The effects of cooperative learning arrangements on the social skills of pupils identified as having severe learning difficulties, who attend special primary schools

Submitted by Maria Eleni Socratous to the University of Exeter

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Abstract

Cooperation among children in classrooms forms the basis of many interventions designed to improve, among others, pupils’ social relations in schools. Therefore, nowadays cooperative learning (CL) is used as a very popular teaching approach in mainstream settings. However, research and literature regarding CL focus mostly on pupils who attend mainstream settings. Research and literature are missing, or at best are very limited, as regards the use of CL with pupils identified as having severe learning difficulties (SLD), who attend special schools. This study aims to suggest ways for addressing this gap by investigating the effects of CL arrangements on the social skills of pupils with SLD, who attend special schools.

This thesis is based on a multiple case study research design. It took place in two different special classes, one in England and the other in Cyprus, and was separated in two different phases. Phase one was an ethnographic study exploring the teaching approaches that were utilised in each class for promoting the social skills of the pupils, how the notion of social skills was perceived in the two settings and how group activities were implemented. For this phase qualitative methods were used, collecting data through semi structured interviews of the professionals’ views on cooperative learning, teaching approaches and about the notion of social skills. Naturalistic observations during the everyday classroom practices were also conducted. Based on the findings of phase one, some initial propositions regarding CL arrangements for children identified as having SLD were developed.

Phase two aimed at exploring these initial propositions in both classes, in England and Cyprus, in order to investigate what happens when they are implemented with regard to the social skills of the pupils. The initial propositions were opened to amendments. By following an action research approach, the propositions were continuously evolved and re-developed on the basis of data interpretations along with discussions with the teachers. By planning, acting, observing, reflecting and then planning again, the effects of these propositions on the social skills of the children were investigated in both classes. In this phase, qualitative methods were used as well, collecting data through naturalistic observations during the
implementation of CL activities, and through semi structured interviews of the teachers’ views regarding these activities.

The findings of this study suggest that CL arrangements for pupils identified as having SLD who attend special schools can be beneficial for the promotion of their social skills. CL arrangements in the two special classrooms promoted not merely pupils’ communication skills that enabled them to express their opinions and choices on issues concerning their learning experiences, but those social skills that created a sense of interdependence among them. Although, current literature and research in the field of SLD mainly suggest ways for practitioners to promote the social skills of the pupils on an adult-pupil basis, the current study takes a step forward. It suggests that CL arrangements in special settings can encourage pupils to promote their social skills by communicating, assisting and expressing their opinions and choices to their peers, in addition to their communication with adults.
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Last but not least I would like to thank my parents, George and Myrofora, whose unconditional love and encouragement made this project possible.
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>AAC</td>
<td>Alternative and Augmentative Communication</td>
</tr>
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<td>BERA</td>
<td>British Educational Research Association</td>
</tr>
<tr>
<td>BILD</td>
<td>British Institute of Learning Disabilities</td>
</tr>
<tr>
<td>CL</td>
<td>Cooperative Learning</td>
</tr>
<tr>
<td>DCSF</td>
<td>Department for Children, Schools and Families</td>
</tr>
<tr>
<td>DfE</td>
<td>Department for Education</td>
</tr>
<tr>
<td>DfEE</td>
<td>Department for Education and Employment</td>
</tr>
<tr>
<td>DfES</td>
<td>Department for Education and Skills</td>
</tr>
<tr>
<td>PMLD</td>
<td>Profound and Multiple Learning Difficulties</td>
</tr>
<tr>
<td>QCA</td>
<td>Qualification and Curriculum Authority</td>
</tr>
<tr>
<td>SEN</td>
<td>Special Educational Needs</td>
</tr>
<tr>
<td>SLD</td>
<td>Severe Learning Difficulties</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNCRC</td>
<td>United Nations Convention on the Rights of the Child</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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Chapter 1

Introduction

1.1 Introduction
In the current study, the effects of cooperative learning (CL) arrangements regarding the social skills of pupils identified as having severe learning difficulties (SLD), who attend special primary schools are investigated. By undertaking an exploration in two special classrooms, one in England and the other in Cyprus, with pupils identified as having SLD, the study was separated into two phases. Phase one followed an ethnographic approach, aiming at gaining an insight in the two settings regarding their every day practices and teaching approaches that promote pupils' social skills, the way they implemented group activities and their understandings about the notion of social skills. By the completion of phase one, an initial CL model was developed for the purposes of the second phase of the study. In the second phase, by following an action research approach, the initial propositions of the CL model were revised and evolved to meet the needs of the participants. Its utility regarding the social skills of the pupil participants was also explored.

This chapter begins by providing the origins of my personal interest in the field of SLD and CL arrangements. Following this, a clarification of the basic terms used in the study is provided. In the third section the academic rationale upon which the idea for this study is developed is presented, along with the main purposes of the study. Finally, this chapter concludes with an outline of the thesis, along with a more detailed account of its main purposes.

1.2 Personal rationale
I was nineteen when I first entered a mainstream primary classroom in Athens as a trainee teacher for the purposes of my undergraduate studies in primary education. I remember I had to teach a lesson about electricity and the supervisor of that module gave us a variety of learning theories and asked us to choose one and implement it in practice. I chose the constructivist approach to learning, believing that giving the chance to the pupils to actively construct knowledge in their minds would be more interesting and meaningful to them. I implemented the constructivist approach through CL arrangements and I
separated the classroom into smaller groups, where they worked cooperatively to design a simple electric circuit. In one of the groups there was a pupil identified as having moderate learning difficulties. Admittedly, as an inexperienced teacher, I found it rather challenging to distribute the work equally and appropriately, in that specific group. My intention was to provide to all of them equal opportunities for participation to the learning process. In addition, I tried to facilitate them with appropriate ways to encourage meaningful conversations among them that would enable them to construct by themselves the necessary knowledge to make the system work, instead of myself giving them the answers.

This incident was the trigger that initiated my interest in the area of Special Educational Needs (SEN) and in social constructivist approaches to learning. A variety of placements followed my first one, in a variety of subjects and year-classes, and in a variety of mainstream schools. As my interest around the area of SEN was growing throughout my undergraduate years, at the same time I had the chance to learn and explore in practice a variety of approaches and strategies that would favour the learning experience of pupils with mild and moderate learning difficulties in mainstream education through an active participation in the learning process, along with their classmates.

After the completion of my undergraduate studies, I undertook a Masters in SEN. As I already had some small experience with pupils with mild and moderate learning difficulties, I decided to explore during my placement an area of SEN that I did not have the chance to work with during my undergraduate years, i.e., pupils identified as having SLD. When I first entered a special primary school in England I wondered whether all the knowledge and experience that I gained through my undergraduate studies about a variety of theories, teaching approaches and strategies could have any relevance and application in special settings. Very soon, I realised that with small adjustments in the pedagogical approaches pupils identified as having SLD can become confident learners and active participants during their learning process. However, some questions remained during my visits to that special primary school: In addition to their academic achievements, can pupils with SLD develop substantial and positive peer relations? Can they interact and work together in a meaningful and productive way? Can a social constructivist
approach through CL arrangements be efficient with this group of pupils, like it does in the mainstream schools? Special schools try to provide to their pupils the appropriate environment in which they can flourish to their full potential in terms of academic performances and communication skills such as expressing their needs, choices and aspirations in matters concerning their lives. But what about those social skills that would enable them to interact with their peers during learning in a meaningful way?

I have started with this story because it marks the beginning of my interest in the field of CL and children with SLD. My interest around this area has urged me to continue my studies and fulfil my wish to understand thoroughly in what ways teachers can develop the appropriate conditions to encourage pupils with SLD to promote their social skills, including their peer relations, by working productively together and through meaningful interactions during CL arrangements. Before presenting the current study’s rationale, the basic terms used in the study are discussed in the following section.

1.3 Clarification of the basic terms used in the study

This section presents a brief clarification of the way the three basic terms of the study are used. These basic terms are: Pupils identified as having SLD, CL, and social skills.

a) Pupils identified as having SLD

There is a debate about defining the criteria that delineate the group of pupils referred to as experiencing SLD (Male & Rayner 2007; Wehmeyer, 2006), since there is a lack of an international precise definition for this group of pupils (Porter, 2005). The distinction among groups of pupils with different needs is inaccurate, as the terms and methods for distinguishing these groups varies across countries. Distinguishing between groups of children with SEN is imprecise and based on subjective judgements, especially for those pupils who fall on the margins (Porter, 2005). Classification of learning difficulties often comprises the terms mild, moderate, severe and profound to describe the degree of learning difficulties that a person has, but classifying or diagnosing learning difficulties can be complex (Fletcher, Lyon, Fuchs et al, 2007). One way to establish the ‘degree’ of learning disability is to use the measure of Intelligent Quotient (IQ). This measure notes that people with an IQ of less than
20 will be described as having profound learning difficulties, those with an IQ of 20 – 50, a severe learning difficulties, and 50-70, moderate or mild learning difficulties (BILD, 2014). However, knowing the IQ score of a person does not contribute to the understanding regarding the learning difficulties concept (Kavale & Forness, 2003), since such scores tell you little about the kinds of support required and how this impacts on their daily interaction with the people around them (Fletcher, Morris & Lyon, 2003). Therefore, teachers should employ strategies that seek to understand the child with SLD holistically and on an individual level to support the full range of each pupil's physical, social, emotional and learning needs. The most recent definition by World Health Organisation (WHO, 2001) conceptualises the term SLD around issues of function, participation and health difficulties. It is also important to recognise that children experiencing similar health difficulties such as cerebral palsy or brain dysfunctions or similar motor or sensory difficulties can sometimes be grouped under the big umbrella of SLD, however they might have different needs, abilities and potentials.

Conventionally, SLD is a term used in the UK to describe children and young people who have significant cognitive or intellectual impairments, experience significant difficulties in learning (Lawson, 2010) and an especially designed Individual Educational Programme is generally provided for them (DfES, 2003). According to the SEN Code of Practice (DfE, 2014) children and young people with SLD have significant intellectual or cognitive impairments, they are likely to need support in all areas of the curriculum, may have difficulties in mobility and co-ordination, communication and perception, and in the acquisition of self-help skills and are likely to need support to be independent. A pupil should be recorded as having SLD only in cases where the pupil is in the primary or secondary SEN and is at School Action Plus or when she has a statement (DCSF, 2009). Regarding the school settings they usually attend, it is difficult to verify the number of children with SLD and the extent to which they attend mainstream or special settings in England, since SLD co-exists alongside other disabilities such as autism and/or communication difficulties which often supersede diagnosis (DCSF, 2007a).

In Cyprus, the term 'child with special needs', adopted by the Education and Training of Children with Special Needs Law (1999), is very broad and can
cover children with mild, moderate, severe and profound learning
difficulties. More specifically, the aforementioned Law states that a child with
special needs means a child who has severe learning or specific learning,
functional or adaptive difficulty, due to physical (including sensory), mental or
cognitive deficiencies and there is a need to be provided to them special
education and training. A definition specifically for pupils identified as having
SLD has not been given by the legislation. Based on convention rather than
legislation, the majority of pupils with SLD in Cyprus attend special schools or
special units either on a part-time or on a full-time basis and an Individual
Education Programme is provided to them.

Regardless of the variation of interpretations of this term, the pupil participants
in this study were seen as unique individuals, with unique experiences, abilities
and potentials. The data collection and analysis procedures regarding their
behaviours and communication acts took into consideration their personal and
idiosyncratic ways of interacting and communicating and their uniqueness as
individuals. My own priority was to understand the pupil participants' social
behaviours at a deeper level that takes into account their background and their
personal, idiosyncratic characteristics.

b) Cooperative learning
The notion of CL arrangements in this study was mainly based on constructivist
and social cohesion aspects that enabled the pupils to actively construct
knowledge on their own through meaningful interactions with each other, along
with additional strategies developed during the action research process in the
second phase of the study. Some researchers view cooperative learning,
collaborative learning, peer learning, group learning and group work as distinct
and different terms, whereas others use them as synonyms that are
interchangeably used to define a process in which students at all levels of ability
work together in small groups to achieve an educational task (Boehm &
Gallavan, 2000; Boud, Cohen & Sampson, 1999). A very wide range of
definitions can be found in literature regarding CL. Johnson and Johnson
(1999a, p. 68) for example, define CL by saying, 'students work together to
accomplish shared goals. Students seek outcomes that are beneficial to all.
Students discuss material with each other, help one another understand it, and
encourage each other to work hard. However, a brief definition cannot easily describe the complex and dynamic nature of CL.

The aim of the current project was not to discover a working or even an operational definition about CL; rather it was to explore CL at a deeper level to investigate the variety of its theoretical underpinnings, its core elements and foremost the variety of ways that it can be implemented in practice. Based on this exploration and on the findings of phase one the study developed an open-to-amendments CL model that was developed for the purposes of the second phase of the study. After the completion of the second phase this model was revised and redeveloped on the basis of an action research approach. All the aforementioned issues are further amplified throughout the thesis.

c) Social skills

A variety of definitions regarding social skills can be found in the literature that approach this term either with a cognitive or behavioural or even ecological approach (Merrell, 2003). There is not a unitary definition that has been agreed upon by most experts in the field (Whitcomb & Merrell, 2013) as each person views this term from a different angle. The current study did not begin the research journey with a predetermined idea of what might constitute social skills for the participants of the study. After an in-depth exploration of the literature and based on a common understanding of myself with the participants, that was constructed in the first phase of the study, an operational definition for social skills was created for the purposes of the second phase (see section 4.5.3.6). This definition places emphasis on a variety of aspects such as academic, demonstrating good manners and enjoyment when being with others, peer relations and expressing choices and preferences. Based on these aspects of social skills the study undertook an exploration of how CL arrangements can be employed to promote all the aforementioned dimensions. The issue of academic outcomes during the implementation of CL activities was not systematically investigated in the sense of pre and post tests; rather it was systematically explored in relation to pupils’ engagement in the activity and in relation to the quality of interactions among the pupils during CL activities.
1.4 Research rationale

Literature and research, during the last two and a half decades, has moved away from investigating ways to support pupils with SLD, functional, self-help skills. After the publication of the Education Reform Act in 1988 and the newly published National Curriculum along with the United Nations Convention on the Rights of the Child (UNCRC, 1989) there was a shift that drew away from practices that promote pupils' functional and self-reliance skills, to those practices that would, firstly, allow pupils to access the National Curriculum in all subject areas and secondly, to those ones that would encourage pupils to have an active participation to issues concerning their learning and lives by exploring ways to facilitate pupils to express their aspirations and choices on these issues.

Without underestimating the significance of the contribution of such practices, current literature and research are at least limited regarding practices that promote and favour those social skills that enable children identified as having SLD to develop their peer relations through meaningful and productive interactions during learning. Promoting pupils' self-advocacy and exploring ways to be included as much as possible in procedures and issues concerning their learning and lives are aspects of significant importance for their education and a vital right as human beings. However, their right to friendship and to positive peer relations are of equal significant importance. The UNCRC (1989) and the current SEN Code of Practice (DfE, 2014) recognises the importance of peer relations in pupils' social development and advocates the importance in assisting the children to acquire the skills for maintaining friendship. However, as it is further amplified in section 2.4.2, most of the current research-base for pupils identified as having SLD, focuses on approaches that encourage pupils to communicate and interact on an adult-pupil basis.

This study undertook an exploration by designing and then redeveloping a CL model that would enable pupils to promote all aspects of their social skills, including their peer relations. CL arrangements that would enable pupils to promote, among other aspects of their social skills, their peer relations, through meaningful interactions between them during learning are missing from the current literature. Therefore, it is reckoned that the field would benefit from a research in this area.
1.5 Purposes and outline of the study

The current study followed both a top-down and a bottom-up approach. As Fullan (1994) argues neither top-down nor bottom-up approaches for educational reform work, because what is required is a blend of the two. Changes in education can occur when both parties, i.e., schools and educational policy, make suggestions for improvement and the one informs the other to coordinate their efforts for a change (Fullan, 1994). Therefore, the current project begun by adopting a top-down approach exploring two aspects in the current literature, research-base and legislation: firstly, the notion of social skills and the pedagogies employed for pupils identified as having SLD that promote their social skills and secondly, the notion of CL, its main ideology and the way it is implemented in mainstream settings. Following this, in the first phase of the study, an in-depth empirical exploration took place in the two special settings, in Cyprus and England, by investigating how participants perceived the notion of social skills, how they implemented a variety of teaching approaches and strategies that promoted pupils' social skills and how they implemented group work. Based on these findings and by combining them with current literature an initial CL model was developed. After the development of the initial CL model, the study followed a bottom-up approach. The initial characteristics of the CL model were further evolved based on an action research approach, in the second phase of the study. Therefore, directions were indicated that literature, research and provision for pupils with SLD could follow, to explore ways that good practice for the benefit of pupils with SLD can be employed. Figure 1.1 illustrates the approach that this study undertook. In the rest of this section, the outline and the purposes of each chapter of the thesis are presented.
Chapter 2 undertakes firstly, an exploration of the notion of social skills in general as well as particularly for pupils identified as having SLD, to identify gaps and contradictions among them. Following this, it explores the variety of pedagogies, teaching approaches and strategies addressed in the current literature and research-base that promote the social skills of pupils identified as having SLD. The gaps and limitations of these approaches are also critically examined and discussed. In the second section of the literature review chapter an exploration of the notion of CL, its theoretical underpinnings and its core elements in relation to the variety of CL models is undertaken and possible gaps in regard to its implementation in mainstream settings are critically examined. In the last section, by combining aspects from all the aforementioned
issues, an attempt to provide some initial assumptions for a CL model tailored on the needs and abilities of pupils identified as having SLD is presented. The chapter does not provide any strong presuppositions for this CL model, as the study aimed to develop this CL model based on a common understanding of the phenomena under study between myself and the participants.

