesson time in the class (Transcript10, field notes 25.01.2015).

Grigoria expressed her view about her the collaboration with the SEN teacher:

“You have so many things to cover in a limited time […] If a student [with SEN], especially, receives individual support, you are in communication with the SEN teacher and you ask her to repeat the lesson for the student. It is a relief, really, because you reassure yourself that ‘OK, he will do the lesson twice’, he will be fine.”

The particular quote describes Grigoria’s feelings about the collaboration with the SEN teacher. In essence, emotions of relief, reassurance and being pressured were expressed at the same time. It seems that the arrangement between Grigoria and the SEN teacher to ‘repeat the lesson’ (object) is a relief for the teacher, since it may imply that the SEN teacher takes responsibility for the student with SEN in order to help him to catch up with the lesson (outcome). Even though it is suggested that division of labour could be seen as a form of collaboration between the members of the classroom community, it raises questions about shared responsibilities, as Grigoria earlier referred to ‘additional work’ needed for those students. The systemic tensions at the level of the classroom in the activity of collaboration between Grigoria and the SEN teacher are presented below in figure 7.4:
7.4 Example of analysis of teacher's collaboration with SEN teacher using Activity Theory

**Teachers' beliefs:**
- 'Inclusion is difficult to achieve'
- Inclusion in terms of placement.

**Tools:**
- Teacher's beliefs and understanding of inclusion, teacher's perceived role of SEN teacher
- 'Placement for more severe cases, e.g. autism, down syndrome'
- 'SEN's responsibility for these students'
- 'Presence of paraprofessional/SEN teacher in the class'
- 'SEN's teacher knowledge on SEN issues'

**Instruments/Tools:**
- Grigoria, third-grade teacher, BEd, MA
- No personal experience with dyslexia
- Experienced in the assessment process
- Professional experience with LD

**Subject:**
- Expectation of work (to co-ordinate the plan for the lesson)
- 'To repeat the lesson with him'

**Object:**
- Teachers' Expectations (academic progress)
- 'To catch up the lesson', 'not to fall behind'

**Enabling rule:**
- 'Information on SEN from SEN teacher'
- 'Learn things I didn't know before'

**Rules:**
- Constraint rules:
  - 'Additional work for these students' need for special treatment'
  - Teachers' emotions (tiredness, disappointment)
  - Teacher's perceived role of the SEN teacher
  - Teacher's lack of perceived ability to teach all students

**Community:**
- Peers, SEN teacher, teacher
- Wider community
- Need for external training
- 'Seminars to be based on SEN issues'
- 'Emphasis of seminars on students with behavioural difficulties'
- 'Lack of practice-based training on supporting students'

**Division of labour:**
- Teacher, SEN teacher
- Teacher's perceived role of the SEN teacher
- Teacher's expectation
- 'Relief he will repeat the lesson with the SEN teacher'
Grigoria also expressed her feelings related to job satisfaction and her ability to cope with the demands of the profession, such as workload and classroom stress.

"I have felt tired and disappointed over the last few years. At the beginning it was different, but over the years I’ve lost my enthusiasm and motivation – there is no motive anyway. You have to do so many things that if you happen to come across an encouraging inspector or Head Teacher, you’ll be lucky and get a good appraisal. I feel tired in my 12th year of teaching. At some point, I was like, ‘I will deliver my lesson to 24 [students] and if 10 of them manage to learn it, they will. I cannot teach everyone to be a scientist.”

The above quote describes Grigoria’s perceived workload-related pressure and stress and her sense of teaching efficacy in diverse classrooms. It also refers to another factor – the system level of inspection and the lack of appraisal for teachers’ work. These factors seem to contribute to teachers’ job satisfaction and commitment. Research evidence supports the view that stress related to workload and students’ behaviour is linked to teachers’ sense of competence and efficacy. This, in turn, is directly related to the sense of job satisfaction and commitment (Collie, Shapka & Perry, 2012). Another study’s results conclude that a Principal’s support and personal accomplishment are associated positively with job satisfaction (Brackett et al., 2010). The combination of these factors at different levels, both individual and systemic, can create tensions and potentially influence teachers’ inclusive practice (see Figure 7.4)

In terms of the definition of dyslexia, Grigoria described it as “a confusing term,” as illustrated in section 3a) understanding dyslexia through the models of disability and she defined it as a “memory disorder”. She said:

“For example, they cannot memorize much information but if it is about something that does not have to do with memory – it could be an intelligence thing, let’s say – they can find it”

Grigoria defined dyslexia as a memory disorder, using medical vocabulary, addressing the level of biology in terms of the difficulties in short-term memory but, at the same time, she referred to strengths, such as intelligence. When asked to refer to the signs of dyslexia, she said:

"I once happened to have a student in my class who reversed the letter ‘ε’ (ε’ in Greek) with the number ‘3’, which I think is common in those who suffer from dyslexia. Then I read more information on the Internet and it was a surprise to read that Einstein had been dyslexic. I mean, such an intelligent person to be dyslexic!”

Grigoria’s overall approach is directed towards the medical-deficit model, using words such as ‘suffer’ in her description above,. She also referred to students with SEND as
those who need ‘special treatment’ and ‘specialist support’. Interestingly, throughout the interview, her approach also included aspects of the causal model, such as the role of the family environment as a contributing factor. More specifically, Grigoria referred to her current experience with one of her students, Linos, whom she suspects of having learning difficulties.

“I cannot tell with certainty though, because he is the only child and he is from a single parent family… I mean, I don’t know if he is spoiled in a sense, by the way he grew up or he is immature. [...] the thing is that, in this case, the child is a colleague’s child and the mum herself thinks that her child is very good and that he only gets distracted at times.”

Grigoria initially suspected that he particular student may be experiencing difficulty with literacy. In her description, she mentioned that he jumbled up letters and could not copy from the board. When asked to discuss his case, she referred to family factors, appearing to believe that they are equally important to an understanding of the difficulties that a student may be experiencing. The possible overlapping of the two models continued in
Grigoria’s description of her second student, Andri, who, during the data collection stage, was going through the assessment process.

“Andri’s mum came to visit me two weeks ago and she asked to move on with the referral process. I will complete the relevant forms, I have to, but I don’t really think that she will get anything more than the ADHD label. I guess she just wants to get those extra support hours (at school)”.

Asked to explain the rationale behind the mother’s concern and decision, she said:

“I believe that Andri is just a weak student… I mean, she is not a high flyer but you can see that she always completes her work and the assigned tasks, she is consistent with her homework and she has acquired the mechanism for reading, for example. I believe that it is more about the way she grew up. I mean, it’s basically because of her family. Her mum told me that she used to go to the same at school herself, just like Andri’s sister.”

It is well-acknowledged that parents strongly believe that a label, which identifies the needs of their children is necessary to secure access to specialist services to gain appropriate help (Gibbs & Elliott, 2014; Reid, 2016). This is especially true of parents who observe that their children are performing significantly worse than their peers and that additional resources or a review of provision may be needed. Grigoria seems to share this understanding in the case of Andri, as she thinks that the particular student is just performing lower in comparison with her peers. In the follow-up discussion, she again addressed this point:
“Her mum is really concerned about Andri’s move to secondary school. She thinks that she will be stigmatized for her weakness and low performance and won’t get good grades. In this case, a formal assessment will be the ‘excuse’ for her low grades. This is my understanding.”

In AT terms, Grigoria’s perception of the process of assessment and subsequently of the outcome ‘label of dyslexia’ is illustrated in figure 7.5:
Grigoria’s Greek language lesson was based on a comprehension task that prepares the students for their writing task for the next lesson. The planning of the lesson and the expected outcomes are aligned with the National curriculum’s objectives for Third Grade students, who need to be able to be aware of the different genres used for writing (narration, description, invitation) and to be familiar with the differences among the genres so as to be able to process the information (MOEC, no date.) Grigoria used Third Grade books (tools) and the reading text was based on Oscar Wilde’s story *The Selfish Giant*. The students were asked to read the passage on their own and then discuss each paragraph and its meaning in pairs. The lesson began by making use of the IWB, in which a brief biography of the author was illustrated along with an interactive map of is country of origin.

It is worth noting that, in Grigoria’s practice and the identified ‘critical event’, there was a combination of a medical model and interactive approaches to teaching and learning. More specifically, Grigoria’s lesson was planned based on more conventional approaches to teaching, such as such direct delivery where the teacher reads the text aloud and requires the students to copy from the board. The tasks (object) were common to all students. While the lesson seemed to be more teacher-centred, the classroom arrangement, along with the use of IWB as a tool, could be seen as an interactive approach. For instance, Andri was placed next to the teacher, sitting with a more able student, and the IWB was used as a tool for accessing information about the author. The students were initially asked to work on their own (to read the text), in pairs (to discuss it with their peers) and then report to the whole group. Throughout the lesson, it was observed that Andri often interrupted the teacher by using the red flash card, even when the task required working in pairs. This happened five times during the lesson.
7. Example of analysis of critical event using DWR

Teachers' emotions
- 'tired and disappointed'
- 'lack of motivation'
- 'additional work'...

Student: 'additional work'
- 'sometimes it feels like an additional burden'
- 'pressure, especially when you have to cover all the objectives and you need to pay attention to the one'

Enabling rule:
- Classroom arrangement: 'Andri is placed in front to teacher's desk'
- Class rules: 'flash cards: green colour for those who finish, red for those who need assistance'

Rules
- 4. What supports or constrains the work?
- Constraint rules:
  - Teachers' emotions: 1. tiredness, 2. disappointment, 3. additional work for these students, 4. need for special treatment
  - Teacher's role: 'I will deliver my lesson to 24 students, if 10 of them will learn they will...

Instruments/Tools
- 3. What is being used?

Subject
- 1. Whose perspective?

Grigoria, third grade teacher, B.Ed, MA
- No personal experience of dyslexia
- Student in the assessment process
- Professional experience with LD

Object
- 2. What are people working on?

Community
- 5. Who else is involved?

Division of labour
- 6. How is the work shared?
- Peers, teacher
- Andri is interrupting the lesson to ask for support 'use of red card'
- Parent: ask for referral process of her student
- wider community
- Need for external training

Outcome
- 7. What is to be achieved?

Critical event: Andri is frequently interrupting the lesson to ask the teacher for help (Classroom behaviour management)

Lesson (Greek language lesson):
- Observational notes and reflective diary, DWR model (researcher)
- 'teacher's beliefs and understanding of inclusion, teacher's knowledge of dyslexia'
- 'need for special treatment' 'memory disorder' 'interacting factor: Family environment' (teacher)
- 'interacting whiteboard (IWB), video, textbooks, teacher's instructional methods, 3rd grade books.'

Expectation of work:
- 1. comprehension task 'Oscar wild story'
- 2. To give title to paragraphs
- 3. To describe the heroes of the story
- 4. To identify the genre of the text
- 5. To copy from the board

Expectation: NNC objectives for 3rd grade
- 'to be able to identify the genre of a text'
- 'to write fictional stories in the form of essay'
- 'to use adjectives in their stories'

Role of teacher: deliver the lesson to the whole class
- Teacher, peers
- 'Andri is paired up with a more able student' (observation)

'Andri is paired up with a more able student' (observation)
Grigoria was asked to comment on and discuss this event.

“Sometimes I feel that she [Andri] can become a bit tiring in the class because I feel she is intentionally seeking my attention and she asks for help even though she might know the answer. The other day, I really believe that she knew the answer to the 7x7 but again she asked for my help and as soon as I told her that she had to try to do it on her own, she gave it a try. Sometimes I think she is a bit lazy; she may also be used to the attention that she gets at home because of her health issue and she is seeking the same attention in the classroom. Sometimes I might comment on her spelling or on the way she writes and she immediately answers, 'That is the way I want to write it'… She can become offensive if you tell her that it is not good enough.”

The quote above describes the tension between Grigoria’s perception of the learning needs of her student (subject) and Andri’s observed behaviour in class (rules). When Grigoria was asked to reflect on the event, she provided a description of the student’s characteristics (such as ‘Sometimes I think she is a bit lazy’ and ‘she is intentionally seeking my attention’), which was linked to Andri’s family environment (‘she may be used to the attention that she gets at home’). In AT terms, there is at the same time a systemic tension between the ‘home environment’ and the ‘classroom environment’ where there is disruption of the lesson by the student (rules). When the discussion addressed whether the student might be experiencing any difficulties in class, which could explain her observed behaviour, Grigoria responded:

“I don’t think so. She is a bit hyperactive but that’s all. She is a slow learner but when she was younger she experienced a health issue, quite a serious one, I’ve heard she was in a coma for a few days. When she recovered, all the attention was on her. She may have a kind of insecurity you know, and she seeks your attention, literally every two seconds.”

It should be noted that the reflective session mainly concentrated aspect of Andri’s behaviour and her home environment. It could be suggested that, even though Grigoria could understand that her student’s difficulties in literacy might be influenced by the home environment, in practice she followed a medical deficit approach to teaching and learning support strategies, in which barriers to learning for the particular student are considered internal, e.g. ‘she is a slow learner’ ‘she is lazy sometimes’ ‘She may have a kind of insecurity and she seeks your attention’. Interestingly, even though Grigoria was one of the teachers who seemed interested in learning more about dyslexia after the completion of the data collection and she also emphasised the need for practice-based training for these students to address contextual dilemmas, she seemed resistant to reflecting upon her own practice. This could possibly be explained by her personal beliefs about inclusion.
and her perceived inability to teach all the students in her class, together with her feelings about both the profession and the student. However, resistance within an activity is a source of tension which does not lead to innovation (Sannino & Ellis, 2013). Such an approach cannot lead to transformation and change in classroom practice.

James:

James is a Year 4 teacher at St Andrew’s school and he has 20 years of teaching experience. He obtained his BA in Education and he also did the PGCE. The school is located in a sub-urban area in North West England, and the area is considered socially and economically deprived. St Andrew’s school is one of the schools to be awarded the Dyslexia Friendly Quality Mark, and it is considered as one of the school which provides inclusive practice for all students, including those with dyslexia. James has no personal experience of dyslexia in family or friends. He had professional experience of students with dyslexia and specific learning difficulties in his class during that academic year and there were two students for whom English was an Additional Language. The class size was 34 and there were two teaching assistants, Lina and Nadine, one for individual support and the other for class support.

James was one of the teachers who seemed to support inclusion as an idea but he was also pragmatic and realistic when discussing the difficulties associated with the implementation of inclusion. James’ own definition of inclusion is concerned with aspects of equality and diversity, similar to Gillian’s (Chapter 6):

“Inclusion, basically, is about treating everyone equally, regardless of where they come from, their background, their religion. It is about treating them the same in terms of work, everything. And in terms of disability, they are all pretty much the same, regardless.”.

From the beginning of the discussion, James referred to the ethos and climate of the school as dyslexia-friendly, emphasizing the need of the school to be inclusive because of the large number of students with literacy difficulties:

“We were stuck by the actual numbers. Many children could be affected by this [dyslexia]. It is not a thing that I realized – how many people it affects. There might be slight dyslexia as well. So what we try is to use pictures on the trays, coloured backgrounds, we try the arcs, the alphabet arcs, we try to use as many strategies as we can. So it helps even the ones with dyslexia.”
James referred to the decision of the school to become ‘dyslexia-friendly’ as a preventive strategy to meet all students’ needs, even those who may struggle with dyslexia. He continued:

“If you take a class, maybe six of the children will have lots of [dyslexia]. So what we decided here was to try make the school and classrooms as dyslexia-friendly as we can, so if anybody else has issues we will help them rather than say, ‘OK, you’ve got dyslexia, we will do things for you’. We are trying to include everybody just in case there is somebody who can benefit from the yellow background on the board or yellow paper photocopied, that sort of thing.”

The quote above refers to the prevalence of dyslexia which is estimated to range from 3% to 10% in England (Snowling, 2013). James also mentioned the use of equipment in classrooms and schools with ‘dyslexia-friendly’ resources and the transformation of classes into dyslexia-friendly places so as to benefit all learners. The school’s approach could be regarded as a ‘systemic process’ of transforming the school and classroom and removing barriers to participation and learning for all students (Waitoller & Articles, 2013).

Throughout the discussion, James’ understanding of inclusion was also related to the difficulties he had experience as a teacher and to the notion of disability. He noted:

“Firstly, with disability, it is very difficult. I’ve been looking this year for additional support, really, because we’ve got about two now for support with Lina and Nadine (TAs) but last year we only had one [TA] for 34 [students]. That was really difficult, especially if you got a lot of challenging children. That was hard, catering for the ability needs of the children more than anything, trying to stretch the able ones and accommodate for the really poor ones and then the middle group… it is very difficult to manage them.”

Drawing on AT, James emphasised difficulties experienced in different elements, such as working with heterogeneous groups, including students with disabilities in the class (community), referring particularly to classroom management difficulties (rules) and his teaching ability (subject). At the same time, there is tension between the teacher’s beliefs about inclusion as treating students equally and catering for their ability needs (outcome) and trying to teach students with diverse abilities in order for all of them to reach the expected targets (outcome). The tension is at a systemic and contextual level which, on the one hand, is the school’s dyslexia-friendly policy and, on the other hand, external pressure from the government to reach expected targets despite children’s different levels of ability. External pressure from the government is discussed elsewhere in this thesis (Chapter 2, section 2.4.3. Inclusive education and dyslexia in UK). It is the pressure to achieve expected targets via the National Literacy Strategy (NLS); all students are
expected to reach these targets, based on quality teaching via the ‘literacy hour’ (Armstrong & Squires, 2014).

James’ concerns about classroom management and teaching all students seem to be similar to those of Grigoria. The two teachers presented similarities in the way they perceived their ability to teach diverse classrooms but also in relation to students who might be challenging, including those with disability or behavioural difficulties. Another commonality identified between the two teachers is the feeling of pressure they experienced, along with feelings about job satisfaction and job commitment.

“It [teaching] is a very difficult job now. Most, if not all of us, we’ve got families...and we need a lot of time to prepare the lessons and mark the tests and I think we need more time. I mean, we’ve had half a day (Preparation Plan Assessment time) which is been very helpful... I mean nobody really has enough time, trying to mark four sets of boxes every time, you plan for the next lesson, and you also have some students who are not progressing as the others... I think time is the main thing really. It is just a lot of work.”

In his description, there seems to be a tension between James’ definition of inclusion, as providing equal opportunities for all learners, and the embedded rule of devoting time to preparation, marking activities and individual time per student during the lesson. This was also observed during the researcher’s visits to the particular school: “Teachers stay at school after 3.00pm when the school day finishes and the particular teacher was marking students’ tests. There was a need to rearrange the scheduled interview with the teacher due to his increased workload that day” (Reflective diary, 22.03.2015). James continued:

“It is a very pressuring job really. We talk about inclusion but, in essence, it is because it is results-driven now, you’ve got to meet your targets, it is a lot of pressure on most of us, much more that in the past. When I first started, there was not so much pressure, not like this. I think it is one of them [OFSTED] they came in. It is good for them to see your work but they put a lot of pressure. And it can affect the morale of the staff because they can be quite critical. The people coming in are quite critical about your work and what needs to be achieved, so they can have a bad effect on morale. Rather than motivating staff, which they should be doing, I think they keep telling people, ‘you are not good enough’. Especially if your results are not good enough, you are told, ‘it is not good enough’, not that ‘you are doing a great job but some of your children are below.’ That’s not an excuse anymore. It is very difficult when you have some of these children to work with”
James expressed feelings of disappointment, frustration and pressure about the criticism teachers receive for their job performance. Such emotions can influence teaching efficacy and job satisfaction. Leont’ev (1974, p.22) articulated the notion of human activity in which “behind the object, there always stands a need or a desire, to which [the activity] always answers.” Kaptelinin (2005, p. 5) highlighted that analysing the object of activity can provide the possibility to understand “not only what people are doing, but also why they are doing it.” As such, emotions can trigger actions towards the object, which, in this case, is the shared object of providing equal opportunities. The negative emotions expressed by James may act as barriers to teachers’ teaching approaches and strategies for supporting students in the classroom. In addition, James seemed to be concerned that some of the students, who are falling behind, are no longer an ‘excuse’ for the class results, expressing his feeling that it is difficult to work with them. Therefore, while some teachers, including James, interpret inclusion as an opportunity for the equal participation of all students, there is a systemic tension at the level of OFSTED inspection and at the system of the classroom, contradicting the values of inclusion and challenging teachers’ ability to teach students with diverse abilities (see Figure 7.7 on the influence of these factors on the activity of classroom management).

When James was asked to defining dyslexia, he referred to his current lack of knowledge of dyslexia and training:

“What I know is we are looking for children who are struggling with, obviously, reading problems, letters are getting mixed up, so they see letters differently. This is one of the things I would look out for. And I also think I would be looking for somebody who is behind in their reading age. That would trigger alarm bells for me. If they are 8 years old and then their reading age is 6, I think there could perhaps be something holding them back, perhaps just how the brain works. I don’t know too much about it in great detail. It is the jumbling of letters. You can see it in Maths as well, sometimes with numbers for dyscalculia I don’t know a great deal about it but something in numbers is related to dyslexia. We’ve had children with dyscalculia. It was combined somehow”.

In his description, James mainly emphasised the students’ performance behaviour in reading and spelling and also referred to their reading age being behind their chronological age, underling the biological origin of ‘how the brain works’. He also referred to co-occurring difficulties such as dyscalculia while, at the same time, admitting his lack of adequate knowledge of dyslexia and its related difficulties. James’s description used aspects of causal modelling in terms of the biological origin and students’ behaviour in spelling and reading. The mediating role of family was addressed in the following section of his interview:
“I don’t really know, to be honest with you, what that should be. I think it could possibly be… I don’t like to say that it may be passed on but we’ve had other instances where one of the parents was dyslexic as well.”