In chapter 3, a discussion is presented on the philosophical underpinnings and the methodological approaches that this study employed in the two phases, along with the ethical considerations and the procedures used for ascertaining the quality of the study. More specifically, in chapter 3 the ontological rationale of critical realism is demonstrated and how social constructionist epistemological assumptions are associated with the particular ontology are also explained. Following this, there is a discussion about the general methodological rationale of a multiple case study design and how this is related with the philosophical assumptions of the study. Moreover, the rationale of the two different methodologies undertaken for the two phases of the study (i.e., ethnography and action research) and the choice of the methods of data collection employed are also discussed. The chapter continues by presenting the procedures used for ascertaining the quality of the study and provides a description of the ethical actions undertaken to protect the participants' well-being, integrity and anonymity.

Chapter 4 refers to the first phase of the study. Its main aims and research questions are clarified. Phase one aimed to explore firstly, the notion of social skills as this perceived in the two settings; secondly, the teaching approaches employed in the two classes that promote the social skills of the pupils; and thirdly, the way that group activities were implemented in the two settings. Moreover, phase one had an additional aim: to develop an initial CL model for the pupil participants of the study that would potentially promote their social skills. This model was designed after the completion of phase one and was based on two premises. First, some of the basic characteristics of CL arrangements as found in literature and research were taken into consideration. Second, some of the characteristics of the teaching approaches and strategies observed in phase one in combination with suggestions from literature and research were also considered.
By following an ethnographic approach to these matters I had the opportunity to construct a common understanding with the participants. In Chapter 4, the procedures used for the data collection and analysis in the first phase are also presented and a detailed presentation of the findings is provided. The findings section includes descriptive presentation of the findings using quotes and extracts from participants' interviews and observations as well as brief critical commentaries of the outcomes.

Chapter 5 refers to the second phase of the study. First, it presents the aims and the research questions of this phase. The research questions of the second phase are relevant to the evolution of the initial CL model. Phase two aimed to explore and identify, firstly, the characteristics of the CL model; secondly, possible challenges during its implementation; thirdly; the types of peer interactions that took place during its implementation; and lastly, to investigate the utility of this model in relation to the social skills of the pupil participants. Following this, a detailed presentation of the procedures used for data collection and analysis in the second phase is provided. Lastly, the findings of this phase are presented, by including quotes and extracts from the interviews and observations as well as brief critical commentaries of the outcomes.

Although some discussion of the findings is integrated in chapters 4 and 5, chapter 6 provides a comprehensive and detailed discussion of the major aspects of the findings in response to the research questions and focuses on the synthesis of these elements into a holistic presentation of the CL model. It also addresses the implications of the findings for educational theory and practice and examines the relationships between the findings of the present study with current literature.

In the final chapter all the significant findings of the study are summarised. In addition, the theoretical and practical implications of this study are drawn together along with a citation of the unique contribution of this study to the field. It also reflects on the limitations of the project and recommends areas for future research.
CHAPTER 2

Literature review

2.1 Introduction

This chapter is separated into three sections. In the first section, a critical account of the notion of social skills in general and for children identified as having SLD in particular is presented. Following this, an in-depth exploration of the teaching approaches currently used in special settings for the promotion of the social skills of children with SLD is illustrated and the gaps in the current literature and research-based evidence are pointed out. In the second section, a critical review of the literature and research-base evidence about CL is presented. In the last section, by combining aspects from all the aforementioned issues an attempt to provide some initial assumptions for a CL model for pupils identified as having SLD is presented. The chapter does not provide any strong presuppositions for this CL model, as the study aimed to develop this CL model based on a common understanding of the phenomena under study between myself and the participants.

In the first section of the literature review a search was conducted using such databases as ERIC, BEI, AEI and EBSCO to find relevant articles about what literature and research suggest in the area of teaching approaches for children with SLD that promote their social skills. In searching for appropriate studies terms such as 'severe learning difficulties', 'severe disability/ies', 'complex needs' or 'severe intellectual disability/ies' were combined with terms such as 'social', 'behaviour/s', 'communication' and 'approach/es', 'pedagogy/ies', 'teaching tool/s', 'strategy/ies', and 'practice/s'. This search did not have any predetermined criteria. However, reviewing a variety of articles relevant to social skills and teaching approaches for pupils with SLD helped me identify additional literature and research around these aspects. Therefore, a holistic understanding about the notion of social skills and the variety of teaching approaches that promote the social skills of pupils identified as having SLD was constructed.

In the second section of the literature review a different approach was used. I was already familiar with some models of CL and their authors from my
professional experience as a primary teacher. Therefore, using the work of Slavin (2009), Johnson and Johnson (2000), Kagan (2007) and Baines, Blatchford, Kutnick et al (2009) as a starting point helped me enhance my understanding about CL arrangements in schools and investigate further the research base and literature around the area of CL.

The last section of the literature review can be viewed as a concluding remark on this literature review journey by identifying gaps and by bringing together aspects from both areas (i.e., SLD and CL) to produce an initial proposition about CL arrangements for pupils identified as having SLD.

2.2 Exploring the notion of social skills

Over the last decades there has been an increasing interest in the social nature of learning, with Vygotskian (1978) accounts being the most influential ones, acknowledging that children's development, knowledge, skills, beliefs and understandings are socially constructed through talk and interactions with others (McLaughlin & Byers, 2001). Pupils become active participants of the learning process, which is socially negotiated through interactions and dialogue with others. As Daniels (2003) suggests, regarding Vygoskian accounts, the teacher and the child start doing a task together; the teacher initially takes the major part of the responsibility for completing this task, but she will gradually transfer the responsibility for the completion of the task to the learner and this transfer is negotiated through dialogue. Vygotsky (1978) suggested that this dialogue can be mediated by a variety of tools and signs, and referred to them as 'psychological tools' (Chalaye & Male, 2011). Particularly, for pupils with SLD, Daniels (2003) argues that these tools could be speech, signs and symbol systems, conventional pointing or anything that is relevant and appropriate for each child. Daniels (2003) also suggests that Vygotsky's claims should influence teachers and they should implement his suggestions in the daily activities of the classrooms, since learning is a social process and that social elements play a crucial aspect in children's education.

Similarly, Faulkner, Littleton and Woodhead, (1998) challenge the Piagetian and cognitive accounts of learning as the most significant in children's development. They argue that these accounts assume that cognitive development occurs in the same way and at the same time in every child, in all cultural settings; thus
they fail to acknowledge the respects in which children's knowledge, skills, beliefs and understandings are socially constructed through interactions with others. Moreover, Rutter (1991) pointed out that the split between the academic and the social dimensions of school was a false one and suggested that schools needed to have both social and academic goals and that academic success and social interactions are interrelated. Similarly, Claxton (2001) and McLaughlin (2000) pointed out that teachers should acknowledge that dialogue and social interaction need to have a more direct connection to academic learning.

In the following two subsections a critical analysis of the literature of what constitutes social skills in general and what comprises social skills specifically for children identified as having SLD is presented. The following subsections conclude with a working definition for social skills derived from the critical analysis of the literature. This definition was redefined based on the outcomes of phase one (see section 4.5.3.6).

### 2.2.1 Social skills and social competence

There are a variety of perspectives involved in the understanding and analysis of social skills and social competence and they have been explained and defined in many ways. Whitcomb and Merrell (2013) argue that there is not a single, unitary definition of social skills that has been broadly used by most experts in the field. A possible definition that could summarise very broadly what constitutes social skills according to most of the recent literature is that social skills represent behaviours that enable someone to function effectively in social interactions (Whitcomb & Merrell, 2013; Slavin, 2012). While exploring a variety of views regarding social skills, I have become interested in the work of Gresham (2011, 2001, 1998, 1992, and 1983). Although most of Gresham's work was based on quantitative research, concerned mainly with rating systems for assessments of social skills, he offers a widely used conceptualisation of the terms social skills and social competence, which was used as a starting point while trying to grasp these terms. Gresham, Sugai and Horner (2001) provide a social validity approach to define social skills, based on social values. A social validity approach has been proposed by Dogde and Myrphy (1984) and Hughes (1990) as well. All of them argue that social skills are behaviours derived from social values, and based on these social values teachers, peers and parents
decide whether these behaviours are significant and functional or not. The social validity approach appears to have been the most influential on much of the recent work about social skills (Whitcomb & Merrell, 2013).

Therefore, social skills are socially significant behaviours demonstrated in specific situations that predict important social outcomes for children (Gresham et al, 2001). Based on that definition, Gresham et al (2001) argue that *socially significant* behaviours are those behaviours that parents, teachers or peers consider important and desirable; and important social outcomes are the outcomes that the parents, teachers and peers consider important and functional. In other words, socially important outcomes refer to a person's adaptation to cultural and environmental expectations. Some examples of socially important outcomes are peer, parental and teacher acceptance, friendship and school adjustment.

This definition lies in accordance with my personal views that the reality around us is socially constructed. What might be considered socially important or significant in each social group implies a joint effort of people building and constructing together common meanings. Therefore, this definition was seen as a useful one and as a starting point in exploring what constitutes social skills for children with SLD. In section 2.3.3 I explain how this definition was revised and became the working definition at the early stages of my research. This definition was further revised over time, in the light of the findings of the first phase of the study.

The literature makes an important distinction between social skills and social competence. While social skills are specific behaviours that a person performs to achieve particular tasks (e.g. starting a conversation or giving a compliment), social competence represents the judgements of the other people that the person interacts with, who judge whether he has successfully achieved these specific tasks. Rose-Krasnor (1997) takes the perception of social competence a step forward by pointing out that the notion of effectiveness in social competence includes both self and other perspectives. She mentions that in social competence resides social and cultural constructs and that it has context-dependent characteristics. Based on this belief it is quite difficult to determine which behaviours constitute social competence. There has been an effort to
conceptualise all the different behaviours that would constitute social competence and set some dimensions (Waters, Noyes, Vaughn & Ricks, 1985; Parker, Rubin, Price & DeRossie, 1995). However, the judgements of social competence are socially and culturally constructed and might differ from context to context (Hubbard & Coie, 1994; Dodge, 1985; Ogbu, 1981), thus a number of disagreements are expressed about such classifications. Based on the aforementioned social validity approach the judgements of social competence are made by peers, parents or teachers in each context, since they are the ones who determine if specific behaviours and their outcomes are considered significant or not (Gresham et al, 2001).

2.2.2 Classification of social skills
Phase one of this study was exploratory in nature, therefore I wanted to be open to any events taking place during lessons, and explore incidents and daily routines in accordance with ethnographic principles without any strict predetermined categories. And that was indeed what I did. However, while reviewing the literature, before visiting the two settings, I wanted to explore what are considered to be aspects of social skills. Although the definition put forward by Gresham et al (2001) was a very valuable and useful starting point, I wanted to further explore in a more practical and concrete sense what constitutes social skills. Purposefully, my exploration started by searching dimensions of social skills in general and eventually I narrowed it down to dimensions of social skills for children identified as having SLD in particular. The differences were indeed interesting and these are discussed in section 2.3.1. In this section are discussed the dimensions of social skills as found in general literature.

The work of Caldarella and Merrell (1997) about classification of social skills, is widely known and is still influential today in empirical research and literature regarding pupils' social skills (for example, Young et. al., 2012; Huit & Dawson, 2011; Matson, 2009; Sukhodolsky & Butter, 2007; Franklin, Harris & Allen-Meares, 2006; Greene & Burleson, 2003; Gresham et al, 2001). Using the social validity approach to social skills, Cardarella and Merrell (1997) provide an empirical-based taxonomy of children's social skills and give five dimensions: Peer Relations, Self Management, Academic, Compliance and Assertion. These dimensions were derived by analysing empirically-based studies on social skills. As Whitcomb and Merrell (2013) suggest there has been located
no other research to date that has carried out such an extensive review of empirically derived social skill dimensions of children. Table 2.1 summarises all the dimensions of social skills.

Table 2.1: Dimensions of social skills as defined by Caldarella and Merrell (1997)

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Peer relations</th>
<th>Self management</th>
<th>Academic</th>
<th>Compliance &amp; Assertion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptions:</td>
<td>A child being positive with peers</td>
<td>A child who can be considered emotionally well-adjusted</td>
<td>A child who complies with school and classroom rules</td>
<td>A child who is compatible and outgoing with others</td>
</tr>
<tr>
<td>Examples:</td>
<td>Complimenting others, offering help, inviting others to play</td>
<td>Accepting criticism, compromising</td>
<td>Completing tasks independently, formulating questions for assistance</td>
<td>Complying with social rules and expectations, sharing things, initiating conversations</td>
</tr>
</tbody>
</table>

The peer relations dimension deals with social skills that refer to a child who is positive with their peers. They compliment and praise others, offer help and invite others to play. The self management dimension deals with social skills that refer to a child, who is able to follow rules, control their temper, accept criticism and compromise. The academic dimension is related to social skills that refer to a child who can be considered a productive worker by the teacher. Some tasks that describe this dimension are accomplishing tasks or assignments independently, listening to teacher’s directions and following the classroom rules. The fourth dimension, the compliance one, describes a child who complies with social rules and expectations such as sharing things with others and appropriately using free time. The final dimension is the assertion. This dimension deals with social skills that refer to a child who might be considered outgoing by the significant others. Some social skills that reflect on this dimension are initiating a conversation, acknowledging compliments and inviting others to interact with them.

It is apparent that these five dimensions are interconnected and interrelated with each other and in some cases some dimensions share similar skills (Caldarella & Merrell, 1997). For example, the assertion and compliance dimensions resemble each other, since both of them focus on aspects of social skills where a child demonstrates enjoyment while interacting with others and complying with social rules. Nonetheless, this taxonomy of social skills did not
play a decisive role during the data collection and analysis of this study in terms of strict categories of an observation schedule during my visits to the schools. Rather it helped me grasp a more coherent idea of what might be considered as social skills in literature in general. The importance of social skills has long been emphasised as the basis of learning from the 1970s by Vygotsky (Slavin, 2012). It is obvious that these dimensions reinforce Vygotskian accounts that the nature of learning is social and occurs through social interactions. All aspects of social skills are interrelated and affect academic achievements as well, since there has been an increasing recognition of the links between social skills and academic outcomes (Kutnick & Rogers, 1994; Parker et al, 1995; Slavin, 2012; Whitcomb & Merrell, 2013). Therefore, when referring to social skills, the academic dimension is definitely an important part of social skills. This study did not aim to explore whether academic achievements or proficiencies took place during CL activities; instead it aimed to investigate the academic dimension as described above, since it is an interrelated factor of social skills, which affects and is affected by the social skills of the pupils as well (Gresham et al, 2001; Caldarella & Merrell, 1997).

2.3 Social skills for children identified as having SLD
Before presenting an in-depth exploration of the aspects of social skills in the field of SLD, it is important to point out that a section of social skills for children identified as having SLD, which would include what might be referred to as deficits (i.e., lacking in social skills), was intentionally not included in the literature. The intention of the study was to explore a specific teaching approach, (i.e. CL), in two particular settings and give the opportunity to the participants to express their opinions on this issue. It was not my intention to stigmatise the pupil participants as individuals with lack of abilities, therefore any reference that may give the impression of facing them as a homogenous group of certain deficits was intentionally avoided.

2.3.1 Social skills for children with SLD and their dimensions
Since the aim of this study is to explore CL activities in relation to the social skills of pupils identified as having SLD, my initial aim was to explore what the literature suggests as social skills for these group of pupils. I had in mind, however, the aforementioned dimensions of social skills as categorised by Caldarella and Merrell (1997), and Gresham's et al (2001) social validity
approach to social skills. Therefore, I became interested in exploring whether these dimensions are considered aspects of social skills for pupils with SLD as well or whether the literature makes any differentiations.

Over the past two decades or so, there has been an international shift regarding the provision for people with SLD, placing a greater emphasis on an 'ordinary life', by involving people with disabilities in choices and decisions about their lives (Porter, Ouvry, Morgan & Downs, 2001). Hearing the voice of children in matters related to them has been well demonstrated in the United Nations Conventions on the Rights of the child since 1989 (UNCRC, 1989). More recently in the UK, there has been a renewed emphasis on giving voice to the children in the decision-making process concerning their lives, and this issue is well-reflected in a variety of government guidance (Porter & Lacey, 2005). Moreover, a number of articles in the recent United Nations Convention on the Rights of Persons with Disabilities (UN, 2006) emphasise the need to increase the power and active participation of people with disabilities in their societies. The UN Convention of the Rights of Persons with Disabilities (2006) highlights the importance of people with disabilities to have heard voices about how they want to live their lives and addressing the issues that are of concern to them. The importance of involving the people in decisions regarding their lives is an important aspect as illustrated in the SEN Code of Practice in England (DfE, 2014). Therefore, this shift regarding the provision for people with disabilities has influenced the arrangements for children with SLD as well. The approach of dealing with the communication and social skills of children with SLD in schools has been shifted and centred its attention to the notion of seeking ways to encourage pupils to communicate their needs, choices, aspirations and wishes on issues concerning their lives and learning.

By drawing on the same line of thought, the Personal, Social and Health Education (PSHE) for children described as having SLD suggests that practitioners should aim in helping children make choices and decisions and develop personal autonomy as much as possible (QCA, 2009). In addition, PSHE urges practitioners to help children to develop self-concept and self-awareness, self-esteem and self-knowledge, to explore and communicate their needs and make choices (QCA, 2009). Similarly, in the United States, the National Joint Committee for the Communication Needs of Persons with Severe
Disabilities (NJC, 2002) conceptualises social skills for people with SLD as skills that enable them to communicate their needs effectively with the appropriate instruction and support. Likewise, Pinto, Simpson & Bakken (2009) argue that individuals identified as having SLD by using their idiosyncratic or symbolic forms of communication can communicate and interact with others and express their needs and opinions. With the use of appropriate devices for communication, children with SLD can improve their social skills by becoming more interactive, engaged and positive with adults, to be able to express their needs and preferences (Jacklin & Farr, 2005).

Summarising this specific notion of social skills for children identified as having SLD, it is apparent that the focus is on issues of assisting individuals to communicate their needs, preferences and aspirations, to be able to make decisions by themselves regarding their lives. Recent literature places a great emphasis on those particular aspects of social skills that would facilitate individuals identified as having SLD to be more independent, and participate actively in decision-making relevant to them.

Beyond the issues of giving the opportunity to the children to communicate their needs and decisions, Howlin (1986) and Nind (1992) both make an additional point regarding what may constitute social skills for children with SLD, placing emphasis on issues relevant to demonstrating willingness to interact and enjoyment when being with others. Howlin (1986) suggests that social skills for children with severe learning difficulties is the ability to relate to others in a positive, reinforcing and reciprocal fashion. Some years later, Nind (1992) in revising this definition, for the purposes of her own research on intensive interaction for people with profound and multiple learning difficulties, suggests that being sociable means:

'having behaviours which reward others for being with you, demonstrating an enjoyment of being with others, and having the desire and abilities to become engaged in, and to take an active role in, a social interaction.' (p. 97)

Summing up the notions of social skills for children with SLD, it can be seen that the literature focuses on two different dimensions. The first one emphasises those aspects of social skills that can be considered as functional and self-advocacy skills that enable individuals to communicate their choices and
aspirations. The second one conceptualises social skills as not just the ability of an individual to communicate her needs and preferences but also to be able to communicate those needs in a manner that demonstrates enjoyment when interacting with others and rewards others when being with them.

By contrasting the notions of social skills in general with the notions of social skills particularly for children identified as having SLD, there is an interesting differentiation. Literature for social skills in general places a great emphasis on issues of peer relations and their importance in a child's learning and self-esteem. Research evidence suggests that peer relationships in childhood have a significant impact on academic outcomes during the school years (Walker & Hops, 1976) and that the ability to relate effectively to others is essential to the progress and development of a child (Hartup, 1983; Merrell, 2003; Gresham, Elliott, Vance & Cook, 2011). The importance of this issue is also reflected in recent legislation in England, with the SEN Code of Practice (DfE, 2014), explicitly advocating the need for emphasising the development of children's social competence, and facilitating them to acquire the skills for positive interactions with peers and adults. However, although peer relations as an important aspect of social skills and of children's development has been highlighted by both literature and legislation, literature and research-base regarding social skills particularly for children identified as having SLD has not paid the necessary attention to this matter (see also section 2.4.2). The social validity approach of Gresham et al (2001) to social skills suggests that socially significant behaviours are those behaviours that among other people, peers consider important and desirable. Moreover, the taxonomy of social skills put forward by Cardarella and Merrell (1997) suggests that one of the five dimensions of social skills is peer relations. It is apparent, therefore, that in the literature when dealing with social skills in general peers play a crucial and influential role in pupils' interactions. However, the literature and research regarding social skills for children described as having SLD appear to sideline the factor of peer relations. This difference in the perception of social skills for children identified as having SLD is further amplified in section 2.4.2 when a discussion about teaching approaches for children with SLD that promote social skills is presented.
2.3.2 Social competence

In relation to the development of social competence, Maruyama and Lecount (1992) suggest that an important part of successful socialisation involves attending to relevant cues and using them to modify behaviour. Burton and Kagen (1995) discuss in some detail difficulties that people with SLD face in this area and point out the need to develop strategic skills for overcoming these problems. Although they recognise the need to understand other people’s lives and ‘what they want to do’ (p.191), the authors subsequently present a model of social competence which highlights the importance of individuals ‘paying attention’ to others when interacting and ‘being aware and understanding’ during these interactions to communicate back to them in the appropriate way (p.192).

However, I believe that such a model does not pay the necessary attention to the fact that behaviours, which to the observer appear totally ineffective, may have positive intentions or outcomes for the individual concerned. When referring to social competence we need to take satisfactorily into consideration the uniqueness of each person. Many individuals with SLD have an idiosyncratic way to interact, i.e. behaviours and sounds have a meaning that is specific for each person (Porter et al, 2001), and therefore, the person who interacts with individuals with SLD has to be aware of their personalised communication acts. My personal beliefs based on my own professional experience are in accordance with these views and my priority has been to understand participants' social behaviours at a deeper level which takes into account their personal and idiosyncratic ways of communication.

Motivation is clearly another factor for consideration. It is important to attempt to clarify the behaviours which are often seen as socially incompetent or ineffective. For example, a child might refuse to put the shapes into the appropriate holes, as the teacher asks her to do, not because she is not able to follow rules or to achieve this desirable outcome, but because she has no interest in engaging in such a task, since she cannot identify any meaning in doing so. Absence of a desire to communicate could suggest lack of motivation rather than lack of a particular skill. Similarly, rule breaking in the classroom context may indicate lack of competence but may equally suggest lack of rationale for following these rules. Nevertheless, I believe that there are many ways in which pupils in special settings can be motivated. It is therefore the call
of teachers and researchers to identify these ways and employ them for the pupils’ benefit. This view seems to be in accord with what Beveridge, Conti-Ramsdem and Leudar (1989) argue. They suggest that the teaching approaches for pupils with SLD, in order to be effective, should be enjoyable to the children. Moreover, they point out that these approaches should be organised in such a way so that the goals are meaningful to the children in their attempts to communicate. These kinds of arrangements make it easier for the children to socialise and interact with their peers and adults. Finding meanings of social behaviours becomes crucial and to this end I have tried to identify the reasons for every behaviour and communication acts observed, which might help to shed light on the issues under consideration.

2.3.3 A working definition of social skills and social competence for this study

After searching and critically reviewing the literature about social skills, I realised that it would be helpful to find a working definition for social skills and social competence, which would act as my guideline during my visits to the two settings. The social validity approach to social skills suggested by Gresham et al (2001) seemed a suitable starting point, since their definition coincides with my personal stance of how people construct and understand reality. On the other hand, I found the definition given by Nind (1992) of ‘being sociable’ particularly interesting, since it places a great emphasis on aspects of social skills that deal with showing enjoyment and desire to interact with others and it does not merely focus on aspects that cover merely functional and self-advocacy aspects of social skills such as communication of needs and preferences. Therefore, by combining these two definitions I ended up with the following one. This definition was a working one and was further developed after the completion of phase one, in the light of the findings of this phase. See section 4.5.3.6 for the further development of this definition.

Social skills are behaviours demonstrated in specific situations by taking an active role in a social interaction. These behaviours reward others for being with you, while showing an enjoyment and desire to be with others.

Social competence deals with the expectations of the outcomes of these interactions. Parents, teachers and peers are the people that would decide
whether these social outcomes are important, positive and functional, based on their own expectations.

The conceptualisation of social skills and social competence is shown below.

**Figure 2.1: Conceptualisation of the definitions of social skills and social competence**

<table>
<thead>
<tr>
<th>Social Skills</th>
<th>Behaviours while interacting with significant others (i.e. peers, parents, teachers)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outcomes of these behaviours and interactions</td>
</tr>
<tr>
<td></td>
<td>e.g.: initiation of interactions, response to calls for interaction, listening to others, respecting other’s opinion, expressing opinions</td>
</tr>
<tr>
<td></td>
<td>Significant others’ judgement on those outcomes</td>
</tr>
<tr>
<td></td>
<td>based on their personal expectations</td>
</tr>
<tr>
<td>Social Competence</td>
<td></td>
</tr>
</tbody>
</table>

2.4 The education of children identified as having SLD

In this section I aim to undertake a critical analysis regarding the educational provision for children identified as having SLD, particularly in respect to the curriculum and how this affects the pedagogy and the teaching approaches and practices that promote the social skills of the pupils in special classrooms. By starting with a critical report of the curriculum provision for children identified as having SLD, I moved gradually to an investigation of how the curriculum provision affects the pedagogy and the teaching approaches and practices in the special classroom settings.

2.4.1 Curriculum and pedagogies for children identified as having SLD

The introduction of the National Curriculum in 1988 in England caused much discussion among both academics and practitioners working with children with SLD. Much of this debate is still going on today, regarding the appropriateness of the curriculum for all the children. This debate naturally leads to another one, which deals with the pedagogy for children identified as having SLD.
**a) National Curriculum for all?**

Prior to the introduction of the National Curriculum, children with SLD received a developmental or functional curriculum designed by the teachers of the schools to meet their individual needs and abilities (Rayner, 2011). The curriculum was not subject-based and in many cases was based around areas such as gross and fine motor skills and communication. The National Curriculum moved the education of children with SLD from functional, life skills and independent living activities, which teachers considered children had to learn, to the introduction of academic subjects (Grove & Peacey, 1999). Some two years after the advent of the National Curriculum, studies conducted by students of the Institute of Education at the University of London discovered that practitioners in the education of pupils with SLD were still largely teaching what they considered to be a needs-based curriculum rather than centrally teaching the National Curriculum (Farouk, 1990; Johns, 1990). However, a few years later it was widely accepted that all children were entitled to access the same curriculum (Ware, 1994). Sebba, Byers and Rose (1993, p. 3) argue that ‘the notion of curriculum entitlement for all pupils may offer the opportunity to challenge attempts to segregate pupils who are different’, and although the National Curriculum might be adapted in order to be more appropriate and relevant to all pupils, the principle of entitlement must be maintained. Similarly, others believed that the basic right to education might be challenged, if pupils with SLD were not included within the National Curriculum (Byers & Rose, 1994; Aird, 2001).

However, the contents of the National Curriculum were not without some criticism, particularly in schools for children with SLD. The criticism was primarily because the starting point of the curriculum material was above the abilities of many children identified as having SLD (Aird, 2001) and that there was a difficulty of meeting both the needs of the subject-based timetable and the therapy needs of the children (Rayner, 2011). In spite of this criticism and concerns, SLD schools sought to implement the National Curriculum material, confident that they would manage to modify the curriculum framework to make it more relevant to the abilities of their pupils. Teachers’ efforts to adjust the National Curriculum to the needs and abilities of their children did not take place without criticism either. The adaptation of the curriculum has been through
incorporation and mediation (Pollard et al, 1994). This incorporation and mediation has taken a number of ways. These ways have been described by Grove and Peacey (1999) as ‘redescription’. ‘Redescription’ is where teachers have taken what they see as fundamental functional skills and redefined them within National Curriculum subject areas. This has always been subject to criticism as it can be seen as using the National Curriculum in a tokenistic way.

The criticism of both the National Curriculum for children with SLD and practitioners' efforts for its adaptation lead to another discussion about pedagogy and whether there is a need for special pedagogies especially for children identified as having SLD.

**b) Need for a special pedagogy?**

Taking into consideration all the categories of SEN and their specialised provision and teaching, Lewis and Norwich (2005) wonder whether this categorisation has any relevance to the development and implementation of special teaching programmes.

‘(...) in asking whether pupils with special educational needs require distinct kinds of pedagogic strategies, we are not asking whether pupils with special educational needs require distinct curriculum objectives. We are asking whether they need distinct kinds of teaching to learn the same content as others without special educational needs.’ (p. 7)

Norwich (2008) suggests that some pedagogic needs are common to all, some are unique to the individual but also some are specific to those with severe and/or profound and multiple learning difficulties. Imray and Hinchcliffe (2012) arguing specifically for children with SLD, point out that specific techniques are indeed required for this group of children, because they learn differently from less ‘exceptional’ children. They continue by clarifying that there is nothing wrong with our children being different and we should not ignore that in the name of political correctness.

While the debate regarding special pedagogies and approaches for special children is still going on, Pring (2004) suggested that research in SEN was filled with difficulties and insufficient depth to inform practice. Apparently not much has changed since this claim was made. Wishart (2005), Porter (2005), Ware
(2005), Lacey et al (2007), Warnock (2010) and Theodorou and Nind (2010), suggest a lack of research-based evidence that can sufficiently inform practice. Porter (2005) points out:

'It would be difficult on this slender research base to provide an answer to the question 'Are we using a distinctive pedagogy for teaching pupils with severe learning difficulties?’ That is grounded in clear evidence for its effectiveness.’ (p. 53)

It is definitely not the aim of this study to explore whether a distinct pedagogy or teaching approach is needed for pupils with SLD. However, in an effort to draw some conclusions about this debate, I take into consideration the argument that research in the SLD area over the last decade is characterised by insufficient depth and a limited volume of evidence. Definitely the fact that practitioners face difficulties in adapting the National Curriculum to the needs and abilities of children with SLD and that research cannot yet provide sufficient evidence regarding good practices for these children suggests that ideas and interventions need to be tried out and more action research needs to be carried out in special schools (Imray & Hinchcliffe, 2012). Therefore, taking into consideration these debates the current study aimed to make an effort to bridge the gap regarding good practices for children with SLD by employing an action research approach in order to investigate whether CL activities can be beneficial for these children as regard to their social skills.

However, before entering the schools, I considered that it was vital to investigate first what kind of approaches and practices the research suggests as efficient for pupils with SLD regarding their social skills and what are the basic characteristics of these practices. This investigation is presented in the following section.

2.4.2 Teaching approaches for children with SLD aiming in developing their social skills

There is a relatively small amount of research-based literature regarding children with SLD and teaching approaches for developing their social skills over the last decade. However, exploring this research-base, some basic characteristics or common patterns emerged regarding teaching approaches for children with SLD and social skills.
a) Basic patterns and features of the teaching approaches

The use of Augmentative and Alternative Communication (AAC) is the main means through which children with SLD communicate and interact and is addressed in almost every research-based piece of literature for children identified as having SLD. The term AAC is used to describe a variety of forms of interaction and communication, such as eye pointing, signs, conventional pointing, showing pictures, forming sentences and requests by using pictures and operating speaking communication devices. There is a clear understanding that the use of AAC can help children with SLD to establish joint attention, to initiate interactions and to request and reject things (Hughes, Rung, Wehmeyer et al, 2000; Snell, Chen & Hoover, 2006).