James’ understanding of inclusion and dyslexia and his beliefs about the need for support staff for dyslexic learners in his class was evident in the discussion of the critical event identified during his instruction. In particular, James referred to a whole school policy for developing children’s writing skills, called ‘Big Writing Day’ (rules). The students are expected to be able “to write down their ideas with a reasonable degree of accuracy and with good sentence punctuation. Teachers should therefore be consolidating pupils’ writing skills, their vocabulary, their grasp of sentence structure and their knowledge of linguistic terminology” (DfE, 2013, p.33). The purpose of ‘Big Writing Day’ which takes place once a week, four times a month is to motivate children to write. James explained:

‘VCOP (vocabulary, connectives, openers, punctuation) is quite trendy at the moment. That’s meant to give them lots of stimulus and ideas and make them want to write, because what I am saying is that they can’t think of anything; at least through that, it gives them some of the features we are trying to get into their writing. So that’s a good thing and what we try to do is engage the children, because it is superheroes, the chance to get the motivated to write ideas but they still want you to give them everything [his emphasis] really”.

Ken [a student with dyslexia] works with Lina (TA) in the class in the group with the lower ability students. Ken was distant from the rest of group and “There seem to be a lack of interaction with the rest of the class and the class teacher, while he addressed his questions only to the Lina” (Transcript 29, field notes, 20.04.2015).

The analysis of the event based on the DWR is presented in Figure 7.7 below and James reflected on the event and his practice:

“Ken, was excited today but that lad has a very poor attendance, he mumbles and he cannot write for more than 15 seconds. He is getting tired, and it is because of poor parenting really. He doesn’t have a model for him, who should be saying, ‘Open your mouth, speak clearly’ or ‘Read this. It will help you to get ideas down on paper. He is really struggling but he is working OK with Lina. Sometimes I think he is relying on her, but I think he learns a lot with Lina”.

Here, systemic tensions at the level of the school-home environment are identified. More specifically, parents’ lack of engagement in the education of their children and parents' SES background were identified as underlying factors contributing to the students’ difficulties. It is worth noting here that the role of environment and the relationship
between family and school seems to be an important issue, especially at St Andrew’s School.

“I think there is a big difference in one achieving alone, in terms of input of the reading; the parents are just not there, really. I think it could be a lot better [if parents were engaged] in supporting their education, making sure they are doing their homework, making sure they learn spelling, reading with them every night, talking to them at home. We do tend to find that where the parents come from poor literacy backgrounds, the children coming through it are struggling with the work as well”.
Fig. 7.7 Example of analysis of critical event using DWR

James, year 3 teacher, Bachelor of Education (B.Ed), PGCE, 20 years of experience, KS2, no background knowledge on dyslexia, need for training on dyslexia

Teachers’ beliefs: ‘beliefs on division of labour for inclusion to be successful’
‘Belief on providing equal opportunities for learning’
Belief on parenting, SES status as contributing on reading experience and writing

1. Subject Whose perspective?

2. What are people working on

3. What is being used?

- BW: They planned a superhero, thoughts about what they look like and some of their weakness and strengths
- VCOGP: ‘It is really trying about waking their imagination to get them to write, it’s got a massive focus on the VCOGP as well’

4. What supports or constrains the work?

- Support: ‘Big Writing’ to make them want to write
differentiation on outcome for the ability groups
TAs working with the lower groups

5. Who else is involved?

- Class: Peers, TAs, Teacher
- Teacher expectation:
  - ‘she can adapt the lesson, she is very good at Maths, she can manage those students with Statement, that’s their level’
  - ‘I think they learn a lot going with Una’ ‘Ken was excited today, he wants to work on his own in the corner’

6. Community

- Constraint:
  - Lack of reading experiences, lack of confidence, lack of ideas, poor family educational backgrounds

7. What is to be achieved?

- Year 4 objectives (NC)
  - SATS, results driven, OFSTED report,
  - ‘Pupils should be able to write down their ideas with a reasonable degree of accuracy and with good sentence punctuation. Teachers should therefore be consolidating pupils writing skills, their vocabulary, their grasp of sentence structure and their knowledge of linguistic terminology’ (DFE, 2011, p. 33)

- Outcome

- Differentiation on outcome for the ability groups

Constraint:

- LA pressure, OFSTED reports, Results driven, SATS
James seemed to understand dyslexia as a multidimensional concept, with a number of interacting factors contributing to the experience of dyslexia. The factors are related to the causal modelling framework (Frith, 1999) taking into consideration environmental aspects such as the school policy, socio-economic factors and cultural factors, including the deprivation of the area and parents’ working class background (Frederickson & Cline, 2009). James’ understanding of dyslexia is illustrated in table 7 below, using elements of the CHAT framework:

<table>
<thead>
<tr>
<th>CHAT elements</th>
<th>Dyslexia</th>
</tr>
</thead>
</table>
| Rules         | 1) Class rules  
|               | - Class arrangement (enabling)  
|               | 2) Policy  
|               | - OFSTED inspection (constraint)  
|               | - Dyslexia-friendly policy (enabling)  |
| Community     | 1) Peer/Class community:  
|               | - disruption of the class  
|               | 2) Family community:  
|               | - poor family literacy background  
|               | - working families (Low SES)  
|               | - Parenting issues  
|               | 3) School community:  
|               | - Dyslexia-friendly school policy  
|               | - Lack of home-school relationship |
| Subject       | 1) Lack of knowledge to support  
|               | 2) Difficult to deal with  
|               | 3) Use of dyslexia-friendly practice  
|               | 4) Need for training |
| Division of labour | 1) Teaching assistants |
| Object        | 1) Genetic factors:  
|               | - brain disorder  
|               | - heredity  
|               | - brain dysfunction  
|               | 2) Student characteristics in learning:  
|               | - Difficulties:  
|               | - Poor working memory  
|               | - Letter reversal  
|               | - Writing and spelling difficulties |
| Tools/artefact| 5) Differentiation  
|               | 6) Dyslexia-friendly resources/materials (Visual timetables)  
|               | 7) Read Write Inc (books, teaching materials). |

Table 7: Example of analysis of James’ understanding of dyslexia
James was asked to reflect further on his practice in the literacy lesson, when he worked with Ken and other students and he referred to the division of labour among the two teaching assistants, along with the use of school resources:

"It is a difficulty. You have to look out for the resources you've got in school. We've got Read Write Inc and the Big Writing Day every week and I have some of my children going now with the TA. That really helps me; it is taking away the pressure of having to plump for those every day, for literacy lessons. So we manage. Lina takes Ken and those, that's their level, everything's right. The same way with Maths as well, I have a group going out with Lina. That works really well, because Lina (TA) is very good at Maths she is been on a lot of training courses, she knows the children really well, she can adapt the lesson, she is very good. So that's taking the pressure off because, in the past, I didn't have those three children in my Maths lessons and yes, of course I want to include them but sometimes it is very difficult to… I think they learn a lot more going with Lina. It is not every day but…"

James described how inclusion could be more successful when teaching support staff took responsibility for some of the groups for the core subjects. In particular, James referred to the division of work with Lina who takes the less able group out of the class, to teach them literacy and maths in a group. This was also observed during the school visits, "where the one student with the Statement and his one-to-one TA (Lina) were withdrawn along with other two students for group teaching.

The impact of TAs on the academic achievement of primary children with identified learning difficulties is indicated in a relevant systematic review (Farell et al., 2010). However, questions are raised with regard to the training of teaching assistants to provide targeted interventions for students with identified difficulties and the model of collaborative teaching in classrooms, as in some instances there is ambiguity over the TA’s role (Webster et al., 2011). The number of teaching assistants (TAs) has been increased in many schools internationally and, in the UK context, over the last decade questions on their model of deployment are noted (ibid). According to the authors, the rationale behind the increased number is to improve adult-to-pupil ratios, taking responsibility for groups of students, which also seem to be evident in James’ interview and the observation notes.

More specifically, James mentioned that such an arrangement takes away some of the pressure on him. In addition, James referred to the use of material and resources, namely the Read Write Inc Phonics programme, which teaches reading, writing and spelling to children aged 4-7 but it can also be used with 8-9 year-olds as a catch-up intervention (Ruth Miskin training, no date). The resources, books and teaching materials are used for
all year groups at St. Andrew’s school. The activity of classroom management is illustrated in Figure 7.8 below.

Finally, in James’ interview and follow-up discussion, the need for in-service training was mentioned since, as a teacher, he felt he did not have an adequate knowledge of dyslexia to be able to identify the signs of dyslexia at an early stage.

“The more we can get, the better really, because we are all learning. We don’t know a massive amount about it and the more we can learn about it can help us help children who need it really. That’s what we got on the training course, to get some fresh ideas. So it is good saying, ‘So and so is dyslexia with the tests’ but whether the teachers, who do not know much about it, can do something could be an issue and it would be really useful if people with the expertise were coming to school. That would be really useful, to tell us more about it”
Fig 7.8 Example of analysis of the activity of classroom management using CHAT

Instruments/Tools
- James, year 4 teacher, Bachelor of Education (B.Ed), PGCE, 20 years of experience, KS2, no background knowledge on dyslexia, need for training on dyslexia
- Teachers' beliefs: 'belief on division of labour for inclusion to be successful'
- 'belief on providing equal opportunities for learning'

Teacher's emotions:
- Frustration, disappointment, pressure.
- Lack of motivation, moral effect on teachers' job performance.

Enabling rules:
- Teacher interested in learning more about dyslexia on how to support the students
- DFS school policy

Constraint rules:
- Teacher's lack of perceived teaching efficacy (subject)
  1) 'Last year I got a [A] for X and X. That was really difficult, especially if you have challenging students'
  2) 'External pressure'
- Pressure on teachers so as all students to reach expected targets through literacy hour (LTS)

Subject

Object
- Gap between chronological age and reading age, reading and writing difficulties
- 'How brain works'
- 'But I think the reading is the trigger really and then in the writing you will see the d's and b's!'

Gap between chronological age and reading age, reading and writing difficulties

Community
- Teaching staff, students, teacher
- 'heterogeneous groups of students to work with'

Division of Labour
- Teacher, TAS (two), one for 1:1 support and the other one for class support

Teacher expectation:
- 'She can adapt the lesson, she is very good at Maths, she can manage those students... with Statement, that's their level' (categorical approach)
- 'I think they learn a lot going with line'

Outcome
- 1. Support the students in the class, 2. Equal opportunities to learn, 3. Catering for their needs
- 'to help the children they really need help'
- 4. Well-being of children
- 'well-being is very important, how they feel these children'

Current support practices in school, DFS resources:
- 1) Read Write Inc., books and teaching materials
- 2) DFS coloured paper, visual timetables, teaching resources
- Teachers' beliefs, teaching practice, teaching efficacy

Rules

Division of Labour
Teacher, TAS (two), one for 1:1 support and the other one for class support
Teacher expectation:
- 'She can adapt the lesson, she is very good at Maths, she can manage those students... with Statement, that's their level' (categorical approach)
- 'I think they learn a lot going with line'
This arrangement takes the pressure from teacher
The quote describes James’ shared object of supporting dyslexic learners in class, which seemed to be a common concern for most of the teachers in this study. The teachers felt they lacked adequate knowledge of dyslexia and of strategies and approaches that can effectively support dyslexic learners in practice. AT sheds light on how practical processes, individual teachers but also wider communities can all contribute to the collective activity, such as training for inclusion and dyslexia. The activity of training as explained by James is illustrated in figure 7.9 below. More specifically, James talked about ‘people with the expertise to come in’ (wider community) and he explained:

“I know now we got 10 hours’ worth with the educational psychologist but it could have been used to learn more about it [dyslexia], I mean, the well-being of a child is very important as well, how they will feel with other children.”

Constraint rules such as the lack of funding for providing additional training opportunities to teachers can be a barrier for successful inclusion as well. At a systemic level, tensions are identified between the Local Authority system (lack of funding), which clashes with the classroom level at which support is provided to learners. In addition, James referred to the well-being of children, which was identified as an important factor contributing to the successful provision of support for all students (Reid, 2016).
Figure 7.9 Example of analysis of the activity of in-service training using activity theory.

**Instruments/Tools**
- Current support practices in school, teacher's knowledge of dyslexia, teacher's observation of student's reading and writing behaviour, staff meetings.

**Subject**
- James, year 4 teacher, Bachelor of Education (B.Ed), PGCE, 20 years of experience, KS2, no background knowledge on dyslexia, need for training on dyslexia.
- Teachers' beliefs: 'belief on division of labour for inclusion to be successful'.
- 'Belief on providing equal opportunities for learning'.

**Object**
- Gap between chronological age and reading age, reading and writing difficulties.
- 'How brain works'.
- 'But I think the reading is the trigger really and then in the writing you will see the d's and l's'.

**Enabling rules**
- Teacher's need for learning more about dyslexia.
- 'The more you know the better to help those students'.

**Constraint rules**
- Lack of additional funding.
- '10 hours worth of educational psychologist'.
- Lack of in-depth knowledge of dyslexia.
- 'We are all learning, we don't know a massive amount about it'.

**Outcome**
- 'Support the students in the class, equal opportunities to learn'.
- 'To help the children they really need help'.
- 'Well-being of children'.
- 'Well-being is very important. How they feel'.

**Community**
- Teaching staff, EP, SENCO, Local Authority funding.

**Division of Labour**
- SENCO, EP, staff meetings, Other members of staff.
James is a an experienced teacher at St Andrew’s school, who believes that inclusion is about providing equal opportunities for learning. At the same time, he believes that students with SEND and additional needs learn better with TAs, in the case of his students, since the TAs are more knowledgeable about their needs, spend more time with them and are trained to respond to their needs. This contradiction between his beliefs and how they are reflected in his practice, as indicated in his account, could be possibly explained considering the following interactive factors: the pressure of work, big class sizes and adult-student ratios, students with more challenging behaviours and external pressure such as ‘results driven’ agendas to academic results in contrast to school’s policy and a climate of ‘dyslexia-friendly’ practice. It could be implied that the interaction of these factors, along with James's positioning as a subject (including his emotions), may have contributed to the way he worked towards the object.

**Gillian**

Gillian is the Nursery teacher (EYFS) at St Andrew's school and she has 20 years of teaching experience, of which the last six have been in the EYFS. James and Gillian work at the same school, which is located in a sub-urban area in North West England, and the area is considered socially and economically deprived. St Andrew's school is one of the schools to be awarded the Dyslexia Friendly Quality Mark, indicating that provides inclusive practice for all students and for those with dyslexia. Gillian is one of the teachers with experience of dyslexia in her family, as her son and her husband are both dyslexic. She also has professional experience of students with speech and language impairment and dyslexia. The class size is 36 and two teaching assistants, Mary and Josephine, provide class support.

Gillian was another teacher who seemed to support the idea of inclusion and her definition of inclusion addressed aspects of equity, diversity and human rights.

> “Every child has an entitlement to learn, no matter what their learning style is, no matter what their home environment is, no matter what their culture is, no matter what their prior experiences are, no matter what their personality is or what their learning preferences are, so it is all about making sure that every child matters, that every child has the same experiences, has opportunities – the same opportunities – because they might not all learn from the same experiences, because all they are learning in different ways, so it is about making sure that provision is a wide provision”.

Gillian’s definition is similar to James’s definition, with emphasis given to issues in diversity but also to systems of provision in order to ensure that all students have equal opportunities to learn. These definitions also align with International and European definitions, which are focused on human rights and equity and they view Inclusion as a
strategy to promote social cohesion, citizenship and a more equitable society (European Agency for Special Needs and Inclusive practice, 2016).

Gillian also valued the importance of parents’ engagement in the education of their children. Throughout her interview, she referred to the parents’ communication with the school and she believes that their involvement is vital for inclusion:

“How I see inclusion is making sure we involve the parents in everything we do. We see them in the morning, we invite the parents into school, so it is a top priority, this daily communication, really, about their children”.

Parents’ involvement seemed to be a central aspect of Gillian’s practice and particular attention was given through different activities in order to engage them:

“We have children’s parents coming in every day and we ask them to work with them. We have showcase days, during which they can come in and work with them, we have the grandparents in… I have regular meetings with children who are on my play plans. We have discussions every morning and, at the end of the day, our feedback”.

In this quote, a number of approaches (tools) are illustrated which, in AT terms, could be interpreted as enabling rules which can support the engagement of parents. When Gillian was asked to reflect on how these approaches worked in her practice to engage the parents, she responded:

“We are really trying but parents are so disaffected that it may be that they don’t want all that time with the child. I know it is a difficult thing to say but they like the child being at school so they don’t have to be with them. I feel that if we get that part (parents’ engagement) right, then it (inclusion) could be successful and obviously as they become young adults, they form our world, don’t they?”

Gillian’s view on the involvement of parents seems to take an interactive approach in which the environment has a contributing role to students’ experience at school (Frederickson & Cline, 2009). Considering Gillian’s perspective on inclusion, it could be suggested that she takes into consideration the whole child when she talks about inclusion. In fact, inclusive approaches to learning and teaching should involve aspects of classroom teaching, the playground, staffrooms and the relationships between the staff and parents/carers (Booth & Ainscow, 2002).

When Gillian was asked to refer to possible factors that may influence parents’ disengagement, she explained:

“I think it is socially and economically a very poor area and perhaps they (parents) didn’t have the same educational opportunities when they were young and they became disengaged quickly and so on. And that cycle carries on, isn’t it so?”
These factors were pointed out in all the UK teachers’ interviews and follow-up discussions and they can be explained by the information about the area where the school is located. As mentioned at the beginning of the accounts, the school is in a deprived suburban area of North West England. What is more, during my school visits and the discussions I had with the teachers, the following note was made on the reflective diary: “The teacher explained to me that the children come from a very poor literacy background and, for this reason, they have full supervision from the Local Authority; The school gets support for students’ writing activities along with their parents, as an activity to get parents involved in their child’s education (Reflective diary, 13.04.2015).

The quotes describe the systemic tension between the home system and school system in which the enabling rules, as described above, seemed to be ineffective when working towards the object (parents’ engagement with the school). The tension could have been resolved by parents’ engagement through the establishment of these rules. Gillian decided to take the initiative to use Orbit for Early Years and the Orbit Family website and application for engaging parents with their children's learning, by proposing innovation. Field notes made during the classroom observations explain the use of Orbit: “The teacher shares support information for the benefit of the children via the application with regard to the child’s progress, collects evidence of work from each pupil and creates a personalised album for each child’s experiences, which is line with the 2012 EYFS Framework. The teacher explained that it was optional for the teachers to use it” (Transcript 30, field notes, 20.03.2015). The teacher’s effort to resolve this tension through the use of the orbit tool can be seen as an enabling rule for achieving communication with parents.

Gillian’s understanding of inclusion and her belief in the need for support staff for the support of dyslexic learners in her class was evident in the discussion on the critical event identified in her practice. In particular, the ‘critical event’ was based on the use of Orbit with one of the students (Lynne), in whom, as she mentioned, she had “noticed behaviours in the writing process.” She explained:

“Dyslexia from that point of view, obviously, in EY we are not psychologists so we can only notice behaviours. We can’t diagnose but we can notice behaviours. Obviously, in EY the writing process is under way and the reading process is under way in terms of children’s independence.”

Gillian used her Smartphone to take pictures of Lynne’s work and she automatically uploaded it via the orbit application on the student’s profile. Parents can access photos related to their child’s work and be informed about their progress. Gillian explained the use of Orbit in relation to her practice:
“I think through Orbit we help to include all the parents because they are very much, you know, in contact with what the children do on a daily basis. We don’t update it every day – it is a weekly thing – but again it is very helpful.”

Gillian added that Orbit was also a “useful tool to keep a record on each child’s progress, to collect observations of each child, to assess learning in line with the 2012 EYFS Framework, to create a personalised album of each child’s experiences, to evaluate children and track their progress over time, to communicate with parents (reflective diary, 22.04.2015). The innovation used in Gillian’s practice is illustrated in Figure 7.10 below:

Orbit is described only as a useful tool which contributes to the inclusion of parents but also to monitor the progress of the students (outcome). The teacher explained to me that in EY, the bigger part of the assessment is based on the recorded observations made by the Orbit in their school.
Figure 7.10: Example of analysis of 'critical event' using DWR

**Subject**

1. Whose perspective?

- Parents' important role in children's education
- Importance of wider provision to support children's learning opportunities

**Enabling rule:**

Teachers' emotions and beliefs on her role as a teacher
- 'Facilitators of learning'

Use of technology-based application to facilitate communication

**Rules**

4. What supports or constrains the work?

- 'Parents' disengagement from children's education'
- 'OFSTED inspection' 'results-driven agenda' 'lack of additional funding'

**Constraint rules:**

**Community**

5. Who else is involved?

- Teacher, parents, TAS, students, LA
- Historically deprived area, parents' poor literacy background, disengaged parents

**Division of Labour**

6. How is the work shared?

- Parents, teacher
- Teacher-parent communication, parents evening, writing activities with their children,
- Constraint: Parents do not visit school, lack of engagement

**Object**

2. What are people working on?

- Teacher, parents, TAS, students, LA
- Historically deprived area, parents' poor literacy background, disengaged parents

**Actions:**

- To take pictures of students' work, to upload the pictures on students' profile via Orbit
- To monitor progress, to collect observations about children's behaviour
- History: deprived area, parents' poor literacy background, disengaged parents

Contribution to child's literacy difficulties

**Outcome**

7. What is to be achieved?

- Teacher's expectations:
  - 'they are much more in contact with what children do on a daily basis' (innovation)
  - 'to assess learning in line with the 2012 EYFS Framework'

**Critical event:** Teacher is recording Lynne's work on writing activity using Orbit and uploading it on student's profile

Gillian, B.Ed, EYFS teacher, 20 years of teaching experience

- Experience of students with literacy difficulties and dyslexia
- Interested in learning more about speech and language development
- Husband and son both dyslexics

Teacher:

- Teacher's approach towards the parents, teacher's beliefs on inclusion and her abilities as a teacher
- Teacher's observation of students' behaviour in reading and writing, Early Years Orbit application
In terms of her definition of dyslexia, Gillian stated the following:

“It’s difficult to define it really because I know it is a multitude of things. I feel that it is... I see it as a difficulty in the way the brain is wired in terms of language development so it doesn’t enable certain students to be able to look at words on the page in the correct order.”