The use of AAC devices is a very important tool through which the implementation of the programmes occurs and can be addressed in most of the current research-base. For example, in the study carried out by Berrong, Schuster, Morse and Collins (2007), the authors evaluated the use of response cards on the social behaviour of eight elementary students with SLD. During intervention, the researcher asked the pupils questions and each pupil had to choose the appropriate card, which were displayed in front of their desks, that illustrated the correct answer. The study concluded that this approach was more beneficial for the students rather than the traditional way of responding (i.e. raising hands). Moreover, Spevack, Yu, Lee and Martin (2006), in order to investigate whether the use of passive approach can assess preferences of children with SLD and Profound and Multiple Learning Difficulties (PMLD), used a micro-switch device to help the children give responses. Similarly, Kahng, Hendrickson and Vu (2000) used an AAC device in order to investigate whether single or multi Function Communication Training is more effective in increasing a pupil’s active participation and decreasing his problem behaviour. Using a similar approach Kreiner and Flexer (2009) used an especially designed AAC device in their study to assist individuals with SLD to express their choices and preferences in leisure activities.

However, the implementation of such devices is not an easy task for practitioners and appropriate training is warranted in helping children interact through AAC devices. For example, the study carried out by McMillan (2008) aimed to evaluate whether the communication acts of the pupils were
increased, after their teachers received professional training on AAC technologies and concluded that after the teachers received the appropriate training, the communication acts of the pupils was increased. An additional kind of equipment, apart from AAC devices, found to be used in special schools is the use of photographs, videos and images, or the use of **concrete materials** relevant to the issue under study. For example, teachers used such strategies to support pupils’ memory during self-assessment procedures, where pupils had to recall their own performances in a variety of activities (Porter, Robertson & Hayhoe, 2000).

The use of **reinforcements** by adults was another characteristic highlighted in most of the research-based literature for children with SLD and social skills. Reinforcements can be considered as any responses that increase the frequency of a behaviour and could be smiles, praise, attention, fun activities, toys or good grades (Slavin, 2012). Not all kinds of reinforcements are appropriate for all children, as every individual has different preferences (Barnhill, 2005). For example, good grades may have little value to some pupils, but to some others might be something very important. Tudge (1990) argues that reinforcing is essential to learners following a problem solving activity and suggests that teachers should be made more aware of the importance of this. Another very popular characteristic is the use of **prompting**. There is an interesting distinction regarding the use of prompting. In several studies the main aim in promoting children’s social skills was to stimulate them to initiate interactions. Consequently the adult partners followed the child’s lead in his attempts to communicate. In those cases, the use of prompts was introduced only if the children did not make any initiations. Such examples can be found in Argylopolou and Papoudi (2011), Chalaye and Male (2011), Kurani, Nerurka, Miranda et al (2009), McMillan, (2008), Solomon (2005), Kellet (2000), Kahng et al (2000). However, there are studies where there was no distinction made between initiation of interactions by adults or pupils. In these studies prompts were used as a ‘first option’. Such examples could be found in studies by Kreiner and Flexer (2009) and Spevack et al (2006). It has been suggested that trying to delay prompting as much as possible and allowing enough wait time for pupils’ responses is considered to be a benefit to the children and thus lead to effective interventions (Porter et al, 2000; Wolery & Schuster, 1997).
Another common characteristic that can be found in most of the research-based literature is that there is an attempt to tailor each approach to the preferences of each child individually, for the interactions to be more meaningful and motivating for the children in order to initiate interactions or responses (for example, Spevack et al, 2006; O’Neil, Faulkner and Horner, 2000; Kahng et al, 2000). Therefore, the use of preferred items to create appropriate opportunities or temptations for the children in order to interact are common patterns used in most of the studies. Another similar characteristic is the one of giving the pupils the opportunity to make decisions about some aspects of the activity.

Research for children with learning difficulties including pupils with profound and severe difficulties highlights the importance of pupils' involvement in the decision-making of an activity and of teaching in general, through the development of choice (Halle, 1995; Porter et al, 2000; Kreiner & Flexer, 2009). As Bambara, Koger, Katzer and Davenport (1995) suggest, pupils expressing their choices and preferences motivates them to raise and focus their attention on the learning tasks. They point out that learning tasks that may initially be uninteresting to the children can be transformed to meaningful if they are offered to them as a personal choice. Moreover, it has been suggested that by giving the opportunity to the pupils to make choices can improve their self-concept and quality of life in the long run (Williams & Dattilo, 1997; Kreiner & Flexer, 2009).

Furthermore, it is important to mention that there is a tendency to implement programmes within the natural context and the existing routines of the daily school day. This seems to be in accord with current views that accept learning as being a social process that is governed by social factors; therefore, pedagogies for promoting positive social outcomes need to be in line with the natural environment of the child (Shuell, 1996). Most of the recent research-based evidence tends to encourage children to interact and socialise within the existing routines of the school day (for example, Chalaye & Male, 2011; McMillan, 2008; Berrong et al, 2007; O’Neill et al, 2000; Kahng et al, 2000). Activities that are repeated each day create a sense of predictability that allows pupils to develop anticipation, thus creating opportunities to express intentional communication and interaction about the activity or routine (Bruce, 2002). Another common point highlighted in the literature and research regarding
interactions and communication within the daily routines of the class, is that the content in which those daily routines take place should be meaningful to the children in their attempts to communicate, in order to encourage their active participation (Beveridge et al., 1989; Brown & Lehr, 1993). This kind of arrangement makes it easier for the children to interact and socialise, since it provides them with a meaningful reason for doing so. A well-known approach that advocates the importance of pupils learning within the natural contexts and existing routines of the school day is called 'Behaviour Chain Interruption Strategy' (BCIS). BCIS is a naturalistic teaching procedure conducted in the middle of a familiar routine. The routine is interrupted by blocking access or by removing items necessary to complete the routine. BCIS is similar to other naturalistic teaching approaches, since it incorporates the pupils’ interests and is conducted during a naturally occurring familiar routine. The basic characteristic, however, of this approach, which differs from other naturalistic ones, is that teaching occurs in the middle of the routine rather at the beginning and it involves manipulation of the natural environment (Carter & Grunsell, 2001). Carter and Grunsell (2001) undertook a systematic research-based literature review for this approach and by presenting a large body of evidence they suggested that BCIS is an effective tool for teaching communication to individuals with moderate to profound learning difficulties. They point out, however, that systematic prompting is needed for its successful implementation and that most studies found that BCIS was not effective without response prompting. They also questioned whether this approach could be effective outside the structured classroom environment and whether the communication taught during structured learning can be generalised to out-of-routines contexts.

Two overall remarks can be pointed out that were addressed in most of the research literature as discussed above. The first one is related to the frequency of implementation of programmes or strategies suggested which is considered an important parameter for its effectiveness. Most of the times, all the aforementioned strategies or programmes were introduced on a daily basis throughout the school day. The second one is related to aspects of the communicative approach. Most recent research evidence highlights the importance of practitioners encouraging communication and dialogue with their pupils, and making sure that teachers provide the pupils all the necessary and
appropriate equipment or means so as the pupils are able to communicate back to them their needs, choices, preferences and aspirations on matters concerning their learning and lives.

b) Child-centred approach versus adult-centred approach

Child-centred approaches can be considered those approaches where pupils are seen as active processors, interpreters and synthesisers of information (Slavin, 2012) and see the child as an active participant of the learning process. Therefore, child-centred approaches use child directed techniques such as adults following the lead of the children, use children's preferred objects in activities and give the chance to the children to initiate the interactions (Snell et al, 2006). On the other hand, adult-centred approaches are characterised by such techniques where adults give requests and instructions or choose teaching material (Snell et al, 2006). The current review of the research-based literature suggests that child-centred approaches were used more frequently rather than adult-centred ones. More specifically, Kellet (2000) clarifies that one of the main aims of the Intensive Interaction approach is that the adult has to follow the child’s lead in her attempts to communicate and imitate the child’s forms of communication. Moreover, she points out that there is a need for a more flexible child-centred curriculum, based on each child’s needs and preferences. O’Neil et al (2000) seemingly share the same ideas as they highlight the importance of giving the chance to the children to initiate interactions and every approach in the classroom should be based on each pupil’s interest and preferences. Similar conclusions emerge from the aromatherapy study carried out by Solomon (2005), where he points out that the pace, pressure and length of the massage should be dictated by the child rather than the adult and he indicates the importance of child-centred approaches to favour their communication attempts. Likewise, studies carried out by McMillan (2008) and Kahng et al (2000) the selection of the objects used in each of those approaches were based on each child’s preferences. They chose items that they knew would stimulate each child’s attention and motivate them to interact. Moreover, they highlight the significance of letting the children initiate the interactions. Similarly, the study carried out by Chalaye and Male (2011), which was about a pair of peers collaborating during play and snack time, they suggest that children
should be the active learners by assisting each other, while adults should limit their involvement by giving feedback and reinforcements.

However, examples can be still found in the research-based literature where adults lead the interactions by prompting or requesting things from the children (for example Berrong et al, 2007; Spevack et al, 2006). In these cases adults' prompts and initiation of interactions were dominant throughout the implementation of the programmes. However, this might happen due to pupils' difficulties to interact because of the severity of their learning difficulties. Hepting and Goldstein (1996) argue that when pupils have more severe difficulties, teacher directed techniques are often used in order to elicit their responses.

c) Concerns of generalisability
It is generally accepted that pupils with SLD face difficulties in generalising their gained skills to new situations. Therefore, educators struggle to find appropriate and effective pedagogies that will enable children to make such generalisations. The issue of finding pedagogical approaches that will help pupils with SLD generalise their skills is vital and crucial, yet most of the studies reviewed do not refer to this issue at all. Although evidence of the effectiveness of the approaches used under the specific situations is clearly provided, it is not mentioned whether the approaches were explored for their effectiveness in new situations. The issue of generalisability of taught skills to new situations has caused a number of discussions over the decades. Porter (1986) challenges behavioural approaches about their failure to encourage pupils to generalise their skills in new situations. This led the attention to more naturalistic approaches that take place within the natural context and daily routines of the class. It has been suggested that allowing enough wait time for the pupils to initiate or respond to an interaction, instead of using immediate prompts, can lead to effective interventions (Porter et al, 2000; Wolery & Schuster, 1997; Wolery, Ault & Doyle, 1992).

d) Social skills programmes
There are some social skills programmes such as Social and Emotional Aspects of Learning (SEAL) and 'circle-time' used in both mainstream and special settings and the Social Use of Language Programme (SULP) used
particularly in special settings, which all aim to promote the social skills of the pupils. More specifically, SEAL is an approach that can be used in all curriculum areas to promote social and emotional skills, positive behaviour of both the pupils and the staff (DCSF, 2007b), and aims among others to promote positive peer relations. A research study by Humphrey, Lendrum and Wigelsworth (2010) about the SEAL programme in mainstream settings suggests that SEAL made little difference to positive social outcomes for pupils.

Circle time is a term used to describe a time when the whole class meets together, and similarly with the SEAL programme aims to help children promote a variety of aspects of their social and emotional skills such as confidence, self-esteem, talking, listening and respecting others as well as a sense of belonging among the members of the class (DfES, 2005). The SULP has been designed for pupils with learning difficulties and focuses on specific characters, who appear in a set of stories, each of the stories focusing on a particular communication skill. This programme similarly with the previous ones, aims to help pupils to practise and promote concepts that are fundamental in any communicative situation, such as eye contact, listening and turn taking and peer relations. A recent study carried out by Owens et al (2008a), regarding its effects on the social skills of pupils with autism, suggests that there was no significant improvement in communication and socialisation skills of the pupils. It has been suggested that although many social skills interventions exist, yet few have a strong empirical basis to support their effectiveness (Owens et al, 2008b).

**e) Peers as partners**

An ethnographic research study by Gleason (1989) into a special education setting for individuals with SLD and PMLD suggested that the interactions taking place were between staff and pupils and that these interactions were always initiated and terminated by the staff. More recent research recognises that children with SLD face difficulties in interacting with peers, since they have the tendency to respond more to adults than to peers (Yoder & Warren, 2004; Jackson et al, 2003). General literature regarding peer relations highlights that peer interactions enables children to develop a sense of identity through social comparison (Barrett & Randall, 2004) and moreover it provides opportunities for social development (Johnson & Johnson, 1999b). In addition to the above,
educational legislation in England (i.e., the SEN Code of Practice) recognises the importance of peer relations in pupils’ social development and advocates the importance in assisting children to acquire the skills for positive interaction with peers (DfES, 2001, 7.60).

However, although recent research evidence in the area of SLD suggests a variety of approaches and strategies for teachers to develop a communicative approach with the pupils, these suggestions focus on adult-pupil communication and interaction. Only one recent study was found focusing on the use of peers as partners in special settings for pupils with SLD by Chalaye and Male (2011). The study explored the effects of peer collaboration during play and snack time, between a pair of pupils with SLD and PMLD, based on Vygotsky’s (1978) social constructivist theory about scaffolding and the Zone of Proximal Development (ZPD). The study concluded that both pupils benefited from such an approach. The pupil identified as having PMLD progressed with his eating by using his hands and also demonstrated signs of enjoyment when interacting with his pair and sought others company more frequently. The pupil with SLD, who acted as the more ‘capable’ peer during their interactions, demonstrated increased maturity and behaviour improvement.

The lack of sufficient amount of evidence regarding teaching approaches that promote the peer relations between pupils with SLD is probably due to the general perception of social skills for children with SLD as discussed in section 2.3.1, since it does not emphasise peer interactions and communication as an important aspect of social skills. Hopefully, this study contributes to addressing this gap by investigating whether positive and meaningful interactions can occur among children with SLD during the implementation of CL arrangements.

f) Assessment of adults’ performances
The importance of adults’ responsivity in helping pupils with SLD to socialise and interact in a meaningful and positive way is an essential issue, which has been highlighted several times before (Harwood, Warren & Yoder, 2002; Yoder & Warren, 2004). Despite the significance of adult-partners’ performances in encouraging children to interact, it is interesting to note that this issue usually has not been assessed in studies relevant to implementation of approaches for promoting the social skills of pupils with SLD. Although authors have pointed
out the importance of the type and frequency of prompts and reinforcements by the practitioners or the importance of practitioners' appropriate training about AAC devices (see section 2.4.2. a) little research included adults' performances as an important parameter that can affect pupil's engagement.

2.4.3 Conclusions of teaching approaches for children with SLD that promote their social skills

The outcomes of this literature review suggest a number of ways for creating the appropriate conditions for children with SLD to become more effective in their interactions and promote their social skills. The key to the effectiveness of these approaches is to focus on a variety of strategies and tools.

a) Common features and gaps in the literature

Clear emphasis is given to AAC. By using these forms of communication children with SLD engage easier in every day interactions with the people around them (Hughes et al, 2000; Snell et al, 2006). Moreover, literature seems to emphasise the importance of implementing programmes within the natural context of the pupils and practitioners should include these programmes within the daily routines of the class. By using natural contexts and implementing approaches within the daily routines, interactions become more meaningful and understandable to the pupils, hence they are more engaged in them (Shuell, 1996; Bruce, 2002). The issue of giving opportunities to the pupils to express their choices and preferences during activities is another strategy that can increase their interest and make an activity more meaningful to them (Dattilo & Rusch, 1985; Bambara et al, 1995). Furthermore, child-centred approaches seem to hold a greater esteem than adult-centred ones. Regarding adults' prompting, literature suggests that delaying prompting and using it only when necessary is a strategy that can lead to an effective intervention (Wolery & Schuster, 1997). In addition, the frequency of the implementation of programmes seems to be an important parameter for their effectiveness. Most of the times, programmes are introduced on a daily basis.

Some important suggestions for further research have emerged from this literature review, as well. The issue of generalisability is underestimated by the current research-base. Future research must give more emphasis to this issue since it is an important aspect for judging the effectiveness of an approach.
Moreover, the importance of adults’ performances during interactions with pupils is a crucial aspect for the effective implementation of an approach (Harwood et al, 2002; Yoder & Warren, 2004); therefore assessing teachers’ performances is another aspect that needs more attention. Lastly, approaches that encourage interactions among peers rather among pupils and adults are very limited. Based on the views of Blatchford, Kutnick, Baines & Galton (2003) consideration of peer interactions and relations may help bring out the potential of more informal and effective contexts for learning. Further research focusing on designing approaches that support and encourage children with SLD to interact with each other is vital and prudent in order to support their learning experiences as well as their social skills. Bridging the gap regarding the aspect of peers as partners was one of the main aims of this study and an important aspect of the CL ideology. This aspect is further amplified in this chapter and throughout the rest of the chapters of this thesis. How, in what ways and to what extent this study bridged all these gaps addressed in the literature are presented in the Discussion chapter. Table 2.2 summarises the common features and gaps of this literature review.

Table 2.2: Features and gaps of teaching approaches that promote the social skills of children with SLD

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>GAPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of AAC</td>
<td>Generalisability</td>
</tr>
<tr>
<td>The role of prompting</td>
<td>Assessment of practitioners</td>
</tr>
<tr>
<td>Tailor activities based on pupils’ individual preferences and give them the opportunity to express their choices and preferences</td>
<td>Peers as partners</td>
</tr>
<tr>
<td>Natural context and embedded learning in existing routines</td>
<td></td>
</tr>
<tr>
<td>Frequency of implementation</td>
<td></td>
</tr>
</tbody>
</table>

b) Social skills in general versus social skills in particular for pupils with SLD: Associations and differentiations

Using the taxonomy of social skills suggested by Caldarella and Merrell (1997) as guidance, as discussed in section 2.2.2, it seems that the dimensions of social skills such as self-management, academic, compliance and assertion, are addressed in literature regarding social skills for children with SLD as well.
The *assertion and compliance dimensions* deal with the ability of a child to comply with social rules and expectations. These dimensions can be related to what Nind (1992) suggests, and that is, an individual to have those behaviours that would reward others when being with her, by demonstrating willingness and enjoyment when engaging in a social interaction. Moreover, the *academic dimension* can be related to the current notion and provision in education, which advocates that all groups of pupils should have access to the National Curriculum; therefore, skills that enable pupils to stay engaged in academic tasks are relevant to pupils with SLD as well. Child-centred approaches, using their preferred objects and using AAC devices and a communicative approach are some of the strategies employed to assist pupils' communication during lessons and increase their participation and engagement in a variety of activities. In addition the *self-management dimension* can be related to what the current literature and legislation suggest for pupils with SLD and that is to encourage pupils to express their needs and preferences and interact with others to communicate their choices and aspirations. Table 2.3 illustrates an effort to relate the different aspects of social skills as defined by Caldarella & Merrell (1997) to the notion and aspects of social skills particularly for children identified as having SLD. Some amendments were introduced to the ‘example’ section to comply with suggestions made by the literature. The dimension excluded is the peer relations one, because as noted above current research literature regarding teaching approaches that encourage pupils to work as partners and assist each other learning is at least very limited.

**Table 2.3: Dimensions of social skills for children identified as having SLD as presented in the literature**

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Peer relations</th>
<th>Self management</th>
<th>Academic</th>
<th>Compliance &amp; Assertion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples:</td>
<td>?</td>
<td>Self-advocacy Skills: expressing needs, preferences and choices on issues concerning their learning and lives</td>
<td>Stay on task, comply with teacher’s instructions and with classroom’s and school’s rules</td>
<td>Complying with social rules and expectations, demonstrating enjoyment when being with others</td>
</tr>
</tbody>
</table>
c) **Cooperative learning as a teaching approach for children with SLD is missing**

Cooperation among children in mainstream classrooms often forms the basis of many interventions designed to improve both the pupils’ academic achievements and their social relations in schools. For these reasons CL has become a main focus in the educational and social psychological literature. For pupils who attend mainstream settings, it has been consistently reported that CL leads to enhanced positive interaction with peers and as a result of that, to substantial social gains (Gillies & Ashman, 1996, 2000; Johnson & Johnson, 2002; Brown & Pontuso 2004; Gillies, 2006; Baines, Blatchford & Chowne, 2007). Particularly for pupils with SEN, who attend mainstream settings, it has been reported that CL improves their social outcomes and leads to acceptance by their classmates (Slavin, 2012; Nevin, 1998; Slavin & Stevens, 1991; Slavin, 1995). Therefore nowadays, CL is used as a very popular teaching technique in mainstream settings.

Yet, although research and literature suggest a plethora of CL models and strategies for practitioners to implement CL in mainstream classrooms, they fail to indicate ways of how this approach could be used in special settings and whether this might be beneficial for the pupils. This might be due to the way that social skills for children with SLD are perceived. The focus of current literature regarding social skills for children with SLD lies mostly around the area of what might be called self-advocacy skills. By emphasising these types of skills, the aspects of peer relations and pupils learning from each other are sidelined. Consequently, this perception guides the research focus. Since the importance of children helping and learning from each other has been paid less attention by literature in the field of SLD, empirical research tends to focus on what literature emphasises: investigating strategies that would enable pupils to actively participate in the decision-making processes on issues concerning their learning and their lives. Moreover, this might be linked to teachers’ strong beliefs in meeting the individual needs of each child; therefore they focus more on using individualised teaching (Watson, 1999). Group activities, however, are not necessarily in contrast to the philosophy of meeting the individual needs of every child in a group (Carpenter, 1997). It is, therefore, prudent for research to
turn to this direction as well and explore the effects of CL arrangements among pupils with SLD.

The conclusions drawn from this literature review were of great importance for the aim of this study. Guided by the features and characteristics of all these approaches, some initial propositions for a CL model for pupils identified as having SLD emerged, by taking into consideration as well the CL principles. The following sections refer to CL ideology and arrangements as found in the mainstream literature and research-base. In section 2.6 some initial assumptions of a CL model for promoting the social skills of children identified as having SLD are discussed.

2.5 Cooperative learning
This section starts with a brief history of CL and how it evolved up until the present day and continues by summarising what constitutes CL and its core features. The last sections deal with the theoretical frameworks that underpin CL and its basic models. Finally, it concludes with a critical review of the literature about CL and possible gaps and limitations are pointed out.

2.5.1 A brief history
As Johnson and Johnson (1999b, p188) point out ‘we know a lot about cooperation and we have known it for some time’. CL is not a new idea. In the beginning of the nineteenth century Joseph Lancaster opened a school in America emphasising CL principles by encouraging the socialisation of pupils coming from a variety of cultural backgrounds (Marr, 1997).

A century and a half later the educational philosopher John Dewey (1940) advocated that learning should be an active and dynamic process and turned his attention to student-centred approaches based on pupils' social interests. He believed that schools' responsibility was to capture pupils' interests and based on those to expand their horizons in an appropriate manner by helping them to develop skills including interpersonal/communication ones and group interactions. Dewey’s suggestion was that through interaction with others, pupils receive feedback on their activities and learn socially appropriate behaviours (Dewey, 1940). More or less during the same time, Deutsch (1949) started investigating the issues of cooperation and competition between individuals in social situations, concluding that when pupils work together and are more
attentive to what others say, they communicate more effectively, they are more motivated to achieve and more productive than their peers in competitive groups. The interest in CL changed direction during the 1960s, where the focus turned to individual rather than group learning (Johnson, Johnson & Stanne, 2000).

The interest in CL activities picked up again in the 1970s partly due to published research on the efficacy of peer-tutoring on both academic and social outcomes (Gillies & Ashman, 2003) and carries on today, with most of the current research consistently reporting that it leads to enhanced positive academic and social outcomes (Gillies & Ashman, 1996, 2000; Johnson & Johnson, 2002; Brown & Pontuso 2004; Gillies, 2006).

2.5.2 Defining CL and its core features
CL is a complex approach, comprised by a variety of features, underpinned by several theoretical frameworks and there is a variety of models for its implementation. Trying to include all these components in a single definition is a challenging task. Nonetheless, below some definitions of CL are given, as an effort to summarise its key principles.

CL can be described by those activities that are intentionally and carefully designed and assigned to be applied to small groups of students. All participants in the group must engage actively in working together towards a common goal. If only a part of the group completes the task, while the others watch, this does not constitute CL; all must contribute more or less equally (Johnson & Johnson, 1994). Pupils are responsible for their own and their group-mates learning (Slavin, 1990), and they should be motivated to increase the learning of others (Hancock, 2004; Olsen & Kagan, 1992). In addition, although CL replaces individual practices, it does not replace the direct and individual instructions by the teacher (Slavin, 2003). Other researchers take a broader philosophical view in defining CL, suggesting that it is a pedagogy that helps schools and society in general to move towards an ideal social justice (Sapon-Shevin & Schniedewand, 1992).

The composition of the groups is also considered crucial for its successful implementation (Dugan, Kamps & Leonard, 1995). There is a general consensus in the literature that groups should be heterogeneous to promote
equality and diversity in terms of abilities, gender and ethnicities (Vermette, 1995). Therefore, the teacher’s role in selecting and creating groups is considered a very significant aspect for its successful implementation and requires very careful planning based on the abilities, needs and characteristics of each pupil (Brown & Thompson, 2000). Lou, Abrami, Spence et al (1996) and Brown & Thompson (2000) support that mixed-ability groups can result in more positive outcomes, rather than random grouping, which can result in an increased off-task behaviour and may reinforce existing classroom cliques. As Antil, Jenkins and Wayne (1998) suggest, CL has potential for accommodating individual differences within groups, since it can actively take advantage of individual differences in pupils' abilities and knowledge to promote positive learning.

Based on the above definitions, one could conclude that CL is not a straightforward approach in regards to its understanding and implementation. Several authors (for example Sharan, 1990; Ormrod, 1995; Brown & Thomson, 2000; Rottier & Organ, 2008) try to identify and summarise all the different characteristics of CL by grouping them in broad dimensions. Table 2.4 presents five main features of CL mainly based on the work of Johnson, Johnson & Holubec (1998), Kagan,(1994), and Slavin (1995). Each one of these authors places emphasis on different characteristics, based on the models of CL that they suggest. Further discussion regarding the models of CL is presented in section 2.5.4.

**Table 2.4: The core features of CL**

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The first feature of CL, *positive interdependence*, can be described as when all the group members participate, interact and work cooperatively to achieve group goals. Positive interdependence can be achieved only when all the group
members value their group and understand that in order to achieve their common goal they must cooperate and help each other. Interdependence includes several types such as common goal interdependence, where the teacher has to design the activity in such a way to favour pupils' interactions and assistance towards the achievement of the common goals, individual tasks interdependence, where pupils can assist each other to complete their individual tasks, and praise interdependence, where pupils reward their group members for their assistance and individual achievements. All the team members should be motivated to work cooperatively, since the completion of the common goal is dependent on the whole group participation.

The second feature of CL is *individual accountability*, which can be described as when each member of the group is responsible for their own learning and completion of their own individual tasks, which eventually contributes towards the achievement of the common group goal. Positive interdependence and individual accountability, seemingly two opponent elements, are deeply interrelated and affect each other. Individual tasks should be distributed in such a way to be interdependent with each other in order to encourage pupils' assistance and interdependence among them (Johnson et al, 1998) and to encourage each other to exert maximum efforts (Slavin et al, 2003). The teacher's role is very crucial regarding these two aspects, since the success in implementing individual accountability is based on the teacher's ability to distribute individual tasks to each member of the group and identify the individual participation of each member of the group towards the completion of the common goal (Slavin et al, 2003). Therefore, it is due to individual accountability and teacher's mastery during the implementation of this aspect that situations where some members do all the work and the rest of them just watch can be avoided. Moreover, individual accountability helps the children realise that the common goal can be achieved under fair and democratic values, since every member has to contribute equally.

The third feature deals with *social skills or group skills*. These skills are necessary for the children to perform cooperatively within their groups. Some of such skills are listening to what others say, taking turns to speak, sharing responsibilities, helping encouraging and praising others (Cohen, 1994a). It is the teachers' responsibility to encourage these behaviours, since some pupils
do not already have these skills in place to begin with. As Nebesniak (2007) points out, pupils might not break free of traditional/individual expectations in a cooperative ideology. Therefore, the teacher's role regarding this aspect is to observe and monitor pupils' behaviours and interactions and provide the appropriate assistance when necessary. The social/group skills are explicitly interrelated with the positive interdependence aspects, since it is through the acquirement of these skills that children will be able to encourage, praise and support their group members. Literature suggests several ways of how pupils can enhance the necessary group skills to assist effectively through interactions their group members. For example, Cohen (1994a) suggests a training programme for pupils that involves activities and games, referred to as 'skill-builders'. These activities teach pupils positive cooperative behaviours, equal participation, how to respond to the needs of the group, and how to function as a group (Cohen, 1994a). These kind of activities can be introduced at the beginning of a CL activity to prepare pupils for cooperation. Similarly, Kagan, Robertson & Kagan (1995) suggest to practitioners to use 'classbuilding' activities as a way to create a positive group identity, respect, and trust among the group members. Kagan et al (1995) suggest that these kind of activities should be repeated throughout the school year. Baines et al (2007) also point out that the group/social skills will not be lasting if pupils do not use them and practice them often.

The fourth feature is face-to-face or simultaneous interactions, and includes among others the aspect regarding the physical layout of the class. The seating arrangements have to be adjusted accordingly so all the members of the group are able to make eye contact with each other at any time. However, the face-to-face interactions are much more than just seating arrangements. It is an aspect of CL interrelated and interconnected with social/group skills and positive interdependence, since it deals with group members being able to interact with each other in a productive and meaningful way, to provide feedback, assistance, encouragement and praise to each other's efforts towards the completion of their individual tasks and therefore, achieve together their common goals.

The fifth feature deals with equal participation and equal opportunities to all members of the group. Since CL theory suggests the groups to be
heterogeneous in terms of abilities, the teacher can distribute the individual work to each child based on their individual needs, but each member of the group has to contribute more or less equally towards the completion of the common goal by working and achieving their individual tasks. Although pupils might have to complete different individual tasks, this does not imply that they have more or less participation than their group-mates during CL arrangements (Slavin et al, 2003). As all the individual tasks are interdependent, pupils through face-to-face interactions with their group members can provide assistance to each other to complete all together their individual tasks and achieve their common goals. Therefore, through different but equal participation all pupils experience similar opportunities towards the achievement of the common goal. This aspect requires the mastery of the group/social skills, described above, so for the pupils to perform their tasks in a cooperative atmosphere, and be able to share responsibilities, encourage and assist each other and respect each other's opinions and suggestions to contribute equally towards the achievement of the common goal.

All the above features are interrelated and interconnected with each other. A successful implementation of CL suggests positive interdependence, but this could not be achieved if the children do not have the necessary group/social skills required in order to be able to respect each other's opinions, listen carefully, assist and encourage each other. The same thing could be concluded for the individual accountability aspect, where its successful implementation is based only on the teacher's mastery in distributing the appropriate tasks to each child and on the ability of the children to provide help and encouragement to each other in order to achieve their individual tasks. Similarly, equal opportunities and participation cannot take place unless the children work within a cooperative atmosphere that enables them to feel safe and motivated to interact in a positive way by helping, praising and encouraging each other. Each of these interrelated features mediates the relationship between cooperation and its outcomes (Johnson et al, 1998). According to Johnson and Johnson (1999a), teachers must understand the nature of cooperation and its basic features in order to implement it successfully in the class. Teachers should observe carefully the interactions taking place in each group to be able to assess and assist children's academic and social skills progress; by listening
and observing carefully pupils' interactions, the teacher must understand and determine what each pupil does or does not understand, to assist them appropriately. As Slavin (2003) points out, although CL replaces the individual learning, it does not replace the individual instructions and assistance by the teacher.

Based on these core features of CL one can conclude that CL is a complex approach and underpinned by a variety of theoretical frameworks, which affect the way these basic features are implemented in practice. Therefore, it is vital to present an analytical view on the theoretical frameworks that underpin CL and how these affect the implementation of the above features.

2.5.3 The theoretical frameworks of CL
The theoretical frameworks that underpin CL can be grouped into two broad categories: the behavioural approach and the social constructivist approach to learning.

a) The behavioural approach
The behavioural approach towards CL has its roots in the rewards which impact the social skills and behaviours of the learners (Kagan, 2009). The behavioural approach can be grouped into two main categories: the motivational and the social cohesion one.

Regarding the motivational approach, Slavin (1996) suggests that each member of the group is motivated to assist and encourage the rest of the group members to complete their personal tasks, in order to all together achieve rewards. Therefore, scholars with this approach focus primarily on the rewards under which pupils operate (Slavin, 1995). In other words to meet their personal goals, group members should help their group mates to do whatever enables the group to succeed, and, even more important, to encourage their group members to exert maximum efforts (Slavin et al, 2003). The rewards are mainly group-based, therefore, the only way a pupil can gain a reward is through group success. Rewarding groups based on group performance (or the sum of individual performances) creates an interdependence structure in which group members will give social reinforcements to their group members (e.g., praise, encouragement, assistance) in response to group mates’ task-related efforts (Slavin, 1983). Kagan (2009) argues that rewards are made more desirable
when they are received immediately by peers, and are more attractive than receiving them from the teacher.

The motivationalist critique suggests that the competitive reward systems create peer norms opposing academic efforts (see Coleman, 1961). Moreover, as Barnhill (2005) suggests no reward can be assumed to be effective for everyone under all conditions. Therefore, although for some pupils high scores in a quiz might have a strong value, for some others they might have no value at all. Nonetheless, as Slavin et al (2003) point out when pupils work together towards a common goal, they may be motivated to express attitudes favouring academic achievement and positive social outcomes, by reinforcing one another for their efforts.