Further discussing her relevant experience, Gillian talked about her personal experience as a mother of a dyslexic child:

“I also think it affects the working memory. I find it especially with my child. It is affected in terms of being able to remember and retain specific words and the meaning of the words because they are not getting the understanding from the fluency or from the intonation of the sentence so they miss that. They also have an issue with writing because it is the directionality of forming the letters.”

Gillian’s description of dyslexia includes aspects at the biological, cognitive and behavioural level, which are also related to the causal modelling framework with an emphasis on the mediating role of the environment:

“My son’s dyslexic and my husband is dyslexic as well so I do have quite a lot of experience of, you know, supporting them. He is moving on now. I think having me as a teacher [...] I decided to move him to another school because of this. The support was not in place at all... I tried to speak to the Head Teacher, who refused to meet with me so I had to go through the class teacher. But you know, there is nothing that not been done in between, everything possible has been put in place, the brain doesn't function the same way. They may have issues with dyslexia, they might have issues with dyscalculia or the way they are encouraged to speak at home [...] but in England OFSTED puts so much pressure on children, they will say, ‘Well, what are you doing about it? Every child needs success. Turn it around, fix it’ but sometimes you can't fix it, can you?”

Throughout the interview and follow-up discussion with Gillian, it became apparent that her understanding of dyslexia was not confined to a single factor but rather to multiple ones, ranging from biological (heredity) to environmental (family and systemic) factors. Interestingly, Gillian referred to supportive factors, such as the mediating role of the home environment, and to limiting factors, including the lack of provision in her son’s previous school and OFSTED inspection.

It is worth noting that teachers in both contexts referred to systemic and family factors, emphasising their contribution to the experience of dyslexia. For example, Gillian referred to the pressure that is put on children in order to reach expected targets.

International comparisons are made based on good literacy skills in each country, as they are considered important skills for economic competitiveness (Armstrong & Squires, 2014).
This has led governments to strengthen the curriculum and control the way literacy skills are taught in schools. At the same time, there is a current demand for including all students in the mainstream school through international policies, placing a huge responsibility on teachers to enact inclusive practice in their classrooms (Florian & Spratt, 2013). In AT terms, the environmental causes can be seen both in relation to rules, for example OFSTED and the pressure for academic results (constraints) and to the lack of provision to schools (constraint) and supportive home environment (enabling).

Gillian also expressed her feelings about OFSTED inspection, which seemed to contradict the ‘love and enjoyment’ she otherwise feels about her profession:

“They [OFSTED] don’t see that they judge teachers on that all the time... the Year 6 teacher is heavily under pressure to plot targets and standards, exams...it is impossible sometimes. We know our child from Reception or Year 1 and they are not going to make it to Year 6, they are not going to achieve that standard. It is just wrong but what can we do? They don’t listen to teachers, the facilitators to learning. We don’t count, do we?”

Gillian seemed to share similar concerns and emotions of disappointment and frustration as James and Grigoria with regard to external pressure such at the systemic level of OSFTED inspection. The tension creates disappointment for questioning the teachers’ values of the teaching profession and their role as ‘facilitators to learning’. Interestingly, while both teachers in the particular school (James and Gillian) are quite experienced, they hold similar beliefs about inclusion and they also experience similar emotions, though the emotions trigger different actions for them. For instance, based on the follow-up discussion and her reflection upon her practice, Gillian appeared to take a more agentive role, proposing an innovation by using the Orbit application to encourage parents’ involvement. She considered their roles as facilitators of learning and she also seemed to hold strong beliefs about wider provision for ensuring that all students have the same opportunities to learning. On the other hand, James seemed to feel less pressure when students with additional needs or SEND were working with the TA in the class. Interestingly, Gillian also referred to the same constraint as James in her interview:

“I think one of the main difficulties for successful inclusion is the staff ratio because I would like to have more support in the classroom, more human resources.

Because it might be a child’s needs in terms of physical development, in terms of going to the toilet, needing to be clean, needing to support their physical needs or issues, so all that is important in EY. It is about how much money really is allocated; it is a financial thing. At the moment we do have 1:10, so it is good but the entitlement is 1:13. That would be my main barrier really, in terms of being inclusive because we very much go out to the way to provide extra learning
resources; we do something called home visits, where we go to the home, see what’s happening in the home environment, and that’s before they start school.”

The above quotes describe tensions at different levels as discussed in all the accounts so far. In particular, Gillian referred to constraint rules such as the lack of additional support staff at the level of the school and the lack of additional funding at the level of the Local Authority as a wider community. However, it is worth noting that, in the particular account, the teacher’s agentive position and the teacher’s activities used wider provision as these are also aligned with the ‘Dyslexia-Friendly’ Policy (BDA, 2012) and have the potential to act as ‘sources’ of development and resolving the tension.

As Yamazumi (2007, p 22) notes, the “agentive layer in human contexts focuses on the human potential for agents with initiative to create intellectual, emotional and moral judgments in their own name as intentional transformative actions.” Specific agentive actions are, therefore, needed if contradictions are to function as sources of development. Both Yianna and Gillian were teachers who took the initiative to make a judgment by using intentional actions to resolve tensions for the benefit of their students. In Yianna’s case, this was to collaborate with parents to include Dan for additional time in the regular class and to co-teach with the SEN teacher, and for Gillian to use the Orbit tool in order to engage the parents more with their children’s education. Both teachers’ intentional actions were directed towards achieving more effective support for their students. Engeström, (2006,) notes that ordinary innovations and isolated individual movements away from the status quo can trigger change in an activity system. By questioning existing practices, the teacher has the potential to start a cycle of expansive learning within a school.

7.3 Conclusion:

This chapter was the second chapter of the discussion of findings focused on the accounts of four teachers – Yianna, Grigoria, James and Gillian – two from each cultural context. The accounts were created in order to gain an in-depth insight into teachers’ practice and the influence of their personal interpretations of inclusion and dyslexia when enacting inclusive practice in classrooms. In order to answer the research question, the DWR framework was used for the analysis of components of the teaching practice, including modifying the instruction, classroom management, collaboration with teachers (other members of staff) or staff and assessment. The identification of ‘critical events’ was based on one of these aspects of teaching practice, through the use of classroom observations.

The discussion of the accounts suggests that, in some cases, teachers’ beliefs influence their practice but, at the same time, a number of other interactive factors are considered as challenges which can hamper inclusive practice. Some teachers seemed to hold strong beliefs about their ability to teach all students in the class, by proposing innovations in
order to achieve the outcome, while others were resistant to taking an initiative or action to resolve the tensions identified in their practice. The discussion of the findings in both chapters has wider implications for teachers’ professional development and in-service training, along with the use of AT as a useful framework for reflective practice. The following concluding chapter of this thesis summarises the findings of the present study, addresses the implications for practice, and discusses its limitations and unique contribution.
CHAPTER 8: CROSS-CASE FINDINGS AND CONCLUSIONS

8.1 Introduction

The final chapter discusses the main findings, using the research questions underpinning this study. The wider implications of the research outcomes concern all stakeholders, including policymakers and practitioners. The chapter continues by discussing the unique contribution of this thesis, both in theoretical and methodological terms, by using the AT framework. Finally, some limitations of this study and potential areas for further research are presented.

8.2 Cross-case findings

This section provides a summary of the main findings as presented in Chapter Six and Chapter Seven on teachers’ understanding of inclusion and dyslexia and their accounts. The purpose of this qualitative research was to explore teachers’ beliefs and personal interpretations and how these may influence their professional practice in classrooms. The Cultural Historical Activity Theory framework acted as the descriptive and analytical tool to examine the following research questions:

1) How do primary teachers understand the concepts of inclusion and dyslexia in the context of their school based on cultural, social and historical factors?
   a. What are the differences and the similarities among the teachers in the two cultural contexts: Cyprus and North West England?

2) How is teachers’ understanding of inclusion and dyslexia related to their classroom practice with dyslexic students in two cultural contexts?
   a. What is the contribution of social, cultural and historical factors to their classroom practice?

This study consisted of two main aspects: the first aspect was related to teachers’ understanding of, and beliefs about, inclusion and dyslexia. In order to explore it, semi-structured interviews, non-participant classroom observations and follow-up discussions with the teachers were used as data collection methods. Broader themes and sub-themes, both pre-determined and emergent, were presented based on all the teachers’ interviews and observational data. The second aspect focused on teachers’ professional practice, through the accounts of four teachers with different characteristics and viewpoints on inclusion and dyslexia, two from each cultural context. The accounts were created to provide a more in-depth understanding of how teachers’ views are encapsulated in their practice for inclusion. Data was collected through non-participant
classroom observations and follow-up discussions. The DWR model was used to analyse teachers' practice along with data analysed in Research Question One (Chapter 6). For instance, teachers' attitudes to inclusion, as presented in the first theme 'conceptualising inclusion in the context of the school', including sub-themes (1a) 'defining inclusion as a shared object', (1b) 'defining inclusion as a shared object constrained by embedded rules' and (1c) 'inclusion through subjects’ personal beliefs and emotions' were used to inform the elements of 'subject' or 'rules' in the DWR model for each teacher. The 'critical events' identified by the researcher through the classroom observations focused on the following aspects: instruction, assessment, collaboration with other members of staff and behaviour management.

The research findings suggest contextual dilemmas and professional factors, along with various implications for teachers’ professional practice, when working with students with dyslexia. To start with the first research question, the following three broad themes were developed: (1) Conceptualising inclusion in the context of the school, (2) Collaboration as an essential element in the community and (3) Conceptualising dyslexia as a tool/artefact. Within the first theme, three sub-themes were developed drawing on the AT framework as follows: ‘Defining inclusion as a shared object’, ‘Defining inclusion as a shared object constrained by embedded rules’ and ‘Inclusion through subjects’ personal beliefs and emotions’. The second theme, discussed the aspect of ‘Collaboration as an essential element in the Community’, in which the school community was taken into consideration (other members of staff including the SENCo/SEN teacher and the parents from the wider community) and, finally, the third theme was concerned with the ‘Conceptualisation of dyslexia as a tool/artefact’. In this theme, the understanding of dyslexia was explored, based on the ‘Understanding dyslexia through the models of disability’ as an artefact, ‘Positioning the subject in the process of early identification and assessment’ and in the ‘activity of in-service training for dyslexic learners’. The main aspects of the CHAT framework, as identified in the findings are presented in Table 8 below:
<table>
<thead>
<tr>
<th>CHAT elements</th>
<th>Inclusion</th>
<th>Dyslexia</th>
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</table>
| **Shared object (outcome)** | 1) Equal opportunities  
2) Social inclusion  
3) Access and participation  
4) Social acceptance | 4) Future success (professionally)  
5) Competent readers and writers  
6) Can be fixed and no longer be a problem |
| **Rules** | Constraints (restrictive)  
1) Class size  
2) Lack of additional time  
3) Lack of additional support  
   - Lack of teaching assistant  
   - Staff ratio  
   - Lack of additional time for individualized support | 2) Class rules  
   - Pair-up with more able peers  
   - Class arrangement  
2) Policy  
   - CES’ system of assessment  
   - OFSTED  
   - Dyslexia-friendly policy |
| **Supportive** | 1) Provision (Dyslexia Friendly school policy) | a)Peer/Class community:  
   - competent readers and writers as everyone else  
   - marginalized and lack of friends  
   - disruption of the class  
   - lack of self-esteem/class stress |
| **Placement** | 1) School unit within the school  
2) School unit for more severe cases | b) Family community:  
   - single-parent family  
   - poor family literacy background  
   - working families (Low SES)  
   - Parenting issues  
   - Greek as an additional language |
| **Community** | 1) Collaboration  
   - Parents  
   - Other members of staff (SEN teacher, other teachers)  
2) School ethos/culture  
   - Acceptance stance towards diversity  
   - Change of school culture  
   - Positive learning environment | c) School community:  
   - Dyslexia-friendly school policy  
   - Lack of home-school relationship |
| **Subject** | 1) Role and responsibilities  
   - More interventionist role  
   - SEN teachers’ responsibility | 5) Lack of knowledge to support  
6) Knowledge based on qualifications  
7) Emotional support  
8) Difficult to deal with  
9) Use of dyslexia-friendly practice |
|              | 2) Beliefs towards inclusion  
   - Belief on building confidence to learn  
   - Belief on support from other members of staff  
   - Belief that inclusion is a difficult to be achieved  
   - Belief on progress as | 
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<tr>
<th>Division of labour</th>
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<tbody>
<tr>
<td>1) Teaching Assistants</td>
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<tr>
<td>2) Need for additional personnel</td>
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<tr>
<td>3) Paraprofessionals</td>
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<td>4) More able peers</td>
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<th>Object</th>
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<tr>
<td>1) All students</td>
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<td>2) Severe cases (Autism, Behavioural Difficulties)</td>
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<tr>
<td>3) Dyslexia</td>
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<td>4) Those with Learning difficulties</td>
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<th>Tools/artefact</th>
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<tbody>
<tr>
<td>1) Differentiation</td>
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<tr>
<td>2) Dyslexia-friendly policy</td>
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<td>3) Read Write Inc</td>
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<th>Genetic factors:</th>
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<tr>
<td>- brain disorder</td>
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<td>- heredity</td>
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<td>- brain dysfunction</td>
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<th>Student characteristics in learning:</th>
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<tr>
<td>- Genetic Factors:</td>
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<td>- Difficulties:</td>
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<td>- Decoding words</td>
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<td>- Poor working memory</td>
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<td>- Letter reversal</td>
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<td>- Writing and spelling difficulties</td>
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<td>- Spatial awareness</td>
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<td>- Strengths</td>
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<td>- Talented in Arts (Theatre)</td>
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<tr>
<td>- Talented in ICT</td>
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<tr>
<td>- Smart/intelligent</td>
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<tr>
<td>- Reading ability</td>
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<th>Within the child characteristics</th>
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<tbody>
<tr>
<td>- Aggressive</td>
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<td>- Lack of motivation (giving up)</td>
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<tr>
<td>- Insecure</td>
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<tr>
<td>- Miserable</td>
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<td>- Hyperactive</td>
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<th>Visual timetables</th>
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<tr>
<td>Coloured paper</td>
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<td>differentiation</td>
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Table 8: Main aspects of CHAT as identified in findings
The research evidence revealed commonalities in teachers’ personal interpretations and the concerns they share but also unique features and particularities that can explain some of the differences. In different cultural contexts, there might be different meanings and values underpinning the concept of inclusive education (Barton & Armstrong, 2007). The importance of the cultural context is concerned with understanding social, political and economic conditions and relations of a society so as to start engaging effectively with all the factors involved (Barton & Armstrong, 2007). Therefore, providing a detailed account of the history of inclusive education in relation to social, political and possible economic conditions (Chapter 2) for each context was a helpful way to understand the factors involved in the teachers’ practice.

In relation to the first sub-theme, teachers’ overall beliefs about inclusion were positive, embracing aspects of social acceptance, equal participation and social inclusion. Such approaches demonstrate teachers’ emphasis on definitions of inclusion related to equality and human rights. Teachers interpret inclusion as a shared object to work towards (desired outcome), taking into consideration the learners’ benefit. However, while most of the Cypriot and British teachers seemed to share similar interpretations of inclusion, a few Cypriot teachers were more critical of the idea of teaching children with disabilities in their own classrooms. In this case, the teachers seemed to favour the ‘special unit’, which is integrated into mainstream schools for particular categories of students. The teachers who followed this categorical approach referred to factors such as the severity of the student (e.g. students with behavioural difficulties or autism), big class sizes and difficulties related to classroom management and to the lack of additional personnel in classrooms. The Cypriot teachers’ stance could be explained based on the fact that, historically, in Cyprus, children with complex special needs and behavioural difficulties were educated in special schools (see Table 2 in Chapter 2). In addition, the research evidence suggests that teachers feel more confident in teaching students with mild disabilities and learning difficulties in their class than they do when the students have more severe disabilities (Avramidis, Bayliss & Burden, 2000). Finally, the lack of training opportunities on inclusion since the recent policy change in Cyprus (Symeonidou & Phtiaka, 2012) may contribute to teachers’ perceived lack of confidence and responsibility for teaching all students. Teachers feel that they may not be adequately trained to teach students with diverse needs and abilities in their classes and they also lack the necessary material resources and equipment.

Teachers in both contexts referred to embedded rules at a systemic level, which may act as barriers towards the successful implementation of inclusion in their classes. Some factors among others are big class sizes, a lack of additional staff, the increased amount of curriculum objectives to cover, time pressure to cover these objectives and a lack of funding from the Local Authority in the case of the UK context. Teachers in both contexts
appeared to share similar concerns about their understanding of inclusion, considering the embedded rules, despite contextual differences. For example, the two countries operate different education systems: schools in England have greater autonomy (DfE, 2013) than those in Cyprus, where the education system is highly centralised and schools are controlled by the Ministry of Education (Pashiardis, 2010). Teachers in both contexts cited the pressure of the job as a main constraining factor on their ability to meet the needs of all their students. It is noted that educational changes in policy at an international level have placed new challenges and demands on the teaching profession, in which teachers now have greater responsibility for students with diverse needs and abilities (Florian & Spratt, 2013) while, at the same time, they feel pressured to cover an increased amount of material in order to achieve higher academic standards. In particular, the British teachers referred to ‘a results driven agenda’ and OFTED inspections which put pressure on teachers so that all children achieve the expected targets. This finding is in line with research evidence which refers to the National Literacy Strategy (NLS) as a response to government’s effort to strengthen the national curriculum (Armstrong & Squires, 2014). Through this approach, all students are required to reach expected targets every term, through the ‘literacy hour’ (rules). The Cypriot teachers referred to a similar situation, in which they have to work on aspects of the students’ difficulties in core subjects such as Greek or Mathematics in the ‘embedded hour’ (rules).

The sub-theme of teachers’ feelings about their profession and their students emerged within their understanding of inclusion. The emotions expressed by the teachers were mixed: three of them – two from Cyprus (Grigoria, Olivia) and one from North West England (James) – referred to job satisfaction as a factor that may possibly influence their work with students with diverse needs in their classrooms. It is suggested that teaching-related factors, such as job-related stress in terms of workload and classroom management difficulties, and many years of teaching experience, can influence teachers’ job commitment and satisfaction (Klassen & Chiu, 2010). All three teachers mentioned one or more of these factors in their interviews, which may also possibly explain their less positive view of inclusion.

Another similarity observed was the teachers’ reference to their ability to manage students’ behaviour in the classrooms as an aspect of inclusive practice. While most of the teachers felt that, due to big class sizes and, in particular, students’ challenging behaviour, it can be difficult for the teacher to manage the class, the Cypriot teachers referred to this aspect more extensively. One difference that could explain this is the fact that teachers lack additional support in the Cypriot classes. In Cypriot schools, class size can be between 20-25 students, resulting in a 1:20 or 1:25 teacher-student ratio, since there are no additional personnel in the class. Throughout their interviews, the teachers addressed their need for the presence of additional personnel in the class so as to share
the workload and support a group of pupils. Interestingly, Yianna, a Fifth Grade teacher (see Chapter 7) was one of the teachers who expressed and demonstrated her ability to manage student behaviour in her class by proposing innovation. The lack of additional personnel seemed to create tensions in the activity system of the class, in which Dan, an MLD student, was also present. Yianna decided to take particular action to include Dan in her class and thus making him spend less time in the ‘special unit’ (rules); she also amended the rules in the classroom (community) by introducing more collaborative activities in order to allow the student to participate in the lesson. It could be suggested that Yianna had a stronger belief than the other teachers in her ability to manage diverse needs and behaviours in the classroom. Teachers who have greater belief in their ability to teach and manage all students in their class tend to be more competent and capable of implementing inclusive education in practice (Tschannen-Moran & Hoy, 2011). On the other hand, the teachers who considered behaviour management a challenge also expressed the belief that inclusion was difficult to achieve in their current setting.

Another theme that was extensively discussed in the teachers’ interviews and follow-up discussions was that of collaboration in the community, and, more specifically, collaboration with other members of staff, the SENCo/SEN teacher and the parents from the wider community. Overall, the teachers expressed strong beliefs about the importance of communicating and collaborating with teachers as an aspect of their practice in order to obtain information about their students or additional tips on how to support them in class. One commonality that observed in both contexts is that there were not many instances of successful collaboration among teachers. Instead, most of the teachers emphasised the aspect of division of labour between two colleagues as essential for their practice. In particular, two Cypriot teachers Stavros and Aliki referred to the lack of a collaborative culture in their school and to the need for co-teaching activities as a way of creating a collaborative school ethos and including all students in their classes. The UNICEF REAP Project emphasises that educators who generally lack knowledge or understanding and experience to include children with SEND in their classrooms can use reflectivity, co-teaching and collaboration as effective ways to overcome some of these barriers (European Agency for Special Needs and Inclusive Education, 2016). Again, in the Cypriot context, Yianna was one of the teachers who took the initiative by arranging co-teaching activities with the SEN teacher once every 15 days and, in the UK context, the Early Years Foundation Stage teachers (Gillian and Victoria) agreed to meet as an EYFS group and discuss their students’ progress. In addition, in the UK context, the teachers referred to their collaboration with teaching assistants (TAs), which is one of the main differences between the two contexts. However, the teachers’ perceived ability to collaborate with Teaching Assistants (TAs) mainly related to division of labour, such as arrangements for sharing the workload and classroom management in order to meet their
students' needs. In the UK context, the teachers viewed the Teaching Assistants (TAs) as valuable members of staff who, in some cases, seemed to be more knowledgeable of students' additional needs than the teachers themselves (Victoria). Both in the UK and internationally, Teaching Assistants have become an essential component of the everyday practice in schools with regard to the inclusion of pupils with SEND and the delivery of curriculum interventions for low-attaining pupils (Webster, Blatchford & Russell, 2013). However, there is an ambiguity about the TA role in relation to teachers and teaching practice and, more specifically, regarding the inclusion of pupils with SEND (ibid). The teachers in this study tended to think that the TAs were also responsible for the students with additional needs in their class.