Empirical research evidence for the motivational approach regarding its implementation during CL (see Zhan, Kagan & Widamin, 1986; Slavin, 1994; Shachar & Fischer, 2004; Hanze & Berger, 2007) suggests that group rewards are the essential key feature to an effective CL implementation, with great emphasis placed on the fact that group rewards, although they are group-based, should be placed on the individual learning of the students (Slavin, 1995). More specifically, a review of 99 studies about CL arrangements in elementary and secondary schools compared achievement gains in CL and control groups. Of 64 studies of CL methods that provided group rewards based on the sum of group members’ individual learning, 50 (78%) found significantly positive effects on achievement, and none found negative effects (Slavin, 1995).

The second category, within the concept of behavioural approach towards CL, is the social cohesion one. The difference between those two approaches is that while the motivational one suggests that pupils help each other for purely selfish reasons (i.e. to get rewards for their personal benefit), the social cohesion one suggests that pupils help each other simply because they purely care about their group. The quality of the group’s interactions is mainly determined by group cohesion. Therefore, pupils engage in the task and help one another learn because they identify with the group and want each other to succeed. This approach is similar
to the motivational one in that it places a great emphasis on motivational aspects as well, however, motivational approach holds that pupils help their group mates learn mainly because it is in their own interests to do so (i.e., to gain rewards). The social cohesion approach, on the contrary, emphasises that pupils help their group mates learn because they care about their group. Therefore, while motivational approach considers as a motivation extrinsic rewards, such as praises, social cohesion approach considers as a motivation intrinsic rewards. Intrinsic rewards can be described as those ones that provide pleasure to individuals when they engage in a specific activity and thus, they are intrinsically motivated to do so (Slavin, 2012). Cohen (1986) argues:

‘(...) if the task is challenging and interesting, and if students are sufficiently prepared for skills in group process, students will experience the process of group work itself as highly rewarding(...)’ (p. 69)

Social cohesion theorists have historically tended to consider the aspect of individual accountability less essential in CL arrangements, and emphasise instead the importance of the quality of interactions among the group members (Battisch, Solomon, & Delucci, 1993; Slavin et al, 2003). Therefore, Slavin (1996), suggests that the social cohesion approach places a great emphasis on the training of pupils during the preparation of the CL regarding group/social skills, such as the team supporting, encouraging and praising each other (see section 2.5.2 about group/social skills element). Moreover, the social cohesion approach is interrelated with the positive interdependence feature. The idea is that if pupils value their group mates, as a result of the group-building strategies, and are dependent on one another, they are likely to encourage and help each other succeed (Johnson & Johnson, 1994; Slavin, 1995; Slavin & Cooper, 1999; Johnson & Johnson, 2003).

There is evidence that the effectiveness of CL depends on the quality of group interactions (Ashman & Gillies, 1997; Battisch et al, 1993). However, empirical research on classroom practices based on the social cohesion is inconsistent. For example, the study by Yager, Johnson, Johnson and Snider (1986) suggested that group-building activities such as reflection at the end of each class period on the activities can have positive effects on CL arrangements. However, the study by Rich, Amir, and Slavin (1986) suggested that group-
building activities had no effect on the achievement outcomes. Slavin (1995) suggests that methods that emphasise group-building but do not provide specific group rewards based on the learning of all group members are no more effective than traditional instruction in increasing achievement, although there is evidence that these methods can be effective if group rewards are added to them (Slavin et al, 2003).

**b) The social constructivist approach**

The social constructivist approaches are based on the premise that teachers cannot simply give knowledge to the pupils (Slavin, 2012), rather pupils should construct knowledge in their own minds, by teaching them in such a way that makes information meaningful and relevant to the pupils. Therefore, the social constructivist approaches to learning place a great emphasis on top-down instructions (Guskey & Anderman, 2008). Top-down means that pupils begin with complex tasks which are complete and authentic, and only after they discover the necessary skills to achieve these tasks with the help of the teacher or peers. The social constructivist approach to learning and teaching makes an extensive use of CL on the premise that pupils can discover and comprehend difficult concepts more easily, if they can talk with each other (Slavin, 2012). Therefore, the emphasis is on the social nature of learning and on the use of peer groups to model appropriate ways of thinking (Webb, 2008).

The constructivist approach in learning also draws heavily on the work of Vygotsky, who argued that pupils learn through interactions with others (Slavin, 2012). According to Vygotsky (1978), children's cognitive function develops first at the interpersonal level by interactions with others. Later they learn to transform and transfer the content of interpersonal interactions with others to the intra-personal level and as a result it becomes part of their repertoire of new skills and understandings. Therefore, children learn through interactions with others (i.e. adults, or peers) who mediate learning, so children are able to achieve tasks independently, that they could not complete on their own before this mediation takes place (Vygotsky, 1978). Vygotsky (1978) believed that learning takes place when children are working within their ZPD. He defined ZPD as:
'(…) the distance between the actual developmental level determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with a more capable peer.' (p. 86)

Therefore, tasks within the ZPD are tasks that a child cannot yet accomplish alone, but could do with the assistance of more competent peers or adults. After their help the child will be able to accomplish these tasks independently. As children learn to complete tasks independently, the ZPD moves (from the lower end of ZPD) and the appearance of other tasks can be achieved with the help of more capable peers (at the upper end of ZPD). Figure 2.2, shows the dynamic notion of ZPD, as the zone overcomes the task to be learned.

Although Vygotsky (1978) highlighted the importance of peer interactions during learning, CL suggests a much more complex theory. While Vygotsky advocated a unilateral relationship between a pair of peers, where the more 'capable' one mediates learning to his pair through social interactions, CL suggests dialectical and mutual interactions among peers, where pupils assist and learn from each other during interactions. Due to the interdependent nature of the individual tasks within a group activity, pupils interact and help each other in order to achieve together their common goals.

**Figure 2.2: The dynamic notion of the ZPD (adapted from Doolittle, 1995)**

How and which of the core elements that underpin CL mostly affect its implementation and effectiveness is an interesting question since no empirical research has focused on this aspect (Siegel, 2005a). Siegel (2005a) suggests the way that teachers implement CL is influenced by their existing knowledge of teaching practices and by their schools' ethos and pupils' characteristics.
Therefore, through the process of adaptation they might alter their practices on the basis of new information and experiences during CL practices. As Nebesniak (2007) suggests it is up to the teachers to decide how each element will be implemented, based on their own experiences during CL practices. Literature suggests a variety of CL models, that each one emphasises sometimes on different and sometimes on similar theoretical frameworks and CL elements, which consequently affect the way that CL is implemented in classrooms. Below are presented the best evaluated models.

2.5.4 Models of CL
Several models for CL have been developed and their contents do not vary widely, although each model places emphasis on different features and on different theoretical frameworks (Murphy et al, 2005). Of all the models employed the best evaluated are Student Team Learning (Slavin, 1994), Structural Approaches (Kagan, 1990), the Jigsaw Method (Aroson, Blaney, Sikes et al, 1978), Group Investigation (Sharan, 1990), and Learning Together (Johnson & Johnson, 1999b). Of all these models, the three most quoted models are Kagan’s Structural Approach, Slavin's Student Team Learning approach and Johnson and Johnson's Learning Together approach. Based on these models a variety of other -some of them mentioned above- were developed. Below, these three models along with the Jigsaw method are presented, since it has been argued that this specific model can be used successfully for pupils with SLD (Rose, 1991). The theoretical frameworks and core features that underpin each of these models are discussed below.

a) Kagan’s structural model
The structural model developed by Kagan (1990) aims to systematise CL activities through the use of structures. Kagan (1990, p.12) defines structures as a ‘content free way of organising social interaction in the classroom’ to promote predictable outcomes in the academic, linguistic, cognitive and social skills areas. Each structure consists of a series of instructional/behavioural steps for presenting a specific material and is designed to assist teachers transform existing lessons into CL activities that promote interactions among peers and between teachers and pupils. These structures describe specific ways of cooperation and can serve a variety of functions, such as concept development, subject matter and so on. Therefore, teachers can use these
'content free' structures in almost any subject areas and lessons, and that helps them adjust the lessons of a variety of subject areas at any age level into cooperative activities in a relatively straightforward manner (Brown & Thompson, 2000).

Kagan's structural model is based on the four out of five core features presented in table 2.4 (i.e. positive interdependence, individual accountability, equal opportunities and participation and simultaneous interactions). Although the social/group skills element is not explicitly mentioned, it is necessary to be taken into consideration for the quality of positive interactions and interdependence among the group members. All of Kagan's structures attempt to implement these features, with positive interdependence and individual accountability being the most vital ones (Brown & Thompson, 2000). The structural model suggests four to five-member heterogeneous groups in terms of abilities, gender and ethnicity. The teacher asks a question and tells the pupils to discuss about it within their groups and make sure that everyone in the group knows the answer. Then, the teacher asks one member of the group to say the answer (Kagan, 1990). Therefore, positive interdependence and social/group skills are built into the structure because if one pupil knows the answer, the ability of group members is increased, as the pupil will share her views within her group. Moreover, individual accountability is also built in, because when the teacher asks a specific person to say the answer, the pupil knows he is on his own. As Kagan (1990) suggests, the high achievers share answers because they know that their names might not be called, and they want their team to do well and low achievers listen carefully because they know that their name might be called. These structures are thought to have positive outcomes on academic progress, self-esteem and social skills development, amongst others (Brown & Thompson, 2000).

b) The student team learning (STL) model

The STL is a set of CL methods developed by Slavin (1994) that suggests pupils work in four to five-member heterogeneous groups regarding their abilities, gender and ethnicity. The STL is based on the motivational framework and involves the issue of competition amongst the groups based on group rewards given by the teacher (Murphy et al, 2005). The groups stay together for five to six weeks or as long as the duration of a unit of a study lasts. The
teacher presents the lesson and the pupils work within their teams to make sure that all the members of their group have understood the lesson. Then the students take individual quizzes on the lesson and their scores are compared to their own past averages and points are awarded on the basis of the degree to which pupils meet or exceed their own individual earlier performances. The points of each member are totalled to form the team scores, and teams that meet certain criteria earn rewards. This model places great emphasis on individual accountability and equal opportunities and participation to succeed and it also includes the use of team rewards (Slavin, 1994; Slavin, 1996; Brown & Thompson, 2000). Individual accountability implies that each member of the team is responsible for their own learning, although group interdependence is promoted as well, because if a pupil wants to earn rewards the only way to do so is if all the group members do well on their individual quizzes. Therefore, pupils are encouraged to assist each other during the completion of their individual tasks to earn group rewards. Equal opportunities and participation suggests that all pupils contribute equally to team's success by improving their individual previous scores (Slavin, 1996).

There are several methods pointed out by Slavin (1994) regarding this model, such as Student Team Awards Divisions (STAD) and Team-Assisted Individualisation (TAI). All these methods are based on the premise that all students have to contribute equally by completing their individual tasks in order to reach their common goal. The average performances of each team during quizzes based on the performance of individuals within the team determines whether or not they get rewards and prizes.

c) The learning together model
The learning together model was developed by Johnson and Johnson (1999b) and draws upon both social cohesion and social constructivist views that suggest that learning can be gained through interactions among peers and that peers help and assist each other because the value and care about their group. As pupils work towards a common group goal, learning and achievement become valued by peers (Johnson & Johnson, 1989). Moreover, this model incorporates all the five core features of CL (see table 2.4), by placing however a great emphasis on social/group skills and positive interdependence.
This model involves pupils working together in three to five-member heterogeneous groups on assignments. The groups hand in a single group assignment and the group members help each other in a friendly and pleasant environment, based on a collaborative relationship among the members (Brown & Thompson, 2000). Group/social skills activities, such as 'skill-builders' (Cohen, 1994a) and 'classbuilding' (Kagan et al, 1995) (see section 2.5.2, about group/social skills element) are suggested to be introduced either at the beginning or at the end of the lesson and throughout the school year, for the pupils to enhance the necessary group skills to assist their group members effectively through interactions. Therefore, regular discussion within groups about how well they are working together is a major characteristic of this model (Thousand et al, 1994; Slavin, 2012).

The learning together model is not such a well-structured model as the previous one, because it does not identify from the beginning the individual tasks of each pupil within a group. Basically, assignments are designed in such a way to promote positive interdependence among the pupils to achieve together their common goals. Social/group skills are necessary for the pupils to build a trustful relationship with the members of their groups, to respect and listen to opinions of others and to discuss how well they work together and achieve their common goals. Simply placing the children in groups and expecting them to work together, does not necessarily constitutes or produce cooperation (Johnson et al, 1998; Slavin, 1996; Kagan, 1994). In the learning together model, individual accountability within a group can be achieved by giving individual tests to the pupils or randomly asking pupils to give answers to represent their entire group (Johnson & Johnson, 1999a). Moreover, during the lesson, the teacher observes and assists children's learning and quality of interactions and intervenes when necessary. In other words the teacher can assess and evaluate pupils' learning and their interactions and when appropriate to help pupils reflect on how well their group has cooperated and functioned (Johnson et al, 1998; Johnson & Johnson, 1999a; Johnson & Johnson, 2003).

d) Jigsawing

The Jigsawing approach has been developed through the work of Aroson et al (1978) and resembles the learning together model discussed above. In this approach an activity is broken down into tasks which are interdependent. Each
task is allocated to each pupil individually according to her individual needs. Each task can be considered as a piece of the jigsaw and the pupils, by completing their individual tasks, can combine them to produce a common product. The Jigsawing approach, as Rose (1991) suggests has been used successfully with pupils with SLD and points out that each piece of the jigsaw is dependent upon the others. Thus there is a need for regular communication between the pupils throughout the session. He goes on to suggest that this model is best to be employed in practical activities for pupils identified as having SLD such as art and craft or cookery, as it ensures full participation of the pupils and teacher can encourage interactions among them while taking into account at the same time their individual needs. This model, similarly with the structural model, incorporates all the five core elements of the CL. Equal participation is an important aspect of this model, since individual tasks are allocated to each child based on his individual learning objectives. Moreover, positive interdependence takes place since each individual task is dependent upon the others, therefore children have to interact and communicate with each other. At the same time individual accountability takes place as well, since each child has to accomplish individual tasks. Face-to-face interactions and social/group skills are necessary so as the children interact and communicate with each other in order to achieve their common goals. This model draws upon both theories (behavioural and constructivist) since it places emphasis on rewards and reinforcements for their individual and group efforts and at the same time it highlights the importance of pupils communicating with each other in order to construct together knowledge. Although it has been suggested that this model can been used successfully for children with SLD (Rose, 1991), no recent empirical research was found regarding its implementation and its effects.

2.5.5 Research on CL in the UK
This section focuses on a critical account of research literature on CL in the UK but also draws on international research where appropriate.

Baines et al (2007) point out that although there is now a large research literature indicating that CL has positive effects on both pupils’ academic and social outcomes (see Slavin et al, 2003; O’Donnell & King, 1999; Webb & Palincsar, 1996), it has been shown that in UK schools little genuine group work takes place and still less is of good quality (Baines, Blatchford & Kutnick, 2003;
Galton, Hargreaves, Comber, Wall & Pell, 1999). The study by Galton, Simon & Croll (1980) showed that in most of the primary classrooms children sit in groups but rarely work as groups. Most of the times, pupils work individually or as a whole class. A repetition of a similar study, nineteen years later, showed only a slight increase in pupils' social interactions within groups, and these interactions between pupils involved mainly exchanging information rather than discussing ideas (Galton et al, 1999).

A possible reason for this is that firstly the main pedagogical ideology, adopted by teachers, places greater emphasis on the teacher-child relationships rather than the peer relationships. The teachers usually plan for their interactions with pupils, but they do not plan for interactions among peers (Baines et al, 2007). Secondly, in the UK group work does not appear significantly in current educational policy and advice (Blatchford et al, 2007a). A study by Baines et al (2003), by providing a systematic description of grouping practices based on an analysis of approximately 5000 pupil groupings in primary and secondary mainstream settings, suggests that teachers showed little awareness of the social pedagogic potential of CL arrangements. The particular research study, as well as others, suggests that most teachers believe that CL activities can lead to loss of control and increase disruption and that children are unable to learn from one another (Baines et al, 2003; Lewis & Cowie, 1993; Cowie et al, 1994). These beliefs result in little opportunities for the pupils to work effectively in groups (Baines et al, 2003). Moreover, Blatchford et al (2007b) point out that teachers have a strong belief in the value of addressing each pupil's individual needs and that group work is not conducive to that respect. From the perspective of the children, studies have shown that children feel insecure and threatened when asked to work as a group and they often withdraw from participation with their group members and seek the teacher in order to give them legitimate answers (Galton, 1990). Moreover, Slavin (1999) warns that there is a risk in CL activities that:

‘(...) one child can do the work for the whole group, that some children will take the ‘thinking roles’ in group activities while others take clerical or passive roles, or that some children may be ignored or shut out of the group activity, especially if they are perceived to be low achievers.' (p. 74)
In order to overcome these problems, many scholars have suggested to give pupils feedback on their cooperative behaviours and ask them to give their own feedback on how the group members worked together; and to highlight to them the aspects of positive interdependence and individual accountability throughout the CL activities (Cohen, 1994a; Cohen, 1994b; Cohen & Lotan, 1997; Cohen et al, 1999; Johnson & Johnson, 1994).