Teachers referred to the need for additional personnel in classrooms in the Cypriot context too (Grigoria, Aliki). The shortage of teaching staff in Cyprus, due to the country's economic situation was emphasised in most of the teachers' interviews. The need for division of labour seemed to be of high importance to the teachers but, at the same time, it raised questions with regard to the aspect of shared responsibilities in inclusive classrooms. Research evidence in the UK context suggests that educators tend to rely on Teaching Assistants to include students, especially those with Statements of SEN in mainstream classrooms, which may imply teachers’ failure to articulate appropriate and pedagogically sound models of inclusive provision (Webster, 2014). Historically speaking, teachers, parents and support staff have participated in a system that is divided and separated, which is incompatible in essence with the notion of shared responsibilities in inclusive classrooms and wider school communities (Engelbrecht et al., 2015). For the successful establishment of collaborative partnerships, teachers need to develop problem-solving skills and interpersonal communication (Oswald, 2007); this will help to develop shared decision-making approaches necessary for collaboration (ibid).

The teachers in this study raised the issue of the lack of collaboration with parents, especially in the UK context. This matter seemed to be of less concern to the teachers in the Cypriot context, whereas the teachers in St. Andrew's school emphasised the need for collaboration with parents and the engagement of parents with their child’s education. Establishing a collaborative partnership with parents is also underlined in Dyslexia-Friendly School policy (BDA, 2012) and St. Andrew's school was one of the schools to be awarded the Dyslexia Quality Mark. External, cultural and systemic factors, such as the deprivation of the area, a working class community and parents' low SES can possibly explain the parents' disengagement. Gillian, an EYFS teacher, proposed innovation in this regard by using Orbit for Early Years and the Orbit Family application for engaging parents with their children's learning (tool). Overall, the 'Collaboration as an essential element in the community' was an interesting theme to emerge, considering the importance the teachers in both contexts gave it.
The third theme, ‘Conceptualising dyslexia as a tool/artefact’, was concerned with the teachers' definition of dyslexia, their role in the process of identification and assessment and their training needs and opportunities for the support of dyslexic learners in the classroom. The multidimensionality of dyslexia and the lack of consensus of a unified definition of dyslexia is widely acknowledged and it was also evident in the teachers' definitions. The Models of disability were used as conceptual models to elucidate teachers' understanding of dyslexia. Teachers in both contexts presented similarities in their definitions, demonstrating an awareness of the interacting factors that may contribute to the experience of dyslexia. It has been noted that some of the teachers felt they did not have adequate knowledge of dyslexia (James, Stavros, Grigoria), positioning themselves as ‘non-specialists' but through the discussions, they seemed to be aware of the environmental factors that could contribute to literacy difficulties. For example, the teachers presented similarities in the contributing role of the family and home environment; they referred to a poor literacy background at home, parents' own disengagement from school, single parent families, a ‘troubled’ home environment and working class communities. One difference identified was that the British teachers seemed to be more knowledgeable about the resources and materials needed and the school's role in meeting students' needs. On the other hand, Cypriot teacher Stavros considered the role of the school as contributing to the difficulties of the students, by promoting the skills of more able students in core subjects, rather than enhancing dyslexic students' skills and talents. Such interpretations can contribute to the understanding of multiple interacting factors and help schools provide a more supportive learning environment for those students by acknowledging them (Reid, 2016).

Most of the teachers held positive beliefs that dyslexia need no longer be a problem for the students and they could be successful in their future careers (Stavros) and become competent readers and writers (Victoria). The teachers' expectations and beliefs about their students' abilities are important factors that contribute to students' academic achievement (Hornstra et al., 2011; Tschannen-Moran & Hoy, 2011). What is more, teachers' decisions and actions are influenced by assumptions about their students' ability (Fendler & Muzaffar, 2008). Hart, Drummond and McIntyre (2007) indicate that teachers who hold deterministic beliefs about students' ability can impose limits on their learning, and especially on students identified as having ‘additional' or special' needs who are vulnerable to these negative effects. This vulnerability becomes even more complicated when teachers believe that these students need specialist teaching for which they have not received specialised training (Florian & Black-Hawkins, 2011).

Despite the teachers' overall positive beliefs about their students' ability to overcome dyslexia, they talked about their roles in identification and assessment, along with their training needs. They especially highlighted the need for more practice-based training,
which would provide them with strategies and approaches to support those learners in class. The latter was also emphasised in the Rose Review (2009), which, drawing on large research evidence, suggested that one of the main points was the need to build more professional expertise in identifying dyslexia and developing effective ways to support learners in classrooms. It is noted that teachers’ understanding of dyslexia and their role in the process of early identification is related to students’ cognitive difficulties and their performance behaviour in class. The teachers in this study considered that their role was the effective communication with the SENCo/SEN teacher to discuss their concerns as the SENCo/SEN teacher was more knowledgeable about dyslexia. Teachers in both contexts discussed extensively the aspect of dyslexia labelling, with the British teachers mostly referring to the parents’ need for labelling of their children in order to secure specialist support while Cypriot teachers mentioned that parents are more concerned about the possibility that their child might be stigmatised.

A number of contributing factors seem to influence teachers’ professional practice when they are working with students with dyslexia or identified learning difficulties in their classrooms. Teachers in both contexts referred to the lack of training opportunities, the demands of the teaching profession (such as the increased workload and classroom management which create feelings of frustration and disappointment associated with job satisfaction), their own lack of knowledge about dyslexia and the need for additional support in the classroom in order to share responsibilities. These factors seemed to contribute to beliefs about inclusion such as “inclusion is difficult to achieve” and “we talk about inclusion but it is a results-driven agenda”. On the one hand, it could be suggested that these factors may influence teachers’ beliefs in their competence and ability to teach big classes with heterogeneous populations. On the other hand, some teachers seemed to take a more agentive role and, despite the limiting factors which create systemic tensions at different levels, they attempted to resolve the tension by proposing innovation. In these examples, the teachers seemed to hold stronger beliefs about inclusion and on their ability and competence as teachers. It has been proposed elsewhere in this thesis that the agency of human subjectivity is realised in material processes of human activity (Wheelahan, 2004). In essence, contextual and individual influences cannot in and of themselves produce or shape the self in a significant way; this is achieved through the activity. For example, the teachers who proposed innovation in the activity of their teaching practice were influenced by these contextual factors in a transformational way, by seeking to change the current state of the activity. The agentive role of the teachers could be explored in future research in order to understand how contextual and individual forces are absorbed and transformed in the context of the collective activity.

To sum up, AT has contributed to exploring and understanding both the similarities and particularities teachers presented in this study. As already noted, the teachers presented
commonalities on the way the notions of ‘inclusion’ and ‘inclusive education’ are conceptualised and understood. For example, teachers interpret ‘inclusion’ as a shared objective to work collectively towards, making reference to shared values of ‘human rights’, ‘equal participation’ and ‘social acceptance’. According to Barton and Armstrong (2007), the way in which ‘inclusive education’ has come to be understood and used in different national and cultural contexts reflects the ‘necessity’ of each context. In this study, inclusion terminology was related to students identified as having SEND and, specifically, those with dyslexia. Considering the history of Cyprus as a British colony, incorporating a ‘lending policy’ (Persianis, 1998) and being influenced by British ideas and legislation regarding the education of students with SEND, it could be that the teachers share similar understandings of the concept. One difference identified in some of the Cypriot teachers was that they seemed to be more critical about teaching disabled students (e.g. students with more complex needs or challenging behaviours). This is related to their sense of their own ability and competence to teach all students in primary settings. Such an approach could be explained by the recent policy change that took place in Cyprus in 2010-2011 (the introduction of the new National Curriculum). As already mentioned, the Cypriot Education System is highly centralised and such a proposed policy change posed additional requirements on the work of teachers; for example, they are expected to take responsibility for a heterogeneous group of students in big classes (1:20 to 1:25 teacher-student ratio), without additional staff support in the class, due to financial constraints, and without appropriate training opportunities. What is more, until the recent policy change, many students with SEND were educated in separated educational settings such as special schools or spent a considerable amount of time in the ‘special unit’ which came under the responsibility of the SEN teacher. In their interviews and follow-up discussions, the Cypriot teachers referred extensively to these barriers as constraining rules when working towards the shared object. These contextual factors at the system level of the school may also influence teachers’ perceived ability to manage challenging behaviours in their classes. For instance, some of the Cypriot teachers referred to the difficulties of managing the classroom especially when a student with challenging behaviour or with autism is included and subsequently disrupts the lesson. These teachers suggested the ‘special unit’ as a possible solution for the more severe SEND categories of students.

Another commonality identified is the need for collaboration in the school community, which is extensively discussed in the theme of ‘collaboration as an essential element in the community’. Teachers in both contexts underlined the importance of collaborating with other members of staff (including the TAs) and with the SENCo/SEN teacher. One slight difference observed was that the Cypriot teachers seemed more confident about underlining and emphasizing the need for co-teaching activities and the development of a
collaborative culture in the school community, while one of the Cypriot teachers proposed innovation by arranging co-teaching activities with the SEN teacher every 15 days (see Yianna’s account). It could be suggested that Cypriot teachers have a stronger belief in their ability to collaborate with other members of staff in their school context. It is noted that the collaboration among teachers is regarded as an “effective tool for improving schools and schools systems” (Mourshed, Chijioke, & Barber, 2010, p. 77) and the Cypriot teachers seemed to think of it as an aspect of their practice that could be inclusive. On the other hand, the British teachers seemed to highly value the contribution of the additional personnel in their classes (TAs) to the education of the students with SEND and for supporting the lower ability groups in the class while, at the same time, and they consider TAs as knowledgeable regarding the needs of the students. It could be implied that the value the Cypriot teachers placed on collaboration with other members of staff was due to the recent shortage of teaching staff in the school due to financial constraints and the lack of Teaching Assistants in the Cypriot schools, whereas the presence of TAs in schools in the UK is considered common practice, especially in recent years when the number of TAs in classrooms has increased significantly.

To continue with the theme of collaboration in the community, another noted difference was the need of the British teachers to further collaborate with the parents of the students and engage them with their children’s education, compared to that of the Cypriot teachers. The British teachers seemed to evaluate the role of the family as critical for the education of their children, especially those with literacy difficulties experienced at school. In their interviews, the teachers made references to various actions taken by the school as a collective system and also by the teachers in order to engage parents with school activities and promote a collaborative partnership between home and school. The collaboration with parents is emphasised in many documents in the UK (e.g. Index for Inclusion and ‘Dyslexia-Friendly’ pack) and British teachers seem to believe in collaboration with parents and in their own ability to collaborate with parents. On the other hand, Cypriot teachers seem not to hold such strong beliefs in collaboration with parents, with very few teachers referring to parents’ engagement with the school. It is noted that the parents of students with SEND and the teachers may not be collaborating due to the segregated system of SEN education which was promoted until recently in schools in Cyprus. It could be implied that the lack of experience of collaborating with parents and the inability to understand their roles and responsibilities in a collaborative support process with the parents may be seen as a possible challenge to the implementation of inclusive education.

Finally, in relation to the last theme, most of the Cypriot and British teachers conceptualised dyslexia as a disorder with a biological basis but, at the same time, they refer to the mediating role played by the environment in contributing further to students’
difficulties with literacy. More specifically, the teachers’ understanding was linked to the causal model, including the biological, cognitive and behavioural level in some instances, but also to the family environment. Interestingly, even the teachers who reported feeling that they did not have adequate knowledge of dyslexia discussed in detail the role of the home environment in students’ difficulties and the experience of dyslexia. Some of the factors mentioned in relation to the home environment included single-parent families, the low SES of the parents, a lack of educational opportunities for the parents, a ‘troubled’ home environment and working class parents. This could possibly suggest that teachers view dyslexia and learning difficulties through the interaction of many factors and not as being predominately a ‘within the child’ deficit. This view, especially in the Cypriot teachers, suggests a possible change towards a more interactive view rather than a medical model view of disability. Recent studies have demonstrated that teachers in Cyprus understand the concepts of ‘special educational needs’ and ‘disability’ based on a medical model of disability (Mamas, 2012; 2013, Symeonidou & Phtiaka, 2014), which again might be related to the previously segregated special education system in the Cypriot context. However, it could be implied that teachers’ past experience with students identified with learning difficulties might also have contributed to their views.

Another difference identified between the Cypriot and the British teachers concerned the Cypriot teachers’ need for further practice-based training in dyslexia compared to their British counterparts. The British teachers felt that it might be useful to gain a more in-depth understanding of dyslexia but, in terms of practice, they seemed to feel confident in their ability to teach dyslexic students using dyslexia-friendly resources, techniques and materials. This might be an expected finding, considering the UK’s longer history of the implementation of inclusive education and the introduction of the ‘Dyslexia-Friendly School’ initiative in schools across the UK for many years. The British teachers showed a strong belief in their ability to support dyslexic learners, referring to the training they had received in dyslexia-friendly practices by the SENCo of the school, and to the benefits of the DF approach in meeting the needs of the these students. On the other hand, Cypriot teachers seemed less confident in their ability to support the specific students in class, and they felt that they needed more practice-based training in strategies and approaches so as to effectively support them in the class. It is suggested that, even though the Cypriot teachers seemed to be aware of the contributing factors to the experience of dyslexia, they may not have acknowledged the school’s role in erecting barriers to learning for those students. However, their need for more practice-based training suggests that the teachers have a sense of responsibility towards these students in their classes.

Overall, despite the teachers’ different cultural contexts, they share similar concerns and present similarities in many aspects in relation to their understanding and professional practice and this is reflected in their professional practice in classrooms. Teachers who
seem to believe in inclusion and in their ability to support all students in their class effectively seem to engage in more inclusive practices in their classroom system. On the other hand, a number of interacting factors are indicated that create barriers to the teachers' implementation of inclusive practice. AT provides an insight into how these factors can be contextualised, based on social, cultural and historical aspects and it is suggested that contextual challenges can have direct and substantial effects on teachers' classroom practices. Finally, teachers who may hold stronger beliefs in their ability to teach all students or to collaborate with other members of staff and/or parents, attempted to resolve the tensions created in the system of the classroom by proposing innovations in their classroom practice. Such innovations are seen as a possible step forward in achieving successful inclusive practice in classrooms for all students.

8.3 Implications of the research findings and areas for future research

The present study has implications for both the academic audience and for those involved in education, such as teachers and practitioners. In terms of the academic audience, the study is oriented towards contributing to a scholarly dialogue and knowledge exchange or advancing the theory, which, in the case of this study, is shaped by the theoretical framework of Cultural Historical Activity Theory (CHAT). The study is examined in terms of research rigour and AT has produced an area of expertise and contributed to the knowledge base for exploring inclusive practice for dyslexic learners in classrooms in schools in two cultural contexts. More specifically, the study enriches the international literature on inclusive education and dyslexia, using AT as a descriptive and analytical tool, and fills the gaps with respect to teachers' beliefs and their link to teachers' professional practice. Drawing on the AT framework gave the opportunity to locate inclusive practice within a broader historical, societal and cultural context and to understand the way concepts such as inclusive education and dyslexia are understood and realised in local contexts (Kozleski, Artiles, Fletcher & Engelbrecht, 2007). AT highlighted the importance of the social and historical context within which collective activity, such as teaching and the support provided for dyslexic learners, takes place and therefore lessons from one context cannot be assumed to be transferred readily to another context. The discussion of the findings illustrates that the activity of teaching is a multidimensional developmental process, in which both teachers and pupils can be transformed. It also highlights the issues and tensions that can be created in the implementation of inclusive education and how teachers mediate and negotiate their views about inclusive education and about learners with dyslexia in wider institutional contexts. The study has practical implications for teachers' professional development and training, which are significant due to the current limited guidance in the literature about how an inclusive pedagogy in practice is enacted in a classroom setting (Florian & Spratt, 2013).
It is suggested that changes in teachers’ beliefs about their roles and responsibilities towards their students may be reflected in changes in their practice (Jordan et al., 2009). Considering the importance of attitudes, beliefs, knowledge and skills to the success of inclusive practice (Specht et al., 2015), it is important to understand the extent to which teachers have the opportunity to reflect upon their practice and be aware of their own pedagogical practice. What may be needed in teacher education is to challenge teachers’ beliefs about students’ ability in learning, about concepts such as dyslexia, which are associated with different value systems, as well as about teachers’ competence, roles and responsibilities. Training needs to be directed towards changing teachers’ beliefs, even though it is acknowledged that transforming teachers’ beliefs is a challenging task (Jordan et al., 2009).

In addition, a research study on inclusive practice demonstrates the importance of cooperation between and within teachers’ groups and the use of continuous pedagogical discussions, which can promote teachers’ own reflective ability (Tjernberg & Mattson, 2014). It is suggested that promoting teachers’ reflective ability can allow implicit thoughts and beliefs to become explicit and subsequently to influence teachers’ practice. Teachers’ in-service training and continuing professional development (CPD) should therefore be directed at developing areas of competence such as “teachers as reflective practitioners and initial teacher education as the foundation of ongoing professional learning and development” (European Agency for Special Needs and Inclusive Education, 2012, p. 7). Such competences concern the knowledge base, how teachers learn and how they become competent teachers for supporting all learners, including those with dyslexia in their classrooms (European Commission, 2015).

Teachers’ collaboration with other members of staff provides an opportunity for them to work together to explore ways in which they can act on reforming ideas, as well as find solutions to tensions created at the level of the classroom and the school. Collaborative models could be perceived as important dimensions of inclusive practice. Therefore, the exchange of ideas, resources and continuous formal and informal conversations about the content of the curriculum, teachers’ practice and how they can successfully remove barriers to learning should be encouraged. It is important that stakeholders establish the necessary conditions to enable teachers to collaborate with other teachers and to engage them in a teacher support system, in order to create a culture of collaborative practice at school. In addition, collaborative school-home partnerships are encouraged as teachers play a critical role in the experience of dyslexia. Support systems should be in place so that parents feel comfortable about engaging with their children’s education.

Finally, understanding variations and similarities among teachers coming from diverse backgrounds, despite official definitions of inclusion found in national policies, is important for policy-makers (Savolainen et al., 2012). Teachers share similar concerns on how to effectively support dyslexic learners in their classrooms; therefore, a key policy priority for
all contexts should be more effective teacher education programmes and ongoing support systems that focus on empowering teachers to engage in inclusive practice in order to provide high-quality education for their learners (European Agency, 2016). Preparing teachers to respond to the learning needs of their students through high-quality teaching might be the policy which can impact on the development of more inclusive communities (European Agency, 2011).

To conclude, suggestions about further research emerge from this research project and aspects of developmental research. The CHAT framework and the DWR model were used as useful descriptive and analytical tools for researching inclusive practice in mainstream schools. The use of AT as a framework can be helpful in exploring practice in different professional settings and different forms of activity, such as staff meetings or on-site training for teachers or the activity of identification and assessment, involving multiple members of the community, such as the SENCo, TAs, parents and/or Educational Psychologists. The notions of multiple activity systems and multivoicedness are explored more extensively in the third generation of Cultural Historical Activity Theory research and can support research action-oriented practice which seeks change. The notion of ‘expansive learning’ and transformation could be a useful concept to explore, for example, teachers’ learning for inclusion and dyslexic students in the professional setting of the school. As such, the use of reflective sessions based on the DWR model can explore longitudinally teachers’ trajectories and learning through time in order to gain a more in-depth insight into the concepts of innovation and transformation. Teachers can become critical reflective practitioners, developing their competences and abilities to support all students in their classes.

The present study used a limited number of participants within a qualitative research design, considering the timeframe, cost and the commitment of a single researcher. Through a qualitative study, I was able to explore teachers’ practice in depth and made links between teachers’ beliefs and their practice. Most studies on teachers’ attitudes and beliefs about inclusion or inclusive practice have mainly used quantitative methods for data collection and analysis (Englebrecht et al., 2015; Malinen et al., 2013; Savolainen et al., 2012). However, it is suggested that a study which employs a mixed-method approach could be a more appropriate approach for data collection and triangulation purposes, with the opportunity for wider generalisations through larger, representative samples (Yin, 2011). On the other hand, the use of qualitative methods for cross-checking provides an opportunity to go into teachers’ practice in depth.

Finally, the role of emotions in teachers’ work in inclusive settings with diverse groups of students should be given more attention in studies related to inclusive education. Teachers’ feelings related to job satisfaction and job commitment and, specifically, to aspects such as workload and classroom management can influence their teaching ability and competence in class. It is argued that subject positioning, including emotions, should
be used more in studies of teachers’ practice as it can enable to explore the reason ‘why’ behind teachers’ actions and decisions when working towards the a shared, collective object.

8.4 Unique contribution to knowledge

Despite the existence of an extensive literature on the attitudes, beliefs and values which should be embedded in inclusive education (Forlin et al. 2009), and some work conducted in the area of tacit pedagogical knowledge required (Hart et al., 2004; Kershner, 2009) there is currently only limited literature exploring inclusive practice as enacted in classroom settings and how teachers’ beliefs and attitudes can influence their practice. In theoretical terms, this study has further contributed to exploring the significant role that teachers’ beliefs and attitudes play in the successful implementation of inclusive practice in classroom settings in diverse contexts. Unquestionably, there is a dynamic interaction between contextual challenges and teachers’ understanding of the notions of inclusive education and dyslexia in providing inclusive practice for learners who are experiencing diverse barriers to learning, especially dyslexic learners with curriculum-related difficulties. Teachers require knowledge of systems and procedures but these need to be located within the context of understanding the role of attitudes and beliefs (Pearson, 2009) and ways to develop inclusive practice and to provide access to an inclusive curriculum for all learners. As Jordan et al (2009) note, the difference between what is considered as effective and ineffective inclusion may lie in teachers’ beliefs about their responsibility for all students. Beliefs in the locus of responsibility can be seen as the prerequisite to teachers’ development of effective instructional techniques for all students, including those with dyslexia. In addition, this study has contributed to exploring beliefs about teachers’ competence and perceived ability to collaborate with other members of staff and with parents, in order to more effectively support their learners in the classroom environment.