A critique relevant to the CL research approaches, by Siegel (2005a, b) suggests that research that centres on experimental or quasi-experimental quantitative studies are researcher-controlled, because the practitioners have little opportunities to express their opinions on the designs of the CL activities. Therefore, they just implement an intervention programme. Such approaches did not take into consideration the dynamic nature of classroom and teaching, or the teachers’ decisions-making during lessons.

"Investigators who conducted these studies employed pre-test/post-test research designs for which cooperative learning instruction was considered the treatment. Accordingly, the instructional methods used to foster cooperation, the frequency and duration of activities, the academic tasks, and the composition of student groups were determined by researchers. Teachers who participated in these studies were not involved in such decision making; they merely implemented the treatment as prescribed. While such quantitative studies may offer generalisable support for models of cooperative learning instruction, they provide little information about how teachers make decisions about and apply these models to their classrooms in natural settings" (Siegel, 2005b, p. 220-21).

In addition, Siegel (2005a, b) points out that most of the popular models of CL (as presented in section 2.5.4) describe their core features (see table 2.4) but fail to outline how practitioners can decide the relative importance of each feature, to which extent each feature should be used in each lesson, and the total amount of instructional time by the teacher that should be devoted during CL activities. Summing up the views of Siegel (2005a,b), although literature points out a plethora of studies that illustrate the efficacy of CL activities, there is a limited amount of studies, which demonstrate how CL might be implemented by the teachers and how they can apply CL activities to their classrooms.
One can trace practitioners’ uncertainty about how to implement CL and which of the core features to emphasise in each lesson to the theoretical frameworks that underpin CL. To date there have been few studies on CL relevant to its theoretical frameworks. On the one hand, social constructivism CL’s framework suggests that pupils can learn from each other, by constructing knowledge together through meaningful interactions and by assisting each other. The critiques of social constructivism in CL focuses on the issue that pupils carry misconceptions, therefore there is a possibility that these misconceptions may pass on to the other pupils. That implies that the teacher must be very cautious to intervene whenever such incidences take place. Moreover, there is a question of whether the more knowledgeable pupil can equally benefit from the other peers, although a systematic literature review for experimental studies suggests that all high, medium and low achievers can be benefitted equally from CL arrangements (Slavin et al, 2003). On the other hand, CL arrangements can draw on the behavioural framework, emphasising the group rewards. Therefore, if CL bases its core ideology on issues of prizes and rewards, one might conclude that the issue of group/social skills and positive interdependence based on which pupils can actively construct knowledge in their minds by assisting each other, does not get the necessary attention, therefore, knowledge is not actively constructed.

As Siegel (2005a, b) suggests, how these theoretical frameworks underpin and affect the implementation of CL is uncertain, since no empirical research has focused on this aspect. Consequently, teachers are unsure to decide on which features of CL to place greater emphasis on each lesson. Moreover, she points out that limited research illustrates to teachers ways to implement CL activities, and few research studies have taken into account teachers’ suggestions about the implementation of CL. In order to overcome these problems Blatchford et al (2007a) point out that there is a vital need for researchers to work closely with teachers so that their concerns can be fully taken into account.

2.5.6 The Social Pedagogic Research into Group work (SPRinG) project
In overcoming the above issues a longitudinal large scale study in the UK, i.e., SPRinG project (Baines, Blatchford, Kutnick et al, 2009) was carried out, aiming to improve the group work practices in schools, by designing and then investigating a model of group work which focused on how to provide guidance
to teachers to implement a group work model that would enable pupils to interact productively and meaningfully within small groups. In collaboration with groups of teachers and by taking into consideration previous research, Baines et al. (2009) created a model of group work that would encourage high level of interactions among the pupils. This model was based on four key principles with practices associated with each. These four principles are the relational, the classroom context, the curriculum and group work and the involvement of teachers.

The **relational principle** dealt with the group work skills, which have to be developed for the implementation of group work to be effective (Webb & Mastergeorge, 2003). The relational approach was based on a naturalistic study of close social relationships (Kutnick & Manson, 1998), and has been developed to overcome problems associated with social skills training programmes. As Gillies (2003) suggests pupils need to have the necessary skills to communicate and interact effectively such as listening, explaining and sharing ideas. However, effective group work also requires pupils to learn to trust and respect each other (Galton, 1990), to compromise, plan and organise their group work. Baines et al. (2007) also point out that group work related skills will not be lasting if they do not use them often.

The **preparation of the classroom context for group work** was based on the premise that group work can be implemented successfully only when the natural context is organised in the appropriate ways. For example, arranging seating in such a way to increase the proximity of pupils to each other and using small groups (of two to four pupils) depending on the tasks requirements can help to reduce distractions and encourage group interaction.

The **curriculum and group work activities** principle dealt with teachers' concerns that the curriculum demands do not allow time for group work. Webb & Palincsar (1996) point out that it is important to investigate group work in relation to the curriculum and the culture of the classroom. The SPRinG project developed group work skills and practices that can fit with the various curriculum areas, by designing tasks in such a way to be conducive to group work and not to individual work.
The involvement of teachers in the support of group work principle aimed to develop classroom strategies for teachers to be able to promote and support high quality group interactions among the pupils. One way was through scaffolding by peers rather than teacher-based scaffolding. In addition, as Baines et al (2009) suggest, teachers should plan lessons very carefully to encourage learning in groups and peer reflections and should also replace direct teaching with monitoring pupils' behaviours and intervene only when necessary.

It is obvious that the SPRinG model moves away from the behavioural framework, and places emphasis on high levels of talk, by drawing on a social constructivist approach to cooperation, and highlighting elements of positive interdependence, face-to-face interactions and group/social skills. The focus is on the quality of interactions among the pupils and on seeking ways that would enable children to have quality interactions and conversations that would enable them to assist each other and construct knowledge together through talking. The model suggests that in order for pupils to communicate and interact effectively, they need to learn not only how to listen carefully and share and explain ideas to each other, but they need to trust, respect and care for each other. This could happen if the teachers plan their activities in such a way to allow children to come close to each other and 'scaffold' each other. In addition, Baines et al (2009) suggest that the teachers should mainly observe and monitor children's interactions and assist and guide them only when necessary. Therefore, their study raises issues about the classroom ethos and the general pedagogical ethos. In order for such a model to be implemented successfully, teachers have to transform their classrooms into environments where pupils' meaningful interactions and conversations will be favoured and encouraged. The results of the SPRinG project showed that group work does not get in the way of progress in mainstream curriculum areas nor encourages conflicts among the pupils, as the teachers thought it might. Moreover, the results suggest that there were positive outcomes on both academic progress and social skills (Baines et al, 2007).

These five models of CL (see also section 2.5.4) place emphasis on different features of CL and draw upon different theoretical frameworks or a combination of them. A common feature of all these models of CL is the extensive use of
speech and conversations, through which pupils exchange ideas, solve problems, assist, encourage and praise each other. Indeed through these procedures and with the guidance of the teacher, pupils develop and promote their academic and social skills. However, literature or research-based evidence is at least limited when it comes to a CL model, specifically tailored for the needs and abilities of children identified as having SLD. Applying one of the aforementioned models to children with SLD can be considered a challenging task, since it is not generally possible to base their interactions and communication on talking and conversations, as most of pupils identified as SLD face difficulties in this area. This study, therefore, aims to address this gap by providing a CL model for children with SLD. The following section makes the first step by providing some initial propositions of a CL model for children with SLD.

2.6 Initial propositions for CL arrangements for children with SLD
This section makes an initial effort to address the gaps of the literature regarding CL arrangements for children with SLD. By combining aspects of teaching approaches for children with SLD that promote their social skills and CL theory, some initial assumptions for CL arrangements that would potentially promote meaningful interactions among peers are presented.

The aims of phase one of this study were first to explore how the notion of social skills is perceived by the two special settings and what teaching approaches are implemented in the two classrooms in regards to the social skills of the children. Moreover, phase one aimed to explore whether and how CL activities are implemented. Based on those findings and by combining literature regarding CL theory and teaching approaches that promote pupils’ social skills, the study aimed to develop an open-to-amendments CL model for phase two that would potentially promote pupils' social skills. Later, during phase two and based on an action research approach, this initial CL model further evolved in collaboration with the participants. Therefore, since phase one was exploratory in nature, designing in advance a CL model was not in my intentions, because I wanted to be open to any events or patterns which occurred during phase one. However, before entering the two classrooms for phase one, I summarised all the aforementioned aspects in order to
conceptualise what the literature suggests. Figure 2.3 presents a concept map developed for this purpose.

**Figure 2.3: Initial propositions for CL arrangements for pupils with SLD**

The concept map is based on two main premises. The first one (the red colour) is the theoretical framework which underpins this model. The theoretical framework is mainly based on social constructivist approaches about the social nature of learning, which take place through interactions with others. They also highlight the importance of giving to the pupils meaningful tasks and by assisting each other they can discover the skills required to solve these tasks.

The second premise draws upon two types of propositions. The first type (blue colour) is about CL elements and the second (green colour) deals with aspects and strategies of teaching approaches for pupils identified as having SLD that promote their social skills. By combining these two types of propositions CL might be tailored for the abilities of children with SLD. All the elements are interconnected and interrelated to each other and can be viewed in a dialectical notion. The issues of positive interdependence, group social skills and face-to-face interactions are related to the theoretical underpinnings of the CL activities, as children cannot assist and interact with each other unless they have positive relations, value their groups and the seating arrangements favour the proximity
among them to assist and encourage each other to achieve their individual and common tasks. Moreover, the ability of the pupils to provide assistance to each other are interconnected with aspects addressed in the research-based evidence for teaching approaches that promote the social skills of the pupils with SLD. For example, CL activities could be embedded in the daily routines of the class. Therefore, the pupils, by being familiar with the processes of these activities, may express intentional communication and assistance to each other. In addition, the use of AAC devices and concrete materials can assist and facilitate their learning experiences and their intentional communication acts to help each other. Giving the opportunities to the pupils to express their preferences during CL practices can also increase their participation in the learning process and by using delayed prompts, teachers can also allow enough wait time for the pupils to respond to each other. Lastly, the CL elements of individual accountability and equal participation are related teachers’ strong value to meet the curriculum’s demands and the individual needs of the pupils. These can be addressed by allocating different individual tasks to each pupil according to their individual learning objectives. How these initial propositions evolved after the emergent findings of phase one and two are discussed in chapters 4, 5 and 6.

2.7 Conclusions

Literature regarding social skills for children with SLD emphasises the need for developing strategies and approaches that will enable children to participate as much as possible in decisions concerning their lives and it also highlights the importance of encouraging children to express their opinions, needs and preferences. However, the aspect of peers as partners is neglected since literature and research-based evidence is at least limited regarding this issue. Consequently due to this notion CL arrangements that would encourage pupils to interact and communicate with each other is missing. This study aimed to address these gaps, by suggesting CL arrangements tailored to the needs and abilities of children with SLD. Figure 2.4 illustrates the gaps in the literature regarding social skills and CL for children with SLD.

A more detailed explanation of the aims, research questions and procedures used for investigating these issues are presented in the following three chapters. More specifically, the following chapter describes the philosophical
underpinnings and the methodological rationale as well as the methods used for the two phases. It also provides details of the actions taken to ascertain the quality of the study as well as the ethical issues taken into consideration. In chapters 5 and 6 are presented the procedures used for data collection and analysis, as well as the findings of phase one and two respectively.

Figure 2.4: Gaps in the literature regarding social skills and CL for children with SLD

[Diagram of gaps in the literature regarding social skills and CL for children with SLD]
CHAPTER 3
The Philosophical and Methodological
Rationale of the Research

3.1 Introduction
This chapter firstly examines the philosophical rationale of the research, by exploring the issues of ontology and epistemology in relation to my personal philosophical stance and the nature of the research problem. Secondly, it provides the aims and research questions of the study as well as a discussion about its methodological principles, the methods employed for data collection and the participants of the study. Lastly, it outlines the procedures undertaken for ascertaining the quality of the study and the ethical considerations which guided the research project. The data collection and analysis procedures and the findings of each phase are described in the following two chapters.

3.2 Philosophical foundations
Looking back on the beginning of my research journey, I was admittedly intimidated by the philosophical and methodological diversity of educational research and by the large amount of the literature generated around these complex issues. At the same time, I considered all these theories insignificant and irrelevant to the reliability and validity of my project. It seemed to me that if researchers wanted to establish the integrity and truthfulness of their project, their main concern should be to report in every detail the methods and the procedures used for data collection and analysis and of course to comply with all the ethical guidelines. However, I have since realised that the methodology of a research project is implicitly influenced by the philosophical perspectives that researchers themselves bring into their projects and directly related to the research problem and its aims. That was when I realised that the first thing needed to do in order to grip with these difficult issues was to explore my personal stance, my own practice as a teacher and my own background as a person and as a researcher.
3.2.1 My personal stance

Try to see it my way
while you see it your way
we can work it out
we can work it out

The Beatles

The first time I heard this song was at the age of 10, when my English teacher in school printed out its lyrics for the whole class, played it in the classroom and invited us to listen to it and translated it into Greek, as a fun way to practice our vocabulary. I loved it from the very first moment I heard it, and this song accompanied me throughout all my teenage years and into adulthood. Back then the reason that I liked it was probably because of its cheerful melody. Later on, the above lyrics touched me deeply and made me appreciate this song even more. I believe that through dialogue and by negotiating, sharing and exchanging ideas people can co-construct knowledge and understanding of phenomena that take place around us. Years later, these lyrics became my main principle as a teacher. I printed them out, put them on the bulletin board and discussed their meaning with my pupils. Humans are social beings, and only by socialising, interacting and sharing ideas and understandings can they learn, discover the solution to various problems or find a way to interpret what is called the truth.

As a person, I believe that life is not static. It is much more fluid and relational. Any effort made in understanding and interpreting phenomena has to be made by taking into careful consideration the context within each phenomenon has taken place, by discussing and negotiating our understandings and interpretations with the people living around us. Having this belief, I started focusing on which paradigm would guide my project, based on the way that I would like to explore and understand the phenomena which were under investigation. I aimed, in the first phase of the project, to gain a deep understanding of classroom practices and how these are affected by and embedded into schools' aims and ideology. Moreover, I intended to investigate the teaching staff's perceptions and attitudes towards the notion of social skills, and how CL activities were implemented. Based on the findings of phase one, I intended to design an open-to-amendments CL model to meet the needs and
abilities of the pupil participants. Phase two aimed to undertake an exploration of this model in both settings (Cyprus and England) and to investigate what happens when it is used with regard to the social skills of the pupils. My intentions for the initial characteristics of this model were to be open to amendments, since its exploration would occur with the help and collaboration of the participants of the two settings.

Consequently, it was certainly neither appropriate nor adequate to approach this exploration based on a positivist position, which would probably result in numerical data. The question therefore, is whether the rejection of the positivist paradigm would necessarily lead me to follow an interpretivist one. One of my first tasks was to gain a deeper knowledge of the interpretivist paradigm and explore its variety of perspectives and understandings.

As I began to explore different articulations of the interpretivist paradigm, I soon encountered critiques of theoretical expositions and alternative interpretations. Instead of gaining a clear, coherent and consistent understanding of the one theory of initial interest, I found myself contending with a diverse array of perspectives. I questioned how I could properly attend to such a large variety of theories, since each of them could provide some sort of explanation and guidance on how to explore the phenomena under study and their broadened contexts.