Overall, teachers’ beliefs in their teaching competence, their ability to collaborate but also to manage their class even when they face challenging behaviours can influence inclusive practice in the classroom in a disabling or enabling way. CHAT, as a valuable framework, shed light on how teachers’ beliefs, when interacting with other factors within an activity system (e.g. the classroom), can create tensions or contradictions in the activity system and on how this could possibly lead to innovation. The concept of innovation was a helpful way to understand that teachers’ beliefs and attitudes are powerful ‘tools’ and they have the potential to contribute to the successful implementation of inclusion in practice. Teachers who have proposed innovation in their practice, seem to have stronger beliefs in their ability and competence to solve the tension created in the particular activity system at a specific time. The development of pedagogical skills within the interactive aspect of teaching is concerned with teachers’ experiences in the field. Drawing on AT, it was possible to explore aspects of historicity in the teachers’ experiences, those that each of the individuals brings in historically accumulated activity systems such as the school and
the classroom. CHAT has also contributed into advancing our knowledge of the social and historical context within which teaching takes place, offering an insight into teachers’ training needs at the same time. Therefore, the meaning of inclusion and how it is enacted in practice in one context cannot be assumed to transfer readily to another context. However, it is argued that approaching teaching as a collective activity, where teachers work together towards a shared object, could be a valuable model for exploring inclusive practice across a wide range of settings.

In methodological terms, the use of the AT framework is well-established as a model to explore professional practice in a number of different settings. For instance, the DWR model was used as an analytical tool for exploring aspects of partnerships between parents and educational psychologists in educational psychologists’ practice (Soan, 2012); as an interventionist methodology to resolve tensions and contradictions in multi-voiced activity systems in the health sector (Engeström, 2000); and inter-professional work and boundaries in staff roles in schools in the field of education (Edwards et al., 2010). In this study, the AT framework was used to explore teachers’ practice for the inclusion of dyslexic learners in primary settings in two cultural contexts. In the discussion which follows, the modification of DWR, together with the use of AT framework for the study’s purpose, are presented as making a distinctive contribution to this study.

Elements of the second generation of Cultural Historical Activity Theory were used for analysing teachers’ interviews and observational data. As illustrated in Chapter 6, elements including ‘object’, ‘rules’ and ‘community’ shed light on teachers’ personal interpretations of the concepts of inclusion and dyslexia. For example, the element of ‘subject’ in terms of teachers’ beliefs (e.g. “inclusion is difficult to achieve”), emotions (e.g. ‘pressured’, ‘stressed’) and teacher’s lack of knowledge of dyslexia (e.g. “dyslexia is a confusing term for me”, “I am not a specialist in dyslexia”) provide a deeper insight into how teachers’ practice can be influenced by these factors when working with dyslexic learners in the context of the classroom.

In order to explore teachers’ practice in depth, the DWR model needed to be modified accordingly. The DWR framework was developed as a practice-based model including the six elements of the second generation and the associated sub-questions (see figure 7.1 in Chapter 7) and it was used as a ‘tool’ to facilitate the reflective sessions with the teachers. The use of the model to promote professional reflection makes a methodological contribution to practice-oriented research studies. In the field of education, such an approach could be used, based on follow-up discussions, to create awareness between the teachers and the researcher about the learning processes and pedagogical methods (Tjernberg & Mattson, 2014). For the analysis of the ‘critical events’, the model was modified by including the analysis conducted initially of the teachers’ interviews and field notes. For example, the element of ‘subject’, as described above was used to inform the element of ‘subject’ in the DWR model as well. Another example is the use of the element
of the ‘object’ to describe the concept of dyslexia (e.g. the characteristics of dyslexia) and to describe categories of students in teachers’ understanding of inclusion (e.g. a categorical approach to special educational needs) (see Table 6 for more details). In the analysis of the ‘critical events’, the object focused predominately on what the people were working to achieve (outcome). In doing so, the ‘objects’ of inclusion and of dyslexia were considered as the ‘conceptual tools’ (tools/ artefacts) in the DWR model, which further contributed to the understanding of the activity at the specific time.

To sum up, CHAT was a valuable framework that shed light on theorising and conceptualising teachers’ personal interpretations of inclusion and dyslexia by arguing that teachers’ professional practice, including their role and responsibilities, teaching competence, job satisfaction and emotions, can be influenced when working with dyslexic students in complicated professional activity systems such as the classroom. The CHAT framework was an effective way to gain an understanding of the interactive relationship among a number of contributing factors (e.g. ‘rules’, ‘tools’ ‘community’) and how they impact on the way inclusion is enacted in real complicated contexts in order to meet a wide range of individual needs, including those with dyslexia. Finally, apparent conflicts and tensions at the macro-level, such as government policy on ‘standards’ and ‘league tables’ on the one side and on ‘inclusive schools’ on the other (Evans & Lunt, 2010) make it difficult for teachers to implement inclusive practice in classrooms.

8.5 Limitations of the study

The present study has a few obvious limitations. Firstly, a limited number of teachers participated in the study, which was in line with the design of a qualitative inquiry. The study used the ‘audit trail’ method, with emphasis on providing detailed accounts of the data collection process and data analysis and presenting the findings. However, as mentioned above, the transferability of the findings to other setting or from one context to another should be treated with caution.

Secondly, another methodological limitation is related to the translation of terms from English to Greek. For example, it was difficult to find Greek words/terms corresponding exactly to ‘inclusion’ and ‘students with SEND’ in the educational context of Cyprus. For example, the Greek word for ‘integration’ was used in some interviews to denote the ‘inclusion’ as a concept. However, although adapting instruments such as the interview schedule from one language to another as a cultural tool is a limitation, I believe that the findings can be discussed on a cross-case basis using this instrument.

Thirdly, DRW proved to be a useful analytical tool for the reflective sessions with the teachers. As explained elsewhere in this thesis (see Chapter 4), the number of sessions conducted with the teachers was restricted due to the teachers’ tight schedules and lack of time to further commit to the research project. This limited the possibility to further promote the teachers’ own reflective ability. It is suggested that continuous pedagogical
discussions with the teachers can promote their reflective ability as practitioners and the conditions necessary for this require adequate time being set aside and special meeting places (Tjernberg & Mattson, 2014). These conditions can be taken into account for future longitudinal practice-oriented studies.

Finally, the use of CHAT as an analytical tool provided an opportunity to identify and explore possible systemic and contextual tensions. The study of systemic contradictions and tensions can offer possibilities for expansive developmental transformations (Engeström, 2000). In order to achieve such transformations, a process that goes through stepwise cycles of expansive learning is needed, beginning with actions of questioning existing standard practice. Even though the notion of ‘expansive learning’ is not explored in this study, there was a possibility for further examining existing practice through the reflective sessions. This could have contributed to a more in-depth insight into the action of innovation as proposed by some of the teachers. However, this was not possible, again due to the limited timeframe set for data collection purposes and to the teachers’ lack of time to further commit to the project. The study of innovations and the analysis of the contradictions of the existing practice by modelling a vision for its zone of proximal development could lead to examining and implementing the new model in practice (Engeström, 2000).

8.6 Conclusion

It has been pointed out that inclusive school communities are responsible for promoting effective learning and high quality teaching, by creating helpful and supportive learning environments within which learners feel appreciated and valued (Englebrecht et al., 2015). On the other hand, dyslexia is still an international concern (Smythe et al., 2005) and, despite the fact that in some cases the initial difficulty can be gradually overcome, there is still a significant proportion of children who experience difficulties in acquiring basic literacy skills (Elliott & Grigorenko, 2014). Schools and teachers are responsible for committing to the transformation of their school and classroom communities in order to successfully enact inclusive practice in their classrooms (Englebrecht et al., 2015). The teachers’ critical role is highlighted: teachers need to promote beliefs and attitudes towards acceptance and a willingness to become involved in reflective processes about what they are doing in classrooms, as well as why and how they do it. As the overall findings indicate, whilst contextual issues – including policy, constraining rules at the level of the school and training opportunities – might shape the way inclusive education is implemented in the classroom for students with dyslexia and how they teach, in this study, teachers’ continuing personal interpretations, in dynamic interaction with contextual issues, determine the way in which inclusion is enacted in their classrooms, as well as how they teach and support learners with dyslexia. Even though the teachers in this study...
seem to hold overall positive beliefs about inclusion and they conceptualise dyslexia through the causal model of dyslexia, there is a need to further challenge their belief in their ability to teach all learners in the class, to collaborate with other members of the community and to have the competence to manage challenging behaviours in their classes.

This can eventually lead to changes in teachers’ belief systems and values. Gaining a clear understanding of the barriers to learning and what their own responsibilities are in addressing these barriers in their own classrooms are therefore of the utmost importance in the implementation of inclusive education.

To sum up, this study acknowledges the challenges and difficulties concerned with the implementation of inclusive practice for all students and for dyslexic learners in mainstream classrooms. The teachers’ critical role is underlined and, in order to be able to implement inclusive practice in their practice, teachers should be equipped not only with competences but also with appropriate values and beliefs, so as to meet diverse learners’ needs and develop more equitable education systems (European Agency, 2012; Engelbrecht, 2013). Therefore, the need is underlined for the sustainable development of inclusive education in diverse educational contexts, in which collaborative partnerships and investment in teachers’ professional development and teacher education programmes are nationally supported.
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“Enacting inclusion for students with dyslexia: using Cultural Historical Activity Theory to explore teachers’ beliefs and classroom practices in Cyprus and North West England”

CONSENT FORM

1. I confirm that I have read the attached information sheet on the above study and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason.

3. I understand that the interviews will be audio/video-recorded.

4. I agree to the use of anonymous quotes.

5. I agree that any data collected may be passed to other researchers.

6. I agree that any data collected may be published in anonymous form in academic books or journals.
If you are happy to participate please complete and sign the consent form below.

I agree to take part in the above project.

_________________________________________  __________________________  ___________________________
Name of participant                      Date                        Signature

_________________________________________  __________________________  ___________________________
Name of person taking consent              Date                        Signature
1.2 PARTICIPANT INFORMATION SHEET

Enacting inclusion for students with dyslexia: using Cultural Historical Activity Theory to explore teachers’ beliefs and classroom practices in Cyprus and North West England

Participant Information Sheet

You are being invited to take part in a research study being undertaken by the student on the PhD in Education at The University of Manchester. The study aims to explore the primary teachers’ understanding of inclusion and dyslexia and their role for supporting students with dyslexia in primary classrooms in North-West England and Cyprus. Before you decide to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

Who will conduct the research?

The research will be conducted by Elena Anastasiou, who is a PhD student in Education at the Manchester Institute of Education at The University of Manchester.

Title of the Research

Enacting inclusion for students with dyslexia: using Cultural Historical Activity Theory to explore teachers’ beliefs and classroom practices in Cyprus and North West England

What is the aim of the research?

The aim of the research is to explore mainstream primary school teachers’ perspectives in both countries with regards to their understanding of inclusion and dyslexia and how it is linked to their practice for those students.

Why have I been chosen?

You have been chosen to take part in the study because you are currently a primary mainstream teacher and you have experience working with students with dyslexia.

What would I be asked to do if I took part?

I would ask you to take part in classroom observations and semi-structured interviews. There will be two phases of the interviews, which will last about 1 hour and a half approximately in total. The first interview (first phase) will last approximately 1 hour. The interviews in the second phase will be less formal, follow-up discussions based on the observations. These will last in total 30 minutes. The interviews will explore your understanding of dyslexia and your current practice with dyslexic students. I will also want to observe at least 4 lessons to gain an understanding of the current practice for dyslexic students.

What happens to the data collected?
The data from the semi-structured interviews and the classroom observations will be studied by the researcher. The results will be discussed in the data analysis and discussion sections of the written PhD thesis of the researcher.

How is confidentiality maintained?

Participants' names and identity will be replaced by pseudonyms to maintain confidentiality. The interviews and field notes from the observations will be transcribed in word documents and will be kept locked in password-protected files on my PC/laptop and used solely for the purposes of this research.

What happens if I do not want to take part or if I change my mind?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason.

Will I be paid for participating in the research?

No payment will be made for taking part in the research.

What is the duration of the research?

If you do decide to take part, I anticipate the interviews (before and after observation) should take a maximum of 1 hour and a half in total to be completed. The classroom observations will be conducted in at least four teaching periods.

Where will the research be conducted?

The interviews will take place in person at the school or at a mutually convenient and safe public place or by skype/telephone, at a time/date convenient for you in February and March. The observations will take place in the natural setting of your classroom and we will arrange at a time/date and to the teaching subject convenient for you in the same period.

Will the outcomes of the research be published?

The outcomes of the research may be published in a peer reviewed journal or presented at a conference.

Contact for further information

Please contact me by email: elena.anastasiou@postgrad.manchester.ac.uk or telephone number: 07809624239 or contact Dr. Garry Squires, supervisor of my PhD project at the University of Manchester by email: Garry.squires@manchester.ac.uk

What if something goes wrong?

If there are any issues regarding this research that you would prefer not to discuss with members of the research team, please contact the Research Practice and Governance Co-ordinator by either writing to 'The Research Practice and Governance Co-ordinator, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester M13 9PL', by emailing: Research-Governance@manchester.ac.uk, or by telephoning 0161 275 7583 or by telephoning 0161 275 7583 or 275 8093
Invitation letter to the head teachers of the school

Dear [name],

My name is Elena Anastasiou and I am a PhD student from the Manchester Institute of Education at the University of Manchester. I am writing in relation to a research project that I am currently undertaking namely “Enacting inclusion for students with dyslexia: using Cultural Historical Activity Theory to explore teachers’ beliefs and classroom practices in Cyprus and North West England” which is funded by the University of Manchester and the A.G Leventis Foundation in Cyprus. The aim of the project is to explore teachers' understanding of dyslexia and their practice in dyslexia-friendly schools in both countries. Please see attached information sheet for more details about my study. I should note, in that connection, that the research is being undertaken in accordance with the University’s Code of Good Research Conduct, which ensures that all information collected, will be kept confidential and anonymous.

As a teacher myself and working with students with dyslexia in primary schools in Cyprus and Nottingham, Leeds and Manchester, I am interested in approaching schools which have adopted dyslexia-friendly practices, as your school, [name of the school]. I am looking for teachers who will be willing to take part in to my project by giving interviews on how they support students with dyslexia in their classrooms. I would therefore appreciate if you could distribute the attached documents for the teachers to your school who might be interested in my research or if you could bring me in touch with anyone from the leadership team. I can be reached at 07809624239 and elena.anastasiou@postgrad.manchester.ac.uk.

I would like to stress that teachers’ participation is based on informed consent, and they have the right to withdraw any time during the project without any explanation.

Please do not hesitate to contact me should you require any further information and/or clarifications. I would also be delighted to attend a meeting at your school to discuss my work in more depth.

Thank you in advance for your consideration.

With best wishes,

Elena Anastasiou
APPENDIX 2

‘Index for Inclusion’ questionnaire (adapted from Booth and Ainscow, 2002, pp. 88-89)

questionnaire 1
indicators

Please tick the group(s) below indicating your involvement with the school:

☐ Teacher ☐ Teaching assistant ☐ Other member of staff
☐ Student ☐ Parent/carer ☐ Governor ☐ Other (specify)

Please put a tick in the box that indicates your opinion

<table>
<thead>
<tr>
<th>Dimension A: Creating Inclusive Cultures</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1.1 Everyone is made to feel welcome.</td>
</tr>
<tr>
<td>A.1.2 Students help each other.</td>
</tr>
<tr>
<td>A.1.3 Staff collaborate with each other.</td>
</tr>
<tr>
<td>A.1.4 Staff and students treat one another with respect.</td>
</tr>
<tr>
<td>A.1.5 There is a partnership between staff and parents/carers.</td>
</tr>
<tr>
<td>A.1.6 Staff and governors work well together.</td>
</tr>
<tr>
<td>A.1.7 All local communities are involved in the school.</td>
</tr>
<tr>
<td>A.2.1 There are high expectations for all students.</td>
</tr>
<tr>
<td>A.2.2 Staff, governors, students and parents/carers share a philosophy of inclusion.</td>
</tr>
<tr>
<td>A.2.3 Students are equally valued.</td>
</tr>
<tr>
<td>A.2.4 Staff and students treat one another as human beings as well as occupants of a ‘role’.</td>
</tr>
<tr>
<td>A.2.5 Staff seek to remove barriers to learning and participation in all aspects of the school.</td>
</tr>
<tr>
<td>A.2.6 The school strives to minimise all forms of discrimination.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension B: Producing Inclusive Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1.1 Staff appointments and promotions are fair.</td>
</tr>
<tr>
<td>B.1.2 All new staff are helped to settle into the school.</td>
</tr>
<tr>
<td>B.1.3 The school seeks to admit all students from its locality.</td>
</tr>
<tr>
<td>B.1.4 The school makes its buildings physically accessible to all people.</td>
</tr>
<tr>
<td>B.1.5 All new students are helped to settle into the school.</td>
</tr>
<tr>
<td>B.1.6 The school arranges teaching groups so that all students are valued.</td>
</tr>
<tr>
<td>B.2.1 All forms of support are co-ordinated.</td>
</tr>
<tr>
<td>B.2.2 Staff development activities help staff to respond to student diversity.</td>
</tr>
</tbody>
</table>

© 2002 CSIE, Booth, T and Ainscow, M (2002) Index for Inclusion: Developing Learning and Participation in Schools. This version has been prepared for display on the CSIE and EENET websites and can only be used for non commercial education purposes, on the condition that the source is acknowledged.
**questionnaire 1**

<table>
<thead>
<tr>
<th>B.2.3</th>
<th>&quot;Special educational needs&quot; policies are inclusion policies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.2.4</td>
<td>The Special Educational Needs Code of Practice is used to</td>
</tr>
<tr>
<td></td>
<td>reduce the barriers to learning and participation of all</td>
</tr>
<tr>
<td></td>
<td>students.</td>
</tr>
<tr>
<td>B.2.5</td>
<td>Support for those learning English as an additional</td>
</tr>
<tr>
<td></td>
<td>language is co-ordinated with learning support.</td>
</tr>
<tr>
<td>B.2.6</td>
<td>Pastoral and behaviour support policies are linked to</td>
</tr>
<tr>
<td></td>
<td>curriculum development and learning support policies.</td>
</tr>
<tr>
<td>B.2.7</td>
<td>Pressures for disciplinary exclusion are decreased.</td>
</tr>
<tr>
<td>B.2.8</td>
<td>Barriers to attendance are reduced.</td>
</tr>
<tr>
<td>B.2.9</td>
<td>Bullying is minimised.</td>
</tr>
</tbody>
</table>

**DIMENSION 6: Evolving inclusive practices**

<table>
<thead>
<tr>
<th>C.1.1</th>
<th>Teaching is planned with the learning of all students in mind.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.1.2</td>
<td>Lessons encourage the participation of all students.</td>
</tr>
<tr>
<td>C.1.3</td>
<td>Lessons develop an understanding of difference.</td>
</tr>
<tr>
<td>C.1.4</td>
<td>Students are actively involved in their own learning.</td>
</tr>
<tr>
<td>C.1.5</td>
<td>Students learn collaboratively.</td>
</tr>
<tr>
<td>C.1.6</td>
<td>Assessment contributes to the achievements of all students.</td>
</tr>
<tr>
<td>C.1.7</td>
<td>Classroom discipline is based on mutual respect.</td>
</tr>
<tr>
<td>C.1.8</td>
<td>Teachers plan, teach and review in partnership.</td>
</tr>
<tr>
<td>C.1.9</td>
<td>Teaching assistants support the learning and participation of all students.</td>
</tr>
<tr>
<td>C.1.10</td>
<td>Homework contributes to the learning of all.</td>
</tr>
<tr>
<td>C.1.11</td>
<td>All students take part in activities outside the classroom.</td>
</tr>
<tr>
<td>C.2.1</td>
<td>Student difference is used as a resource for teaching and learning.</td>
</tr>
<tr>
<td>C.2.2</td>
<td>Staff expertise is fully utilised.</td>
</tr>
<tr>
<td>C.2.3</td>
<td>Staff develop resources to support learning and participation</td>
</tr>
<tr>
<td>C.2.4</td>
<td>Community resources are known and drawn upon.</td>
</tr>
<tr>
<td>C.2.5</td>
<td>School resources are distributed fairly so that they support inclusion.</td>
</tr>
</tbody>
</table>

**Priorities for development**

1. 
2. 
3. 
4. 
5. 

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APPENDIX 3

PILOT STUDY REPORT

The pilot study was conducted prior to the main data collection stage of the research project. The purpose was to pilot the interview instrument developed and to create the account for one teacher, using the elements of the second generation of Cultural Historical Activity Theory.

*Teachers’ accounts for the understanding of dyslexia: a pilot study*

**Abstract:** Appropriate professional development is considered as an important step towards the development of inclusive education. This small–scale pilot study is concerned with two Cypriot primary teachers’ perceptions of dyslexia and how this is reflected on their classroom practices. Cultural Historical Activity Theory has been used as the framework to explore the complexities involved and to analyse teachers’ responses. The data is collected through the use of in-depth interview with the teachers in order to create their “accounts”.

The account report in this pilot study paper is for one of the teachers, Ellie. The accounts are based on teachers’ previous experience with students with dyslexia, their perspectives about students’ characteristics, their initial thoughts for taking action, the decisions they made, intentions and reasons for their decisions taken and their judgements about their decisions. The aim of this study is to gain an insight into how primary teachers understand a complicated concept such as that of dyslexia and also how this can influence their classroom practice. The findings of this study are presented and discussed in relation to the further development of the future actual doctoral study.

**Introduction:**

There is an international drive towards inclusive education and it is argued that teachers play a central role to the success of this movement (Mittler, 2000; Pearson, 2009). Inclusive education has been related with the rejection of a medical/deficit model of disability, which locates the difficulties within the person, in favour of a social model, which places its emphasis on the barriers created by the society, or an interactive model (biopsycho-social) (World Report on Disability, 2011, p.4) which focuses both on the individual
and their characteristics and the interaction with contextual factors (environmental and personal factors).

According to Black-Hawkins, Florian and Rouse (2007), inclusion is regarded as a complex and evolving concept that is contextually and historically situated. It could be acknowledged, that while many countries demonstrate commitment to the universality of the underlying view that inclusion is a fundamental way of providing quality education for all learners, there are clear differences in the national policies and the way in which context and culture interact (Kozleski et al., 2007; Savolainen et al., 2012).

At this point, it is worth noting that whilst in many cases there are many possible usages of the terms ‘inclusion’ and ‘inclusive education’, implying that there is no consensus over a unified definition (Ainscow, 2007), the focus in this report is related to those learners with specific learning difficulties and/or dyslexia. These two terms were in current use in the Cypriot policy and guidance (MoEC, 2008). Some students are identified as having specific learning difficulties and/or dyslexia whilst some others are identified as having Moderate Learning difficulties including dyslexia. In some instances, these terms were used interchangeably although in recent years there has been a tendency for the use of the term specific learning difficulties.

The Cypriot context:

In Cyprus, as in many other parts of the world, a similar trend towards the implementation of inclusive education has been noticed. The recent and long-awaited National Curriculum Reform (NNC) which has been officially implemented in all public schools in Cyprus in 2011 is regarded as the reflection of the national report within the framework of the Cyprus National Reform Programme 2011 (UNESCO, 2012); it places its emphasis on the role of teachers in Inclusive schools to ‘respond to the diverse needs of the students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use and partnerships with their communities’ (MoEC, 2008, p.7).

Historically addressing the movement towards inclusion in the Cypriot context, it is worth noting, that after the Cypriot Independence from the British colony in 1960s, the efforts of the Government for the integration of children with special needs started. However, it can only be traced in the 1999 ‘Education and Training of Children with Special Needs Law (113(I)/1999) (Ministry of Education and Culture) and its subsequent guidance on the implementation of the legislation in 2001. According to the 1999 Act, children identified as having SEN are entitled to special educational provision which can be provided in either a mainstream or a special setting. This is due to the dual model of provision currently operating in Cyprus (MoEC, 2014). For example, pupils who experience learning
difficulties of a more moderate nature (currently the largest portion of pupils accredited with SEN including dyslexia) are accommodated in the mainstream class but are regularly withdrawn for individualised learning support in a resource room (MoEC, 2014). This support is provided by a special support teacher or a specialist such as a speech therapist (Symeonidou, 2002).

Based on the latest educational reform, as described on the previous section, this new reality in the educational system in Cyprus is created. An increased number of children who are presenting learning difficulties or difficulties of a dyslexic nature are now educated in mainstream settings. This new reality has created a number of new expectations and responsibilities on the part of the Cypriot in-service teachers (Angelides, Constantinou & Leigh, 2009).

**Defining dyslexia:**

Dyslexia is regarded as an international concern in many countries (Smythe *et al*., 2005). A great number of different definitions can be found around the globe depending on the context of each country. In this report, a working definition of dyslexia with no exclusionary criteria proposed by the British Psychological Society (BPS) Dyslexia Working Party (1999, p.18) is adopted: “Dyslexia is evident when accurate and fluent word reading and/or spelling develops very incompletely or with great difficulty. This focuses on literacy learning at the “word level” and implies that the problem is severe and persistent despite appropriate learning opportunities. It provides the basis of a staged process of assessment through teaching”. This definition represents the core features of literacy learning difficulties and what exactly learners cannot do in relation to the tasks of reading and writing (Woods, 2002).

It should be noted that in relation to the terminology used in many countries, the term dyslexia falls under the broad category of SEN and sub-category of Moderate Learning difficulties such as in the case of Cyprus (MoEC, 2008) and in England within the sub-category of Specific Learning Difficulties including dyspraxia, dyslexia and dyscalculia (DfE, 2014). The use of particular language it seems to matter since, ‘This language (special educational needs & learning difficulties) shapes and constrains our (educators’) thinking, limiting our sense of the scope available to us for positive intervention to a narrowly circumscribed set of possibilities.’ (Hart,1996, pp.x).

In the same line, Booth (1998, p. 49) assert that the term of ‘special educational needs’ is beyond redefinition but he argued that “the ideas of ‘learning’ and ‘difficulties’ which each tend to have an everyday meaning have merit”. As he stated:
“(Learning and difficulty) can be linked to mainstream practice and a social model, in which difficulties in learning are seen to arise in a relationship between students, teachers and the resources available to support learning” (Booth, 1998, p. 49).

Teachers’ beliefs
Research evidence suggests that individual teachers’ beliefs about disability and their roles and responsibilities for including students with special education needs is linked with their sense of teaching efficacy in successfully implementing inclusive classroom practices (Jordan et al., 2009; Savolainen et al., 2012; Forlin et al., 2010). In Cyprus, similar research evidence indicated that teachers tend to use the medical/deficit model to describe students with Special Educational needs and disabilities and they expressed their concerns that they do not feel skilled enough to teach those students into the regular classes as the specialists’ staff (Phtiaka and Symeonidou, 2009). In some other studies, teachers reported that they feel it is not their responsibility to teach those students in general (Mamas, 2012; 2013). Taking into consideration that models of disability are related to different value systems, attitudes and behaviours (Pearson, 2009) and in particular, a subset of behaviours such as that of teachers’ pedagogical practices (Jordan et al., 2009), it is crucial to examine their between links if practice is to be developed. As such this pilot study is concerned to examine teachers’ conceptualization of the concept of dyslexia and their associated practices. In order to achieve this, it proposes Cultural Historical Activity Theory as the ‘lens’ to consider the complexities involved.

Cultural Historical Activity Theory:
Cultural and historical Cultural Historical Activity Theory (CHAT) originates from the work of Lev Vygotsky (1896- 1934) and his colleagues in the 1920s and 1930s in an attempt to understand and explain the links between individual processes of learning and development and most importantly, the cultural and social contexts within which all learning and development takes place (Leadbetter, 2008). Vygotsky’s concept of “mediation” opens the way for the development of a non-deterministic approach, in “which mediators serve as the means by which the individual acts upon and is acted upon by social, cultural and historical factors” (Daniels and Cole, 2002, p. 313). In other words, a human individual does not react directly to the environment. The relationship between the human agent and the objects of the environment is mediated by cultural means, tools and signs. The concept of ‘mediation’ has gained popularity in recent years and scholars following Vygotsky’s interest in mediation, emphasized the role of semiotics as signs, symbols and in relation to the language (Daniels and Cole, 2002). According to Roth and Lee (2007) Vygotsky’s conceptualisation of ‘mediation’ has been described as the ‘first
generation of Cultural Historical Activity Theory' and it is depicted on the triangular model of subject-tools-object.

Leontiev (1978), one of Vygotsky's students and colleague, further expand the concept of mediation into the hierarchical structure of human activity; the mediation by other human beings and social relations which are not theoretically integrated into the triangular model. From a Leontievian perspective, activities are collective and motivated by the need to transform an object into desired outcomes. This motive gives sense and direction to the actions which are carried out by the subjects and which are oriented towards specific or finite goals. Actions, which are intentional are mediated by tools, can be material (e.g. books, computers, approaches, etc.) or psychological (e.g. language, sign systems, models). Engeström's (1999) notion of activity systems, is an expansion of Leontiev's (1978) triadic model subject-tools-object; it includes the community, composed of participants sharing the same objective or motive, as well as the rules and division of labour which govern the community and mediate the individual and collective actions carried out by the participants (Figure 1).

Cultural Historical Activity Theory has been applied to diverse disciplines and research areas including education in general (Edwards, Gilroy and Hartley, 2002), to specific curriculum areas (Van Alsvoort, 2004), to the constructs of disability and special educational needs in inclusive education (Pearson, 2009), to the professional practice of educational psychologists (Leadbetter, 2005) and to special education (Daniels and Cole, 2002; Pearson and Ralph, 2007). However, there is a limited amount of research using Cultural Historical Activity Theory as a 'lens' to explore teachers' conceptualization of
dyslexia and the link to their professional practice regarding the pedagogical issue of supporting students with dyslexia in mainstream classrooms.

In this regard, the research question that will address this report is the following:

- How do primary teachers' understand the concepts of dyslexia in the context of their school based on cultural, social and historical factors?

**Methodology:**

For the purposes of this pilot study, a qualitative research design was employed in order to "gain insights into things like people’s opinions, feelings, emotions and experiences' (Denscombe 2007, p. 174). The nature of the research question required an in depth analysis; thus qualitative methods of data collection were used. More specifically, semi-structured interviews were used as the main method for data collection and the purpose was to construct the "accounts" or "stories" (Cohen et al., 2007) of the teachers. The aim of constructing these "accounts" and "stories" was to explain ‘why’ an event which involves human action has happened (Polkinghorne, 1988). For example, when the teacher was asked to provide a definition of dyslexia based on her current knowledge, she was able to reflect upon her professional experience with a particular identified student. The teacher was then in the position to describe and recall this experience and explain possible relevant actions taken in a chronological sequence. In doing so, the researcher probe with further questions so as give to the teachers the opportunity to further recall her experience and provide as many details as possible.

The interview schedule has been designed based on the relevant literature on inclusion and dyslexia, addressing the elements of Cultural Historical Activity Theory. The interview schedule has been developed and organised in the following six themes using open-ended questions:

1) Getting to know the participants, 2) Educational Background, 3) Understanding Inclusion 4) Understanding Dyslexia, 5) Early Identification and Assessment 6) Personal Feelings/emotions/thoughts.

The interviews with the teachers lasted approximately an hour and they were transcribed verbatim by the researcher (Denscombe 2007). Thematic analysis of the interview transcripts was used to analysed the interview data (Braun and Clarke, 2006) using the elements of the second generation of AT.
Findings:

Teachers’ accounts:

Subject Teacher 1 (Ellie)

Ellie is a Greek-Cypriot primary teacher in a primary school in a “Zone of Educational Priority (ZEP)” area in a south west district in Cyprus. She has seven years of teaching experience and the last year she is teaching at the ZEP school. According to the Ministry of Education and Culture in Cyprus (2008), an area is regarded as ZEP when there is a high rate of school failure and functional illiteracy, a large proportion of students drop out and incidents of violence and delinquent behaviour take place and finally, there is a high percentage of foreign students (Ministry of Education and Culture, 2008). Ellie is currently teaching at the first grade (5.8/12 and 6 years old children) of the primary education which is compulsory for all children in Cyprus (MoEC, 2014). She mentioned that the school size is small in this area, for example her class consists of eleven children in total, 5 boys and 6 girls which most of them are from diverse cultural and language backgrounds.

She is a qualified teacher and she obtained her Bachelor degree in Education and her Master Degree in the Development of Educational Programmes and Teaching. She is currently a part-time PhD candidate in Education. She mentioned that she has no personal experience of dyslexia or her relatives. When we started discussing about dyslexia, she clarified to me that she has a limited knowledge on dyslexia and it dates back during her Bachelor studies.

The need for a specialist:

Throughout the interview, Ellie was positioned herself as not ‘the specialist’ on dyslexia so as to be in the position to identify a child with learning difficulties and to be certain that this is dyslexia. She underlined the fact that a specialist is needed in order to get advice from them about the signs of dyslexia:

Ellie: “However, in any case I don’t consider myself as a specialist to make a diagnosis and to be 100% sure that this is dyslexia. I can recognise a few symptoms but I won’t be 100% sure unless I get the advice from a specialist”

Ellie: “Well, I am not a specialist on that, but I think when a child is diagnosed as dyslexic, does not necessarily means that it has to deal with it (dyslexia) for the rest of his life, I think it can be overcome to that extent that no longer be considered as a problem”.

Lack of training on dyslexia and SEN

She also mentioned that she has not received any in-service training on SEN and particularly on dyslexia since she started working as a teacher in primary schools in Cyprus and she expressed her concern that there are might not be any relevant seminars for in-service primary teachers in general for in-service primary teachers in Cyprus:
Ellie: “Except those two course units I have attended as part of my BA studies, I have not received any training about SEN and dyslexia as a teacher, not only me but I think in general there is no training on those issues for primary in-service teachers in our schools”.

Ellie: “I think this part (of training) is much overlooked in our schools, but at the same time is so important. . . as I told you before, I feel that I need training on those issues (SEN and dyslexia). Even though I can recognise a few symptoms of different disorders like dyslexia and AHDH, I don't feel that confident and certain to make a diagnosis which will be 100% correct so as to know how to tackle it. I need training to do that. . .”

However, she read a few articles on dyslexia on her own and she expressed her interest in learning more about dyslexia. Ellie has a student that has been officially assessed as dyslexic the last academic year and another one that she suspected that might have learning difficulties and/or dyslexia.

**Definition of dyslexia: the medical/deficit model**

When she was asked to define dyslexia based on her current knowledge, her definition was the following one:

Ellie: “I believe that dyslexia is a learning disorder that can be fixed and it has to do more with the writing and the reading, the one affects the other. It is generally said that you can recognise it through writing, but from my observation I think affects the reading as well, the two of them are interconnected. I know that if you see for example, a reverse symbol, a theta for a beta (greek alphabet), doesn't mean anything, or to see a child’s writing above the lines, or the child not to be able to read a syllable… usually these kids are doing a bit better on maths, I think their main problem is on the language lesson (Greek). Probably, I am not sure it is also connected with poor working memory … According to the legislation for dyslexia these children have difficulties in learning. They struggle to recognize and to memorize symbols and signs, maybe because their brain functions…processes information differently. I don't know”.

The definition of dyslexia provided by Ellie was analysed using the framework of the second generation of Cultural Historical Activity Theory (Figure 1.1 below).
Figure 1.1: Initial coding of *Analysis of Definition of dyslexia*

**Activity: Reflective discussion on dyslexia**

Teacher (Ellie, 7 years of teaching experience, no personal experience with dyslexia, ZEP school)

- Expectation that it can be fixed and be overcome
- A specialist is needed at schools
- Not confident that she can identify a child with learning difficulties without the advice of a specialist

**Legislation for dyslexia:**

"According to the legislation for dyslexia, these children have difficulties in learning, they have difficulties in memorising symbols and signs"

**Constraining rules:**

- Teacher’s lack of confidence to assess a child with dyslexia unless she gets advice from a specialist
- Lack of training to learn more about dyslexia
- No seminars on dyslexia

**Subject**

**Instruments/Tools**

**Description/definition of dyslexia:**

Teacher describes dyslexia and how she understands the concept.

**Tools/artefacts:**

a) Teacher’s own observation
b) Student’s writing
c) Teacher’s current knowledge on dyslexia
d) Legislation on dyslexia (Rules)

**Expectations:**

Teacher believes that it can be fixed and that it can be overcome to that degree that will be no longer considered as a problem

**Outcome**

**Rules**

**Community**

Children with dyslexia

Not same as everyone, ZEP school, deprived area, increased number of students with

**Division of labour**

Specialist is needed to make the assessment and give advice to the teacher

- Lack of educational psychologists at schools
Experiences of a student with dyslexia:

Initial concerns and thoughts

Ellie reflected on her experience of having a student with dyslexia in her classroom the last academic year. She told a story of confusion and uncertainty in initially understanding what was happening with a student that she considered as “a really smart student, with a great potential to achieve in the future” (Ellie). She recalled her experience with Chris, a student that presented literacy difficulties in reading and writing and she explained her decisions and follow-up actions.

Ellie: “I can remember that he was a really smart student, he was doing very well in Maths particularly. However, he has a real problem in writing; if you could see his writing you would definitely assume that he is a very weak student”.

Interviewer: Did you observed any difficulties in his writing in literacy?

Ellie: “Well, orally he was doing well, he has developed his critical thinking as well, more than the others I can say, he could also do mathematical calculations abstractly in his mind. In Maths, his only problem was that of writing the numbers, he sometimes writes them in reverse, like the 9, 7 and 3. However, his real struggle was that of copying from the board”

Interviewer: Was that the first sign you noticed to identify his difficulties?

Ellie: “It was so weird for me that I couldn’t explain it at the beginning. I knew from his mother, that he learned the letters since he was at the nursery but again he was struggling to copy them from the board. I was not certain about what to do, to whom to talk about this”.

Making accommodations in the classroom:

As she further explained, she decided to make arrangements in the physical space of the classroom so as to accommodate Chris:

Ellie: “From the very first months he showed his preference in listening and writing the letters on his own pace instead of copying them from the board. So I brought him to the front desks to be as much close to me as he could be so as to listen to me more clearly”.

Practices within the classroom:

Ellie was then asked to continue the story in relation to the practices she did in order to accommodate Chris in the class.
Ellie: “sometimes I could understand that the exercises I was giving them within the classroom were too difficult for Chris. I tried not to push him to finish the same time with his peers. So for example, I used to complete the sentences that he started himself so as not to make him feel that he is falling behind the others and to get stressed about that”.

Interviewer: what did you decide to do in this regard?

Ellie: “Sometimes, I was giving him extra time to finish the exercise on his own and some other times, we were going together to my office during the break time and we were writing together whatever is left from the lesson. I didn’t want to spent his break time, but at the same time I didn’t want him to left the exercises undone and to make him think that he is not a good student” […] or the other thing that I was trying to do is differentiation for him so for example I might ask him to write only 3 sentences for a particular task instead of 6 that his peers will write, you know so as to catch up with his peers”.

Ellie’s approaches and strategies to support Chris within the classroom are presented in figure 1.2 below using the CHAT framework:
**Figure 1.2: Initial coding for classroom instruction**

**Activity: Practices within the classroom**

**Subject:** Class teacher (Ellie)

**Instruments/Tools**

**Rules:** complete the exercises within the class at the same pace with their peers/all working at the same pace

**Support:**
- extra time
- No pressure

**Constraint:**
- Working together in the office (during break time)

**Enabling Rule:**
Rewarding system for participation

**Constraint:** need to finish everything on time so as to catch up with his peers

**Characteristics (description) of the student:**
- Sociable
- High self-esteem
- Humour
- Good self-image
- Slow reader

**Approaches and strategies of the teacher to support**
- No pressure to finish the same time as his peers (Rules)
- Extra time (Rules)
- Working together in the office (Rules)
- Rewarding (Rules)
- Instead of writing 6 sentences to write only 3

**Object**

**Community**
- Teacher, student (Chris), peers, mother (family)

**Division of labour**
- Teacher and student (Chris)

**Outcome**
- Not to make him feel that he is not a good student
- Not to create phobias and stress to X because of his problem
- Not to create any kind of psychological issues on him because of his problem.
- Need to catch up with his peers
**Communication with mother:**

Ellie continued her story by providing information on her decisions and explaining the reasons upon her actions.

“I thought about it and I decided to approach his (Chris) mother. I invited her to the school for a meeting, and I told her my concerns and what I have observed. I told her that I decided to talk to her because I believe that Chris has a potential, that he has so many abilities and I saw him that he was falling behind because of that problem. It was a pity to let him fall behind, he is still in the first grade, I believed that it was too early and there was something that could be done’.

Interviewer: And what did Chris’ mother tell you?

Ellie: “oh thank God, she was very cooperative with me and she recognised the same symptoms as me, maybe because she is a teacher as well and she could understand . . . You know how difficult is to tell to a parent that their child lack of something . . . they (the parents) might not take it that positively you know, they might think that it is something bad and they take is as a personal issue, that the teacher has something personal with them “.

However, Ellie considers that her decision to approach Chris’ mother was proved to be the right decision. She explains that she believes that Chris has not been affected by his dyslexia as a result of the personality of Chris and his characteristics but also because of the efforts that she and Chris’ mother made so as not to make him feel inferior comparing to his peers.

Ellie: “I think his dyslexia did not affect him, he is a very sociable person, with high self-esteem and humour, he has a good self-image. He can understand that he lacks of something but he probably thinks that he is just a slow reader. . . I think we (with his mother) managed not to create him any phobias and stress because of his problem. I mean he can see that he was participating in the classroom activities, and I was rewarding him again and again so as not to make him feel inferior comparing to his peers”.

The initial concerns of the teacher along with her decision to approach Chris’ mother and her explanations on that decision were analysed and presented within the second generation of Cultural Historical Activity Theory diagram in the figure 1.3 below:
**Figure 1.3: Analysis of the responses of the teacher**

**Activity: Communication with mother**

**Subject:** Class teacher (Ellie)

**Copy from the board**

*Rules:* "It was the beginning of the year (first grade) and all the kids were learning to copy the letters from the whiteboard" Ellie

*Constraint:* "Chris has a great difficulty copying from the board"

**Less demanding activities**

To work on his own pace

**Instruments/Tools**

**Object**

**History:** "He knew the letters since he was at the nursery but again he could not copy them from the board"

"We noticed that even though he learned the reading mechanism, he was still struggling to read"

**Support:** T: initiative to talk to mother

Mother: very cooperative

*Constraint:* Bureaucracy within the school
  - Decision not to follow the procedure (to talk first to head teacher)
  - Takes time (experience with one of her

**Teacher’s strategy:** decision to bring him to the front desks (Rules)

**Teacher’s approach:** initiative to talk to

**Teacher’s expectations**

- Not to let him fall behind
- First grade, too early, something could be done

**Community**

Student with dyslexia, mother, teacher, private SEN teacher

**Outcome**

**Division of labour**

Mother (M), Teacher (T), SEN teacher (SEN T)

T: talked to mother

M: ascertained that she noticed the same difficulties as the teacher. She decided to take X to a private SEN teacher (outside school)

SEN teacher- eg a "different pencil, a thicker one, that he can handle it easier on writing"
Discussion of the findings:

The purpose of this small-scale pilot study was to explore Greek-Cypriot teachers' conceptualisations of dyslexia and their associated practices when identifying a student with dyslexia. The second generation of Cultural Historical Activity Theory has been used as the descriptive and analytical framework in this regard. Using the activity system analysis for coding the data allowed some of the complexities to be evolved and some possible constraints to be exposed.

Conceptualisation of dyslexia:

Throughout Ellie’s story and her definition of dyslexia, emphasis was placed on the object in relation to dyslexia using a particular set of words that could be related to the medical/deficit model. More specifically, Ellie used a medical terminology to describe dyslexia, such as “learning disorder”, “diagnosis” and “symptoms”. In addition, when the story was focused on the identified student with dyslexia, the teacher used to refer to “his problem”, indicating the within the person pathology of the impairment, which is associated with the medical model. This is in line with Phtiaka’s and Symeonidou’s (2009) findings in their study, which claimed that Greek-Cypriot teachers tend to focus on the impairment of the students and they have the perception that students with Special Educational Needs and Disabilities (SEND) face a problem that they need to overcome.

In Pearson’s (2009) study, Cultural Historical Activity Theory was used to analyse trainee teachers’ conceptualisations of SEN and Disability. She concluded that respondents who tend to emphasize the object, are more likely to have a pathological view of pupil diversity whilst those who considered factors such as their own role, subject, the deployment of additional staff, division of labour, are more likely to have more interventionist perspective. In the same line, Jordan and Stanovich (2003) claimed that teachers who emphasize the pathological view of the disability do not see themselves as responsible for modifying their instructions to accommodate those students.

When Ellie recalled her experience with Chris, she seems to emphasize the element of object when describing the student, but she was describing both weakness and strengths of the student. In the table 1. below, Ellie’s examples of analysis of her responses are presented:
<table>
<thead>
<tr>
<th>Domain</th>
<th>Dyslexia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Learning disorder</td>
</tr>
<tr>
<td></td>
<td>Smart student</td>
</tr>
<tr>
<td></td>
<td>Potential to succeed</td>
</tr>
<tr>
<td></td>
<td>Good in Maths</td>
</tr>
<tr>
<td></td>
<td>Critical thinking</td>
</tr>
<tr>
<td></td>
<td>Many abilities</td>
</tr>
<tr>
<td></td>
<td>Struggle to copy from the board</td>
</tr>
<tr>
<td></td>
<td>Incomprehensible writing</td>
</tr>
<tr>
<td></td>
<td>Slow reader</td>
</tr>
<tr>
<td></td>
<td>Reverse writing of the numbers in Maths</td>
</tr>
<tr>
<td>Subject</td>
<td>Lack of confidence</td>
</tr>
<tr>
<td></td>
<td>Uncertainty</td>
</tr>
<tr>
<td></td>
<td>Initiative</td>
</tr>
<tr>
<td></td>
<td>Approaches to support</td>
</tr>
<tr>
<td></td>
<td>Expectations</td>
</tr>
<tr>
<td>Artefacts/Tools</td>
<td>Teacher’s current knowledge on dyslexia</td>
</tr>
<tr>
<td></td>
<td>Student’s piece of work</td>
</tr>
<tr>
<td></td>
<td>Teacher’s observation</td>
</tr>
<tr>
<td>Division of labour</td>
<td>Specialists</td>
</tr>
<tr>
<td></td>
<td>Educational Psychologists</td>
</tr>
<tr>
<td>Community</td>
<td>Slower than the others in reading and writing</td>
</tr>
<tr>
<td></td>
<td>Not same as everyone</td>
</tr>
</tbody>
</table>
Different pace
Legislation of dyslexia in Cyprus
Teacher’s observation

It can be fixed
Great potential for success in the future

<table>
<thead>
<tr>
<th>Rules</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different pace</td>
<td>It can be overcome</td>
</tr>
<tr>
<td>Legislation of dyslexia in Cyprus</td>
<td>Great potential for success in the future</td>
</tr>
</tbody>
</table>

Table 1: Examples of analyses of the responses of Ellie

As it can be seen from the table, Ellie emphasises Chris’s strengths instead of his weaknesses on her description. For instance, she emphasized his developed critical thinking, how good was in Maths and that he was a really smart student with a potential to achieve in the future. When she was referring to Chris’s weaknesses, Ellie seemed to be concerned more with the fact that his was falling behind his peers because of his struggle to copy from the board and his difficulty in writing. She seemed to be able to recognise the capabilities of a student like Chris and thus she took into consideration his preferences and characteristic; she managed to arrange the physical space of the classroom (rules) accordingly so as to accommodate him. What is more, Ellie demonstrated willingness to support him within the classroom, by using the term ‘differentiation’. She referred to differentiation of the task so as Chris to have less writing (tools) or by supporting him individually during break time (tools/rules). It could be argued that with reference to the particular example, using the word ‘differentiation’ can be seen as an indicator of the engagement of the teachers with the inclusion view. However the way it was described and interpreted based on the activity systems analysis it seems to create a constraint and contradiction to the rules such as spending time with the student during their break.

To continue with, Mamas (2013, p. 485) states that the medical/deficit model is predominately reflected on teachers’ everyday teaching strategies, which in some cases can provide them also with the ‘defence’ and ‘excuse’ of their ‘perceived inability’ or non-responsibility to educate children with Special Educational Needs. However, in this particular case, Ellie seemed willing to take responsibility for this student and she has provided no specific excuses for not being able to support Chris. It can be suggested that, one constraint that could be identified in this regard, was the fact that Ellie was feeling that she lacks of confidence and the ‘appropriate skills’ to identify and support a child more efficiently.
It can be argued that there seems to be a noticeable interplay between Ellie’s conceptualization of dyslexia within the medical/deficit model and her reported actions towards supporting and accommodating the student to a more social model. For example, Ellie seemed to take student characteristics and preferences into consideration and acting in a way to accommodate the student in the classroom, position herself as the subject within the activity system who takes responsibility to support this student. However, when she was explaining about her decision to talk to his mother, he expressed the opinion that ‘something could be done’ so as to help Chris overcome his problem. More specifically, she stated that “if it is diagnosed in an early stage, it can be overcome to that extent that no longer be considered as a problem”. In this regard, it can be also argued that the element of objective, which is the desired outcome, is also related to the medical/deficit model. Ellie made references to the phrases “it can be fixed”, “it can be overcome” and “it was a pity to let him fall behind because of this problem”. This can be linked to the official legislation of Cyprus for students with Special Educational Needs through the ‘Education and Training of Children with Special Needs Law (113(I)/1999) (Ministry of Education and Culture) and its subsequent guidance on the implementation of the legislation in 2001, which emphasize the within the child difficulties in the learning process. It could be argued that this contradicts with the latest educational reform that took place in all public schools in 2011 (Mavrou and Symeonidou, 2014) which celebrates the democratic and humanitarian schools, and emphasizes the accommodation that need to be made in order to meet the needs of all students.

Considering the theme that emerged with regards to the specialist's skills and the lack of confidence of Ellie to support these students, this could be seen in relation to the element of the division of labour. Even though Pearson (2009) considers that when teachers emphasize the division of labour element in relation to particular additional members of staff or SENCo are more likely to have an interventionist role, in the case of Ellie seems not to be the case. For example, even though Ellie is positioned as a teacher who is willing to take a more interventionist role, she feels less confident in doing so and she is seeking the support from specialists, such as educational psychologists instead of the SEN teachers or other member of staff within the school community. This could be explained that within the Cypriot educational system, most of the schools do not have Teaching Assistants (TAs) or paraprofessionals so as the teachers to receive extra support from these members of staff. Additionally, in some schools where paraprofessionals have been employed to assist students they are most of the times assigned to students with severe learning difficulties and their duties in some cases are confined not to the classroom support but to personal care when is needed (Angelides, Constantinou & Leigh, 2009).

It should be noted that research evidence also demonstrated that in Cyprus the relationship between SEN teachers and classroom teachers does not have the sense of
collaboration (Liasidou, 2007) and this could be based on the fact that still there are two different curriculums in the Cypriot Educational System. The one derives from the Ministry of Education and Culture, in a centralized educational system (Mavrou and Symeonidou, 2014, Mamas, 2012; 2013) and the other one is derived from the department of the Special Education within the Ministry of Education and Culture (MoEC, 2013). The second curriculum is still followed by the SEN teachers in the Cypriot schools, which seems to contradict the rhetoric of inclusion and the recent educational reform in all public schools in Cyprus.

It could be argued that Ellie did not seem to support the segregated curriculums that currently exist in schools in Cyprus by clearly express her frustration that ‘everyone does their job individually. If we have a good relationship with the SEN teacher, we might collaborate; otherwise nobody is willing to communicate with each other’.

**Conclusion:**
Throughout this report, there was an attempt to explore teachers’ conceptualisation of dyslexia and how this might be related to their practices for these students. It has become apparent that Ellie tend to favour the medical/deficit model which emphasizes the pathology of the individual, despite some efforts for support and accommodation of the student within the classroom. The element of objective emphasized the medical/deficit model which is about ‘fixing’ the problem. Even though the intentions were towards the support of this student, her actions seemed to be guided by a medical/deficit perspective to disability. What is more, the lack of confidence for having the ‘appropriate skills’ to support those students again indicate how Cypriot teachers favour the specialist support and expertise of particular people within the wider community of an activity system.

Finally, the teachers emphasize the lack of training which again she explained that will help her to identify a child and to help them overcome their problems. It could be argued that in this sense, for the teacher, the content of the training has to be again within the limits of a medical perspective on how to ‘diagnose’ a child and ‘help them to overcome their problems’.

**Implications for the doctoral study:**
This study is reported here as a pilot study and it was proved to have implications for the future of the planned doctoral study. To start with, this study gave me the opportunity to design an interview schedule which will be used in the doctoral study and assess their feasibility. It became obvious that some revisions are needed in terms of the research questions that will be used in the future doctoral study. It was important to give the participants time to tell their story, to probe them with questions to understand their reasons behind their actions but not to lead them in any possible way. Secondly, at this point, the contribution of Cultural Historical Activity Theory as a conceptual and analytical
tool can be recognised. The second generation of Cultural Historical Activity Theory gave me the opportunity to think in a more holistic way on human’s actions, the influences that can have upon them and the motives for their actions. This guided me to ask for ‘why’ questions in the interview and elicit more information. It was also important to see the rules/tools that might be derive from government’s agenda or policy documents and the position that the subject takes in an activity system in relation to those rules/tools. However, Cultural Historical Activity Theory demonstrated and some limitations that will be taken into account for the future doctoral study.

Using Cultural Historical Activity Theory as an analytical approach was proved advantageous but at the same time problematic in some instances. For example, the benefit of using Cultural Historical Activity Theory was that the teachers are positioning themselves as the subject in the story allowing the researcher to gain a better understanding on their potential actions (Pearson, 2009) even though it was not possible to see the directionality of this relationship. Likewise, some elements such as tools and rules tend to refer to similar aspects of the activity. For example, the rewarding system for the student which can be interpreted as a mediated action towards a desired outcome (e.g. to boost the self-esteem of the student and not to make him feel inferior) is also related to a set of rules in relation to behavioural management practices of the teacher.

To sum up, piloting the instruments and reporting the pilot data was a very useful process into identifying potential pitfalls of the study and at the same time improving the instruments and the approach to the data analysis. Overall, in terms of designing the interview schedule it was noticed that some more areas in relation to the inclusion of all children was needed before discussing about dyslexia specifically. Finally in terms of constructing teachers’ accounts the approach was useful into including the elements of the second generation of Cultural Historical Activity Theory but it could be suggested that more information based on the observations can enable to gain a more in-depth insight into teachers’ practice during reflective sessions.

References:


Van Aalsvoort, J. (2004). Cultural Historical Activity Theory as a tool to address the problem of chemistry’s lack of relevance in secondary school chemical education. *International Journal of Science Education, 26*(13), 1635–1651


4.1 Interview schedule for teachers

Elena Anastasiou
Manchester Institute of Education, Full-time PhD in Education, University of Manchester

Interview Schedule for Class Teachers

<table>
<thead>
<tr>
<th>Interview Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain who I am and what I am doing in School.</td>
</tr>
<tr>
<td>Remind the respondent of their rights (Participant Information Sheet) and collect the Consent form.</td>
</tr>
<tr>
<td>Remind the respondent that the interview will take approximately one hour.</td>
</tr>
<tr>
<td>Remind the respondent that I am asking them for permission to audio record. Remind them that their name will not be attached to the data. If the person does not give permission to have an audio recording then I will take notes. If this is refused then the interview cannot go ahead.</td>
</tr>
<tr>
<td>I will ask the respondent if they have any questions before the interview goes ahead.</td>
</tr>
</tbody>
</table>

**Purpose:** Getting to know the participants, start creating the accounts and gaining an insight into teachers’ understanding about inclusion and dyslexia.

1. **Getting to know the participants** - **(SUBJECT)**
   - How many years are you teaching in this school?
   - Which year group are you currently teaching?
   - Do you have a personal experience of dyslexic relatives, friends or colleagues in your environment?
   - Do you have qualifications in special educational needs?
   - Have you done any in-service training in dyslexia and/or special educational needs so far?

2. **Educational Background:** **(SUBJECT)**
   - Which is your educational background? (BA, MA etc)
   - Have you been informed about dyslexia during your studies? How?
   - Do you get any information on dyslexia yourself? How?
3. Understanding inclusion **[TOOL/ARTEFACT]**

- How would you define inclusion?
- What are the opportunities and difficulties you encounter when you are working to support the learning of all students in your class?
- How do you plan and coordinate the needs of your dyslexic students? What is your role in this process?
- What do you do as a class teacher so as to include dyslexic students in the learning process based on the given constraints you mentioned above?
- What do you feel is the level of benefit of dyslexic students in the school’s regular curriculum?
- What do you think are the biggest barriers on inclusion in the school in order to meet the needs of dyslexic students?
- What helps to improve your role as a class teacher to foster the inclusion of all learners?
- How would you envisage better inclusive practices in the future?

4. Understanding dyslexia: **[TOOLS/ARTEFACT AND OBJECT]**

- From your point of view, how would you define dyslexia? Probe: previous or current experience with dyslexia
- In what ways do you think dyslexia can affect learning?
- From your experience what are your students’ difficulties in learning and what are their strengths?
- From your point of view, can you think of any likely factors that might lead students with dyslexia to experience these difficulties?
  Prompt: For example, Environmental, Curricular, within the child?
- Do you think your current understanding of dyslexia help you to support a student with dyslexia in your classroom? In what ways? Why?
- Will you be interested in learning more about dyslexia? Why?
- What support is in place towards your own professional development in relation to dyslexia?

5. Early Identification and Assessment: **[SUBJECT/ RULES/TOOLS]**

- From your current experience, do you feel that you can identify a learner who might have dyslexia in your classroom? How?
  Probe: What signs do you think a learner might exhibit so as to understand?
- Could you explain me which procedure you should follow if you think that one of your students is dyslexic, according to the Code of Practice?
What records, assessment records and other information do you obtain before a student with dyslexia will be in your class? Do you find them useful?

How do you assess your dyslexic students' work?

How do you monitor your dyslexic students' understanding and learning in the class?

6. **Collaboration in the Community:**

Do you feel that there is collaboration between the staff (including teachers, SEN teacher, SENCo, head teacher) in order to support dyslexic students in your classroom?

How does the teaching support staff (if present) contribute to the learning of all students during the lesson? In what ways?

What is their role? Do you find it useful?

In what ways do you collaborate with them?

Did you ever receive the support and advice of a Special Education Needs Coordinator/SEN teacher? Did you find it helpful?

What collaborative activities help you in successfully providing inclusive practice in your class?

What do you think prevents collaboration in your school?
### Observation Schedule for Classroom Observations

**OBSERVATION SCHEDULE FOR A LESSON**

**DATE:**

**LOCATION:**

**TEACHER:**

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>FIELD NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class Environment (Rules):</strong></td>
<td></td>
</tr>
<tr>
<td>Class size</td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
</tr>
<tr>
<td>Class arrangement (physical space)</td>
<td></td>
</tr>
<tr>
<td>Rules and procedures exist for non-instructional events (e.g., movement about room, student talk) and for instructional events (getting ready for lessons, expected behaviour of instructional group)</td>
<td></td>
</tr>
<tr>
<td><strong>Curriculum: (Tool/ Rules)</strong></td>
<td></td>
</tr>
<tr>
<td>What is the lesson and what are the principal objectives?</td>
<td></td>
</tr>
<tr>
<td>Are there specific objectives being differentiated for dyslexic students? In what way?</td>
<td></td>
</tr>
<tr>
<td><strong>Teaching process: (tools/artefacts /objective)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>How do the learning objectives linked with the classroom tasks?</strong></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>What is the outcome to be achieved?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>What teaching methods are utilised and how do they link with learning aims?</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Learning and Learning environment (activity):</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How is the learning environment fostered by the teacher?</strong></td>
</tr>
<tr>
<td><strong>What evidence is there of learning taking place?</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Resources, materials, software, approach, strategies (Tools/artefacts):</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What teaching and learning resources/materials/tools are being used for all students and in what way?</strong></td>
</tr>
<tr>
<td><strong>How are these materials/tools/resources being used for dyslexic students?</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Teacher and pupil interaction (Activity):</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How the teacher interacts with his/her students?</strong></td>
</tr>
<tr>
<td><strong>How does the teacher interact with their dyslexic students?</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Other comments:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Identification of ‘critical event’:</strong></td>
</tr>
<tr>
<td><strong>Critical event to be related to:</strong></td>
</tr>
<tr>
<td>a) Instruction</td>
</tr>
<tr>
<td>b) Classroom management</td>
</tr>
<tr>
<td>c) Assessment</td>
</tr>
<tr>
<td>d) Collaboration with other member of staff</td>
</tr>
</tbody>
</table>
Appendix 4.3 Interview schedule for follow-up discussions

1) **Identification of ‘critical event’** (based on the aspects of inclusive practice as follows: modified instruction and assessment, classroom management and collaboration with other members of the community) (Malinen et al., 2013)

2) **Interview questions to further elaborate on the ‘event’**: 

1. Do you differentiate your teaching methods/approaches/techniques and instruction for accommodating the needs of dyslexic students? How? Why? (tools/artefacts/materials) – probe on why questions (to explain the event)

2. In your view and experience, how does the curriculum provide you with the opportunity to be flexible and make adaptations on your teaching plan and lesson for these students? Why?

3. How does the Teaching Assistant (TA) in your classroom (if present) help you to support your students with dyslexia? In what way do you think he/she help you to support the students with dyslexia? (Rules/division of labour)

4. What evaluative measures are in place for your use for the assessment of your students? (assessment/rules)

5. How do you evaluate and monitor the progress of your students in the class? In what basis?

6. What kind of extra work does including dyslexic students in the class entail? (rules)

7. What effect do dyslexic students have on the rest of the class? (community)

8. To what extent do you encourage the involvement of parents in their child’s learning? (community)

9. How has your role and responsibilities for teaching students with dyslexia changed since you started teaching these students (subject)? (probe: e.g. based on current changes in policy in each context)

10. What factors do you think influence these changes? (probe: e.g. external such as greater parental involvement (community), or the new curriculum reform?

11. How would you conceptualise an ideal ‘good practice’ in relation to the support and education of children with dyslexia in mainstream schools? (objective) What recommendations would you like to make about that? (if not covered in previous interview) Or

12. What suggestions would you make about how the current practice might be improved to provide more support to students with dyslexia (objective)
Appendix 4.4 The Developmental Work Research model (Engeström, 2007)
## The Initial Coding Manual (as developed)

<table>
<thead>
<tr>
<th>Code definition</th>
<th>Code description</th>
<th>Relevant literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understanding Inclusion</strong></td>
<td>The way teachers understand inclusion in the context of their school</td>
<td>Teachers’ definition of inclusion E.g. ‘equal opportunities for all students’. The definition is based on teachers’ conceptualisation and personal interpretations (conceptual tool/artefact and/or objective)</td>
</tr>
<tr>
<td><strong>Understanding dyslexia</strong></td>
<td>The way teachers understand dyslexia based on their current knowledge and experience</td>
<td>Teachers’ definition of dyslexia (conceptual knowledge) and understanding of interacting factors through the models of disability</td>
</tr>
<tr>
<td><strong>Cultural Historical Activity Theory (elements)</strong></td>
<td>Tools or artefacts mediate the interactions between the subject and the object.</td>
<td>The tools can be shaped and altered during the development of the activity and can be either tangible or psychological in nature. Example of <em>material tools</em>: (textbooks, IWB, Dyslexia-Friendly resources, assessment books)</td>
</tr>
</tbody>
</table>

### Notes
- **Understanding Inclusion**: Teachers’ definition of inclusion based on their personal interpretations and conceptual tools.
- **Understanding dyslexia**: Based on current knowledge and interacting factors through models of disability.
- **Tools/artefacts**: Tools or artefacts mediate interactions, shaped and altered in development.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th><strong>Other tools</strong>: teachers techniques, approaches and methods used. <strong>Conceptual tools/artefacts</strong>: models of disability to describe dyslexia and conceptualisation of inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td><strong>Rules/norms</strong></td>
<td>Explicit and implicit regulations and norms that govern actions and interactions within an activity system</td>
</tr>
<tr>
<td>5</td>
<td><strong>Object</strong></td>
<td>The immediate goal or motive that subjects aim to achieve in an activity system mediated by the social environment</td>
</tr>
<tr>
<td>6</td>
<td><strong>Objective/outcome</strong></td>
<td>what people are working towards, including the purposes of the actions as well as the purposes of the community in which actions take place</td>
</tr>
<tr>
<td>7</td>
<td><strong>Community</strong></td>
<td>Multiple individuals or subgroups who share the same general object or identify with the object</td>
</tr>
<tr>
<td></td>
<td><strong>Division of labour</strong></td>
<td>The role that each individual in an AS plays in the pursuit of achieving the object of a particular activity</td>
</tr>
<tr>
<td>---</td>
<td>------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>8</td>
<td><strong>Inclusive practice</strong></td>
<td>Inclusive practices in relation to 1) instruction, 2) behaviour management 3) assessment 4) collaboration with other members of staff and the community</td>
</tr>
</tbody>
</table>
APPENDIX 6:

Coding system (initial and emergent ideas)

**Bold** – initial ideas/coding

**Bold underline** – emergent ideas/coding

Typical font – expansion of initial and emergent ideas based on the data

1. Subject:

   - **Qualifications**
     - Bachelor of Education (or other Bachelor degree)
     - Master
     - PhD
     - PGCE

   - **Teaching experience**
     - 0-5
     - 5-10
     - 10-15
     - 15-20
     - More than 20

   - **Prior experience with students with dyslexia**
     - Yes
       - Personal experience
       - Professional experience
     - No

   - **In-service training (professional development)(INSET)**
     - Yes
       - Optional seminars
         - Seminars on behaviour management (CPI)
         - Seminars on differentiation
         - Optional intervention course (Write Away Together)
         - On-site training by SENCo
         - Dyslexia-friendly training
       
     - No training
       - Limitations
         - Lack of training on dyslexia
Inconvenient time
- Inconvenient place
- Seminars primarily for SEN teachers
- SEN’s responsibility for dyslexic students
- Lack of practice-based workshops
  - Recommendations
    - Need for more practice-based training

- Information on dyslexia
  - Search on their own
  - Based on prior experience (hands-on experience)
  - Through university courses
    - Unit at the university on special needs
  - No information
    - SEN’s responsibility for dyslexic students
    - No need for more information (quite experienced on dyslexia)
    - Lack of information

- Beliefs on inclusion and dyslexia
  - Belief on building confidence to learn
  - Belief that confidence as progress
  - Belief on building a culture of acceptance
  - Belief on emotional support
  - Belief on progress as success
  - Belief that inclusion is very difficult to be achieved
  - Belief on on-site training for teachers along with consultation
  - Belief that all students need to be equal (”as everyone else”)
  - Belief on inclusion in terms of support
  - Belief on inclusion as the right to education in mainstream school
  - Belief on collaboration among staff for the successful inclusion

2. Understanding Inclusion (artefact/tools: conceptual tool)

- Definition of inclusion
  - Inclusion as social acceptance
  - Inclusion as equal opportunities
  - Inclusion as differentiation/accommodation to the needs of the students
  - Inclusion of all students
  - Inclusion in terms of placement
  - Inclusion as access and full participation
Inclusion as a for child to be part of the class and feel happy
Inclusion as getting the parents involved
Inclusion in terms of provision

- **Difficulties and opportunities (benefits)**
  - Challenge to keep everyone on task
  - Difficulty to manage all ability groups
  - Difficulty to engage the parents into the process
    - School’s efforts to include them
  - Difficulty to manage the class (disruptive behaviour)
  - Difficulty to support them (need for additional work/special treatment)
  - Difficulty to get funding
  - Challenging the benefit of being at the unit
  - Difficulty to progress academically in the regular class (for more severe cases)
  - Opportunity for social inclusion
  - Opportunity for a change of classroom culture
  - Opportunity to collaborate with different people
  - Opportunity to remove barriers to learning
  - Opportunity to discuss about diversity
  - Challenge to get high academic results

- **Placement**
  - Special/Resource unit within the school
    - Negative
      - Challenging the benefit of being in the unit
    - Positive
      - Academic progress for those students
      - Meet their academic needs with small staff ratio
      - Lots of Resources
      - Social opportunity during lunchtime
  - Special school for more severe cases
    - Equipment to meet their needs
  - Regular class
    - Benefits
      - Social inclusion
      - To be part of the community
    - Challenges
      - Affect their self-esteem
      - Difficult for the peers (distraction)
- Difficult for the teacher
  - Withdrawal from class for individual support

- **Dyslexia friendly school provision**
  - Accommodation of classroom environment
  - Human resources to support learning
  - Accommodation to the level and needs of the student
    - Inclusion is about the equipment
      - Feel the same as everyone else

---

- **Conditions for inclusion to be achieved (objective)**

  - **Tools**
    - more multisensory teaching
    - scaffolding their contributions
    - peer support

  - **Division of labour**:
    - The presence of TAs or co-teaching
    - Communication with SEN teacher/SENco
    - Individualized support in the class
    - More human resources (more staff in classes)

  - **Community**:
    - Collaboration among external agencies and other members of staff
    - Collaboration among teachers
    - Presence of an educational psychologist at school
    - Acceptance stance towards diversity
    - Change of School culture/ethos
    - Positive learning environment (feeling valued)

  - **Rules**:
    - Placement for more severe categories (autism)
      - school unit within the school
    - Time (additional time for planning)
    - School leadership towards differentiated instruction
    - Flexibility on the curriculum
      - Teacher’s autonomy
      - Differentiated material for dyslexic students (graduated activities)
      - Smaller class sizes
    - INSET
      - Continuing Professional Development
      - On-site training
3. Understanding dyslexia (Artefact/tools: conceptual tool)

- **Definition of dyslexia**
  - Brain disorder
    - Related to speech and language development
  - Learning difficulty/SpLD
  - Reading difficulty “behind their reading age”

- **Dyslexic learner’s difficulties**
  - Memory difficulties
    - Poor working memory
    - Poor auditory sequential memory
  - Decoding words in written form
  - Reversal of the letters
  - Behind their reading age
  - Spatial awareness
  - Difficulty in Maths/numbers (dyscalculia)
  - Mispronunciation of words
  - Speech and language elements related to dyslexia
  - Difficulty in perception/comprehension
    - Intonation
    - Flow of understanding

- **Dyslexic learner’s strengths**
  - smart/intelligence
  - Reading ability
  - Talent in theatre
  - Memory on historical facts
  - Talent in ICT/computers
  - Talented in Arts
  - verbal activities/discussions

- **Factors related to dyslexia**
  - **Genetic factors**
    - Below their chronological age/Child’s maturity
    - Heredity
    - Child’s maturity
    - Speech and language development
  - **Environmental factors**
Home environment
- Parenting issues/parental involvement
  - Single parent (lack of understanding, spoiled child)
  - Parents’ Low SES
  - Greek as an additional language
  - Overprotective home environment (due to health problem/insecurities)
  - Lack of collaboration between home-school

School environment
- Marginalisation of students with other abilities
  - Accepted by their peers
  - Dyslexia-friendly school
  - Socialising (play groups/play gyms)

Emotional and/or Social Factors
- Lack of friends (loneliness)
- Emotional difficulties (child depression)

Individual characteristics of the students
- Shy
- Easily giving up
- Spoiled

Affect of dyslexia on:
- Confidence/self-confidence
- Behaviour
  - Behavioural difficulties/disruptive behaviour
  - Aggressive
- Learning
  - Misunderstanding of words and language

Support to students with dyslexia
- Lack of knowledge to support
- Individualized support (withdrawal from the class)
  - Support by the teacher (mother)
    - Read together
    - Use of light blue ruler to screen text (tool)
    - Transfer him to another school
    - Overlays
  - Support to children with speech and language difficulties
  - Group support provided by TAs
  - School-based Intervention
- **Reading recovery**
- **Dyslexia-friendly schools**
  - **TOOLS**
    - Visual timetables
    - Coloured paper
    - Labelling (pictures to words)
  - **RULES**
    - School policy
    - Prevention policy (inclusion)
    - Training ("empathy and understanding of how they read")

**Labelling**

- **Parents**
  - Close-minded
  - Fear of stigmatisation
  - Need for a label
    - To involve the social services
    - For their children to get extra time during examinations
    - To explain children’s difficulties
  - Preference for an ADHD label

### 4. EARLY IDENTIFICATION AND ASSESSMENT

- **Role of the teacher**
  - **Early identification**
    - Observing behaviours in the class
      - Disengagement from task
      - Low self-esteem
      - Language sequence
      - Incorrect blending of words
      - Behind their reading age
    - Early Identification plan ("Play-plan" provision)
    - Not formal identification until the age of 7
  - **Collaboration with SENCo/SEN teacher**
    - Reporting behaviours to SENCo
  - **Talking to parents**
  - **Procedure of referral (rules)**
  - **Supporting them/use of strategies to help them**
  - **Lack of knowledge to identify**
- **Procedure**
  - tools (screening tests)
  - community (Educational psychologists, parents)
  - rules (bureaucracy)

5. **EMOTIONS**
   - **For working with dyslexic students:**
     - Challenge
     - Confidence
     - Good relationship with
     - Neglect
     - Love
     - Neutral
     - Reassured (when TA is working with the student)
   - **For the Profession**
     - lack of motivation
     - additional work to do
       - pressure
       - moral effect (based on the inspection)
     - stress
     - too many responsibilities on the behalf of the teacher
     - passionate for Early Years

6. **COLLABORATION**
   - **with parents**
     - negative experience
       - lack of understanding (they do not seem to understand or they did not accept it at the beginning/fear of stigmatisation
       - Hard to engage them
         - Working class
         - Very young parents
         - Single parents
     - positive experience
       - book day (rules)
       - writing mornings (rules)
       - Orbit Early Years (tool) to communicate with parents
     - Neutral
       - home visits
   - **with SENCo/SEN teacher**
     - negative experience
• positive experience
  • to arrange on-site training for teachers
  • SENCo did the training
  • Gives feedback to individual teachers
  • Seek for training opportunities

• with other members of staff (head teachers, teachers, teaching assistants)
  • planning of the IEP
  • lack of co-teaching opportunities
  • need for collaboration among staff members
  • TAs as valuable members of the community
  • Shared responsibilities in class

7. BARRIERS TO INCLUSION
• Class size
• NATIONAL Curriculum -Curriculum objectives
• Educational system's expectations
• Lack of embedded time
• Lack of additional support
  • Not TA in the class
  • In terms of staff ratio
  • Lack of additional hours for those students for individualised support

• Lack of collaboration with/engagement of parents
  • Working class parents
  • Low SES background
• Lack of collaborative school culture and practice
• Lack of knowledge to support (dyslexia related)
• Pressure of time
• lack of knowledge to support
• lack of funding (financial situation in Cyprus)
  • shortage in teaching staff
  • staff ratio
• lack of individualised/personal time in the class
• lack of (additional) funding
• Rules: OFSTED inspection
8. INCLUSIVE PRACTICE

- Assessment
  - Purpose/objective
    - Monitor progress (formative)
      - Half-term
      - Term (Reading Scheme)
      - IEP
    - Evaluate/measure performance (Summative)
      - SATS
      - NC level
      - TIMMS
      - Ages and stages (EY)
    - Look at children’s learning (Nursery)
      - Phonics’ test (year 1)
  - Object
    - Self-assessment
    - Peer-assessment
    - Feedback
  - Tools
    - Workbooks
      - Tests
      - Rewarding System
      - Praise
      - Revision
      - Learning journey
      - Essex tracker system
      - “baseline assessment”
      - Orbit Early Years
  - Instruction
    - Experiential instruction
      - Outdoor play
      - Experiential workshop
      - Fieldtrip
      - Model building
    - Role playing activity
  - Indirect instruction
    - Guided inquiry
  - Independent Study
Independent learning
  - Interactive instruction
  - Cooperative learning
    - Open discussion
    - Think-share-pair
  - Phonics Instruction (Early Years)
    - Assisted blending, segmenting

- Tools
  - Dyslexia friendly provision
    - use of visual elements
      - visual timetables,
      - numicon
    - mini whiteboards
    - choice boards and next boards (nursery)
    - strategies for memory
    - guided reading
    - concept mapping
    - multisensory resources
    - Ruth Minskin series (RWI)
    - Word banks

- Rules:
  - In pairs
  - Red cards/green cards
  - “Big Writing”
  - Golden Time (class rule)

- Objective
  - Each year groups’ curriculum objectives

- Interaction with the students
  - Individual time between the teacher and the student
  - Different pace

- Coordination and planning
  - Rules (time to plan)
    - Weekly (based on ongoing assessment)
    - Biweekly (fortnight)
  - Rules (Curriculum objectives)
    - Flexibility on planning for EY
    - According to the group needs
Based on the NC (centralized system) (Cypriot teachers)

- Read Write Inc

**Tools**
- National curriculum (NC)
- Ages and Stages (for EY)
- Day plans (for EY)

**Objects**
- VCOP
- Big Writing

**DIFFERENTIATION**

**Purpose/Objective**
- Differentiation as a way of acceptance
- Differentiation as accommodation to the needs of the students

**Methods**
- Assessment
  - Task
  - Grouping
  - Resources
  - Pace
  - Outcome
  - Dialogue and support

9. **SEN teacher/SENCo role**

- Support teachers on training
- Seek training opportunities
- Provide on-site training (dyslexia-friendly)
- Co-teaching (collaborative role with teachers)
- During assessment process (discussion with teacher)
- Do the screening test
- Take responsibility of the child (more severe cases or when they are given a statement) Cyprus (1:1 in Cyprus)
- Keep track of students' progress in the system
- reading recovery with dyslexic learner
APPENDIX 7 – Examples of analysis of individual code

7.1 Coding for the node ‘subject’ – Cypriot teachers

Teacher 1 (Grigoria)
Grade 3 teacher, B.Ed, MA, 12 years of teaching experience, no personal experience of dyslexia
Belief that inclusion is difficult to be achieved – only for specific group of students

Teacher 3 (Yianna)
Grade 5 teacher, B.Ed, MA, PhD, 20 years of teaching experience, no personal experience of dyslexia
Interested in further information on dyslexia

Teacher 5 (Olivia)
Grade 2 teacher, B.Ed, MA, 12 years of teaching experience, no personal experience of dyslexia
Belief that inclusion is very difficult to be achieved

Teacher 2 (Stavros) (St. George Primary School)
Grade 6 teacher, B.Ed, MA, PhD candidate in Education, 19 years of experience
Information on dyslexia through ‘Special Needs’ unit at the University
Not adequate knowledge on dyslexia, role of specialist for those students
Belief on emotional support to the students, ‘to make the feel valued, to believe in themseves, to have confidence’

Teacher 4 (Aliki) (St. Neophytos Primary school)
Grade 1 teacher, B.Ed, MA, 12 years of teaching experience, no personal experience of dyslexia
Belief on building a culture of acceptance
Belief that inclusion is very difficult to be achieved

Subject
1. Whose perspective?)
7.2 Coding for the node ‘subject’ – British teachers

Teacher 7 (Victoria)
Reception teacher in DF school, 12 years of experience, Bachelor of Education (B.Ed), specialism in Early Years, passionate with EY,
Hands-on Experience on SEN, not interested in more information (quite experienced in dyslexia)

Teacher 6 (Louise)
Year 2 teacher in Dyslexia Friendly School, 3 years of experience, previously Teaching Assistant and Nurse, PGCE, specialism in Early Years
Intervention course “Write Away Together” for low ability groups in writing
Belief on building confidence to learn (individuals-
Not any ongoing training on SEN and

Teacher 8 (Gillian)
Nursery teacher in DF school, Bachelor of Education (B.Ed) , 20 years of experience, specialism in Early Years, strong preference to EY
Personal experience of dyslexia (son and husband dyslexic)
Interested on information on speech and language in relation to dyslexia (ELKlan

Teacher 9 (Jane)
SENCo in DF school, Bachelor of Education (B.Ed) , Master in Special Needs, SENCo,
Personal experience of dyslexia (husband dyslexic)
18 years of teaching experience

Teacher 10 (James)
Year 4 teacher, Bachelor of Education (B.Ed), PGCE
20 years of teaching experience, KS2, year 4 teacher, no background knowledge on dyslexia
Belief on division of labour (support by TAs) for inclusion to be successful

1. Whose perspective?
7.3 Coding for the node ‘object’ – Cypriot and British teachers

Teacher 8 (Gillian) EYFS teacher
‘To use guided reading’
‘Phonics instruction: assisted blending, segmenting’

Teacher 9 (Jane) Year 1 teacher
‘Big Writing’ objectives
Independent writing

Teacher 10 (James) Year 4 teacher
Vocabulary Connectives, Openers and Punctuation
‘students’ to enrich the vocabulary’
‘to write confidently in Big Writing’

Teacher 7 (Victoria) Reception class teacher
‘To become independent writers’
‘To become competent readers and writers’
‘To develop their writing skills’

Teacher 6 (Louise) Year 2 teacher
‘To become independent writers’
‘To develop their writing skills’

Teacher 3 (Yianna) Grade
‘To work in groups: collaborative work among students’
‘To have self-assessment skills

Teacher 2 (Stavros) Grade 6 teacher
‘to create a friendly environment, to build a good rapport with the students’
Expectation: all students can succeed if the believe in

Teacher 1 (Grigoria) Grade 3 teacher
IWB, lesson plan, peer support,
Teacher’s expectation: ‘SEN teacher to support the students with additional needs’

Teacher 5 (Olivia) Grade 3 teacher
To learn the alphabet
To start working in pairs
To segment letters
To monitor progress in an on-going basis

Teacher 4 (Aliki) Grade 1 teacher
To become confident in participating
To contribute to oral discussions
To work in teams

What are people working on?
7.4 Coding for the node tools/artefacts - British teachers

Teacher 8 (Gillian) EYFS teacher
DFS materials and resources
Visual timetables, coloured paper, visual signs in class
'play-plan' provision; role-playing activities and experiential instruction (outdoor play)
'EYFS Orbit application' for collaboration with parents
'Every child a talker' system
Ruth Miskin (Read Write Inc materials and resources)

Teacher 7 (Victoria) Reception class teacher
DFS materials and resources
Visual timetables, Ruth Miskin (Read Write Inc materials and resources); mini individual whiteboards for each student

Teacher 6 (Louise) Year 2 teacher
Ruth Miskin (Read Write Inc materials and resources)
DFS materials and resources, visual timetables, numicon in Mathematics, visual signs in class
Use of Golden time for students' behaviour

Teacher 9 (Jane) Year 1 teacher
Multisensory teaching,
Peer support
DFS sources and materials; experiential instruction (e.g. fieldtrips that can contribute to the 'Big Writing')
Ruth Miskin (Read Write Inc materials and resources)

Teacher 10 (James) Year 4 teacher
DFS material and resources, Big Writing,
Ruth Miskin (Read Write Inc materials and resources)
Word banks and flash cards (for vocabulary)
7.5 Analysis of the node tools/artefacts - Cypriot teachers

Teacher 5 (Olivia) Grade 3 teacher
‘Curriculum objectives’
IWB, power point presentation, coloured books.
Experiential instruction: role-playing activities, story telling activities,
Guided reading

Teacher 4 (Aliki) Grade 1 teacher
Multisensory resources (visual timetables)
Experiential learning
IWB, video player, projector, websites (TES videos)

Teacher 3 (Yianna) Grade 5 teacher
Knowledge on dyslexia, curriculum objectives
Teachers’ expectations:
Experiential workshop – teachers’ approach
Teachers’ belief on social inclusion

Teacher 2 (Stavros) Grade 6 teacher
Teacher’s approach- to emotionally support them
Expectation: all students can success if the believe in themselves
Opportunity to participate – ‘to create a friendly environment, to build a good rapport with the students’
Traditional approaches (‘I don’t differentiate my lesson’)
Peer support system available
Appraisal – Reward system

Teacher 1 (Grigoria) Grade 3 teacher
IWB, lesson plan, peer support,
Teacher’s expectation: ‘SEN teacher to support the students with additional needs’
Interactive instruction: Open discussion (Literacy Lesson) and concept mapping
Independent study: for writing
### 7.6 Analysis of the node rules (constraints or support) – British teachers

**Teacher 8 (Gillian) EYFS teacher**

**Constraints:**
- Lack of collaboration with parents (school-teacher);
- Pressure of time;
- Lack of funding from the LA; staff-student (ratio)

**Support:**
- DFS policy and materials; TAs’ support;
- Teacher’s love for EYFS and her job;
- Rewarding system available in EY; teachers’ beliefs in inclusion (expectations)
- Teacher’s interest in learning more about speech and language development

**Teacher 7 (Victoria) Reception class teacher**

**Constraints:**
- Lack of parents’ engagement (Working class parents, deprived area),
- Lack of funding from the LA

**Support:**
- DFS resources and materials; TAs (knowledgeable staff members)
- ‘Have a go’ class rules: students to try first and then the teacher to provide them with the right answer
- ‘Flexibility on planning in EY according to the needs of the students’

**Teacher 9 (Jane) Year 1 teacher**

**Constraints:**
- Lack of additional funding from LA (10 hours’ worth)

**Support:**
- Fieldtrips (experiential learning and instruction) for ‘Big Writin’

**Teacher 6 (Louise) Year 2 teacher**

**Constraints:**
- Lack of collaboration with parents

**Support**
- Group support provided by TAs (students’ withdrawal)
- Support by student teachers (practice-placement in the school) to the groups (division of labour)
- ‘Have a go’ class culture: students to try first and then the teacher to provide them with the right answer

**Teacher 10 (James) Year 4 teacher**

**Constraints:**
- Pressure of time; ‘results driven agenda’;
- ‘lack of collaboration with parents;
- Lack of funding from the LA (10 hours’ worth)
- OFSTED reports – ‘moral effect on teachers’ abilities and job commitment’

**Support:**
-
7.7. Analysis of the node rules (constraints or support) – Cypriot teachers

Teacher 2 (Stavros) Grade 6 teacher

Constraints:
- Lack of collaborative culture in the school
- Education system’s expectations (e.g. does not promote students’ talents in other areas)

Support:
- Rewarding system (for motivation); Peer-support available (students with LD pair-up with more able students, group work); ‘Friendly learning environment’

Teacher 5 (Olivia) Grade 3 teacher

Constraints:
- Pressure of time; Difficulty to teach all students – work with the average ability students; Curriculum objectives – ‘demand to cover the curriculum objectives in limited time’
- Big class sizes and lack of additional personnel in classes

Teacher 3 (Yianna) Grade 5 teacher

Constraints:
- Lack of additional support in the class
- Lack of additional time for individualised support

Support:
- Collaboration with parents and other members of the staff;

Teacher 4 (Aliki) Grade 1 teacher

Constraints:
- Lack of additional support in the class (constraint)

Support:
- Presence of teaching assistant through the scheme in their school; use of multisensory

Teacher 1 (Grigoria) Grade 3 teacher

Constraints:
- Pressure of time; Difficulty to manage class with students with challenging behaviours; Lack of practice-based workshops and training opportunities in dyslexia and inclusion; Shortage in teaching staff in Cyprus; Cyprus’ financial condition (wider system)

Support:
- Teachers’ interest in learning more about dyslexia