One solution may be to acknowledge the variety of perspectives but be entirely consistent and attempt to frame the research within a single world view. However, is a single paradigm adequate to explore and explain the enormously complex issue of classroom practices and their contexts? During this exploration I discovered some authors' views (Pring, 2000a, 2000b and Scott, 2005, 2007), who suggest that the division between the two major paradigms (positivism and interpretivism) is too simplistic and unnecessary. More specifically, Pring (2000a, 2000b) refers to the false dualism of educational research and describes the way in which educational research has been dichotomised into two major philosophical sites or world views. The first one embraces a scientific model of understanding, supporting the notion that the world exists independently of us and that an objective reality can be discovered. The other, is based on the premise that objective reality cannot be discovered.
and that research must focus upon the subjective meaning of learners. However, Pring (2000a) continues by concluding that such a division is not valid, since 'it is possible to reject what is referred to as positivism of paradigm A without abandoning the realism of the physical and social sciences and without therefore concluding that reality is but a social construction' (p. 51). If Pring’s conclusion can be termed as ‘paradigm C’ then there is a main emerging foundational principle on which it is based on. That is: an independent reality exists but this does not imply that absolute knowledge of this reality is possible. In other words, a world independent of people’s actions exists but arguing about discovering an objective truth and certain knowledge about the nature of the world is not possible; because people are continuously interacting and evolving in this world and therefore an objective truth cannot be discovered as knowledge can be viewed as transitive.

Guided by Pring’s (2000a) views, a paradigm that could adequately help and support me to explore the phenomena in my study started emerging in my mind. My purpose in exploring classroom practices was to gain a deep understanding of a variety of teaching approaches in general and CL in particular and the schools’ ethos and purposes which in turn shaped the pedagogies’ ideology. Then, I aimed to investigate how an open-to-amendments CL model for the pupil participants can be evolved with the help of the participants and what happens when it is used with regard to the social skills of the pupils. I intended to do this by interacting and cooperating with the participants and by taking into consideration the normative rules based on which each class and school are formed. I wanted to approach these rules within their cultural context and by interacting with the members of these communities (i.e. children and practitioners) in order to construct a shared and mutual understanding. It was neither my intention, nor I believed it was possible, to discover the absolute truth of how these normative rules work. Instead I hoped I produced, with the help of the participants, outcomes that may contribute to human knowledge about classroom practices.

3.2.2 The ontological and epistemological foundations of the study
As I believe in a world view which supports that an independent reality does exist, but absolute knowledge of the way it works is not possible, I have turned my attention to the perspective of critical realism, since this is a position
endorsed by most critical realists. Cruickshank (2003) summarises critical realism into two basic ideas:

‘(...) first, that there is no rational self, and instead the self is a decentred contingency which cannot transcend its socio-historical location; and, secondly, that what is taken to be knowledge is a reflection of the prevailing discourse or language game (...) This means that social scientists must use qualitative research to understand the reality constructed by the group studied, rather than claiming to discover the truth about a group.’ (p. 1)

Moreover, as defined by Scott (2005) critical realism supports that:

‘(...) any attempts to determine the nature of the social world are always fallible; but this is not anti-realist in the sense that a world independent of particular human endeavours to describe it does exist.’ (p. 635)

Critical realists argue that we can obtain knowledge of a reality, but this does not mean that we can discover the absolute truth; rather it means that we have access to the truth via fallible theories (Cruickshank, 2003). In other words, critical realism supports that it is not that there are multiple realities; rather there are different ways in which reality is conceived. These ways in which reality is conceived and described, however, are open to an internal critique (Cruickshank, 2002). Cruickshank (2002) supports that since there is this division between reality and how it is conceived, any effort to describe this reality should be open to critique and ready to be replaced by alternative ones, if these descriptions or assumptions of reality are found to be flawed. However, each alternative in turn is subject to this internal critique. Critical realist research can be considered political in that sense, since any work conducted will either contribute to an existing understanding of a phenomenon, or it will confront this existing understanding, by offering an alternative one. In any case, the aim of my study was not to argue about the certainty and the correctness of what may be discovered; rather I intended to produce a negotiated understanding of truth, as this would be constructed through the interactions between me and the participants. Critical realism argues against an ontological certainty of absolute truth and argues for epistemological transitivity (Scott, 2007) and a methodological approach that ‘can only be developed via critical dialogue’ (Cruickshank, 2003, p.3).
Therefore, since I embraced the critical realist theory and accepted that reaching the absolute truth is not possible, I needed an epistemology that would allow me to share, discuss and negotiate my personal understandings of truth with the understandings of the people studied.

Epistemology would give me the opportunity to share my interpretations with the people under study to avoid an interpretation of the data that is based merely on my own understandings. I believe that social scientists must use qualitative research in order to understand a reality that is not based mainly on their assumptions and propositions, but a reality that is constructed along with the group studied. This naturally leads my study in an epistemology where knowledge is constructed based on the articulation of common forms of understandings between myself and the participants.

While searching the literature for a suitable epistemological theory that would represent my personal perceptions and ideology, I came across two branches of the same epistemological approach that, although they share the same core ideology, differ in some respects from each other: i.e., social constructionism and social constructivism. Although, both of them believe that knowledge is socially constructed through interactions of people with each other, they differ in that social constructivism expresses the theory that knowledge is built by the person when interacting with others, while social constructionism expresses the further idea that knowledge happens felicitously when the person is engaged in the construction of something external or sharable, through interactions with others (Papert, 1991). As mentioned above, my ontological beliefs suggest that the discovery of the absolute reality of the phenomena under study cannot be achieved, thus, this project aimed to provide a reality of the phenomena under investigation as this would be perceived from a specific angle. Therefore, I needed an epistemological approach that would enable me to interpret and perceive this reality not merely based on my personal construction of knowledge while interacting with the participants of the study, but an approach that would enable me to construct knowledge along with the participants, through meaningful interactions about the phenomena under study. In other words, the study did not intend to develop a CL model based on my construction of knowledge through my interactions with the participants (social constructivism), rather to construct along with the participants a common
knowledge about the development of a CL model (social constructionism). Thus, social constructionism seemed the most suitable choice, as the combination of critical realism and social constructionism gave this study the opportunity to present a reality based on a shared construction of knowledge as this perceived by myself and the participants.

The origins of social constructionism can be traced back to a number of sociologically based works that emphasise the experimental nature of reality. For example, Garfinkel's (1967) emphasises that a sense of the real can be achieved through the contextual, embodied, ongoing interpretive work of people. Berger and Luckmann (1966) proposed that the social world is a human product so we have to get out, interact with others and learn about it. From this point of view, 'reality' is considered socially constructed by people and we get to know about this 'reality' through our conversations and interactions.

Gergen's work in recent years supports that social constructionism as an epistemology encourages people to study the world from the point of view of the historically and culturally situated individual (Gergen, 1994). Moreover, social constructionism articulates the transitive nature of knowledge, since it explicates common forms of understandings as they now exist, without promising that these socially constructed understandings will not be evolved or replaced by alternative and more coherent ones (Gergen, 1985). Its theoretical orientation, as Gergen, McNamee and Barrett (2001) put it, is based on the concept of transformative dialogue, self-expression and co-creation of new realities. They argue that through interactions people negotiate understandings of realities; therefore, through dialogue these understandings of realities may transform and change to new commonly negotiated ones. Moreover, social constructionist epistemological assumptions about the constitution of meaning argue that researchers are not distinct from their subject under study, rather they interact with their participants and it is through this mutual interaction that deeper understanding and interpretation of social life is achieved (Miller & Brewer, 2003). Different people construct different meanings, even in reference to the same phenomenon (Crotty, 2003). Thus, the understanding of social skills and a CL model for children with SLD, cannot be defined objectively because different individuals may have constructed different meanings in reference to these notions. For example, some teachers might believe that social skills for
children with SLD, is about individuals communicating their needs and choices, while some others might believe that it is about children making friends and playing together and some others might argue that it is a combination of all these and much more. Since the aim of the project was to explore and deeply understand a variety of phenomena of two culturally different classroom practices, social constructionism would enable me to engage in a transformative dialogue with the group under study and co-construct a common perception of reality.

However, social constructionism can frequently be criticised due -in my opinion- to a misunderstanding of constructionist arguments. Gergen (2009), by challenging this criticism, states:

'A frequent reaction to constructionist ideas is a frustrated cry of disbelief, "Are you trying to say that pollution is not real, or poverty or death?"(...) for me, pollution, poverty and death are very real (...) However, the moment we begin to articulate what there is -what is truly or objectively the case- we enter a world of discourse, and thus a tradition, a way of life, and a set of value preferences (...) As we speak so earnestly about the world's problems we often forget that we are functioning from within a particular tradition.' (p.161)

Therefore, based on the above example, the social constructionist view only suggests that we have to be cautious when treating these daily realities or facts as the absolute truth, since our understandings about a phenomenon or reality are culturally and value-based embedded. Making definite declarations of the real or the truth is like abandoning the possibility of dialogue and discussion. That exactly was the case that I wanted to avoid in my study. I do not deny that there is an objective reality out there, but I believe that every person interprets this reality in a different way, based on their own experiences and background. I wanted to avoid exploring and eventually discovering a reality based merely on my own understandings. I intended and I believe I managed to a great extent to present a reality that was discovered by sharing and negotiating my interpretations with the interpretations of the group studied.

Both critical realism and social constructionism have been guiding me throughout this research journey. In the following sections of this chapter I
explain how these two theories influenced the methodology and the data collection and analysis procedures.

3.3 Aims and research questions of the study
Before discussing the methodological principles, it is important to present at this stage the aims and research questions of the study. The study was separated into two important phases.

3.3.1 Aims of phase one
Phase one was exploratory in nature. It took place in two different special schools, one in Cyprus and the other in England. The aims were firstly, to investigate what constitutes social skills in the two settings; secondly, to explore the teaching approaches that take place in each classroom with regard to the social skills of the children and thirdly, how CL arrangements were implemented in the two classrooms. Moreover, phase one had an additional aim and that was to develop an open-to-amendments CL model for the pupil participants. This model was designed after the completion of phase one and was based on two premises. Firstly, the main ideology and core elements of CL theory were taken into consideration; secondly, some aspects of the teaching approaches and strategies observed in phase one in combination with ones suggested in literature were considered as well.

3.3.2 Research questions of phase one
Phase one of this study aimed to answer the following questions:
1) What constitutes social skills for the practitioners in the two special schools in England and Cyprus?
2) What teaching approaches do the teachers in the two classes usually utilise for developing the social skills of their children?
3) How do these teachers implement CL in the classroom?

3.3.3 Aims of phase two
Phase two aimed to undertake an exploration of the model developed from phase one in both settings (Cyprus and England) in order to investigate how this would evolve in each setting and what happens when utilising it with regard to the social skills of the pupils. The initial characteristics of this model were not definite, since the exploration of this model occurred with the help and collaboration of the participants within the two settings.
3.3.4 Research questions of phase two

1) What are the characteristics of the CL model developed for the pupil participants of the study?
2) How do the CL model's activities help the pupil participants practise their social skills?
3) What types of peer interaction take place during the implementation of the CL activities?
4) What are the challenges that emerged during the implementation of the CL model's activities in regard to the social skills of the children?

3.4 Methodological principles

Although, phase one can be viewed as a preliminary stage for phase two that enabled me to familiarise myself with the two settings, at the same time, it served an additional, unique purpose. It aimed to explore and enhance my understanding about the theory that underpins CL, as well as the notion of social skills and the teaching approaches that promote the social skills of pupils with SLD. As the philosophical foundations of the study highlight the importance of constructing an understanding of the phenomena under investigation along with the participants, phase one aimed to extend my understanding of the aforementioned phenomena during my interactions with the participants. Although literature review gave me the opportunity to develop a conceptual framework of the aforementioned notions, the findings of phase one allowed me to further enhance these notions by building a common theoretical framework along with the participants. Based on these findings an initial, not predetermined CL model for the pupil participants was designed to be implemented in the second phase of the study following the methodological approach of action research.

A two-phase approach was therefore used for this study. Each phase served different but equally important aims. In phase one, the theoretical framework about the notions of social skills, CL and teaching approaches for pupils with SLD was evolved and co-constructed along with the participants. In phase two, based on these common understandings a CL model for the pupil participants was investigated by following an action research approach. The findings sections of the following chapter (see sections 4.5.3, 4.5.4 and 4.5.5) provide detailed descriptions and explanations of how the notions of social skills, CL
and teaching approaches for pupils with SLD were extended and reformed based on the common understanding that was constructed between myself and the participants in phase one.

At the same time, this project can be viewed as a case study, as it investigated a phenomenon within its real-life context. Case studies allow the researcher to focus on the exploration of a phenomenon holistically and thoroughly within participants' natural contexts (Yin, 2009; Miller & Brewer, 2003) and aims to grasp the totality of a situation (Bakker, 2010). The use of a case study gave me the chance to learn about the participants' daily routines, the ideology of each of their contexts, their perceptions and understandings about social skills and teaching approaches and finally, it provided me with a 'deep insight' (Stake, 1995) in my attempt to explore the CL model, which was the fundamental purpose of this study.

For this particular study, a multiple case study design was chosen. In a multiple case study one issue is selected, but the researcher selects multiple cases to illustrate the issue under investigation, which all share a common characteristic that works as a link that binds them together and makes them form a collection of cases (Stake, 2006). The evidence from multiple cases is considered to be more persuasive, and therefore the study as a whole is regarded as more robust and rigorous (Herriott & Firestone, 1983). It allows exploration of processes and outcomes across cases (Chmiliar, 2010), while the evidence is regarded as more compelling (Yin, 2003). Yin (2003) suggests that multiple case designs should be preferred over single case when possible. My decision to choose a multiple case study design was influenced by the study's aims, firstly, to undertake an exploration of the perceptions and understandings of the participants about social skills, teaching approaches and CL in both settings and secondly, to investigate how the CL model would evolve and what would happen when it was utilised with regard to the social skills of the pupils. All these were located within the participants' social context to achieve a mutual and shared understanding about the phenomena under study. Therefore, a multiple case study design seemed to be an appropriate choice, as it allows for comprehensive exploration of the above issues. The choice of the two particular countries was related to prior experience that I had with special schools in these two countries. Yin (2009) points out that the multiple case study design uses the
logic of replication; hence, in both cases the same methods were applied investigating whether they would produce similar or contrasting results.

In terms of its type, this current study involves a combination of both descriptive and exploratory elements. Phase one attempted a holistic and in-depth investigation of the issues under study, drawing mainly on the descriptive characteristics of case study. The basic characteristic of a descriptive case study lies in enlightening patterns and connections in reference to existing theory and therefore, developing or advancing theory (Tobin, 2010). Thus, in phase one, by exploring the aforementioned issues, it was intended to advance theory by developing an initial CL model, which later would be implemented and explored during phase two. Phase two can be considered as an exploratory case study, due to the lack of research regarding CL arrangements for children identified as having SLD who attend special schools. Nevertheless, as Tobin (2010) suggests the lines between different types of case studies are not always clear, rather elements from different types can be combined and overlap in the same study.

Case studies are not without weaknesses. Criticism has been made in reference to the limited possibilities of generalisation (Wellington, 2000; Stark & Torrence, 2005; Yin, 2009). However, what is perceived as a weakness in terms of generalisability is concurrently the main strength of case studies (Wellington, 2000). Stake (1995) suggests that the length and the characteristics of the research can play a vital role regarding the issue of generalisation and that the importance of a case study then lies in particularisation, not generalisation. The emphasis is placed on the uniqueness, the transparent way that the researchers present their studies and on the in-depth exploration of the cases, that provide rich and detailed conceptualisation of a specific phenomenon in its natural context (Wellington, 2000). The issue of generalisability is further discussed in section 3.9 regarding the quality of the study.

3.4.1 The methodological approach of ethnography for phase one

Based on social constructionism theory, I needed a methodology that would enable me to develop a strategy or a plan of action that would allow me to reach the aims and answer the questions of phase one of this study. Therefore, there was a need for a methodological view that would give me the opportunity to
approach the issues under study through meaningful interactions and conversations with the participants to construct together a mutual understanding of reality.

My attention was drawn by the methodological approach of ethnography. Ethnography proposes that research must be conducted in such a way to take into serious account and consideration the perspectives and interactions of the people under study and it is based on the principle that social reality can only be understood through the regulations that structure the relations of the people under study. Pring (2000a) suggests that in ethnography the social world under study is an objective reality as the physical world is; and ethnography aims to study this world as it is. This presupposes that the researcher has to enter this world and participate in it and ‘only then might one come to understand that reality’ (Pring, 2000a, p.106).

Ethnography has its origins in anthropology and had its beginning in the early 20th century. For most anthropologists the term ethnography implied the necessity of actually living in the communities of the people under study for more or less 24 hours per day, participating in their everyday activities, and all these taking place for a long period of time, at least one year (Jeffrey & Troman, 2004). Since then, however, many things have changed and ethnography can, nowadays, be considered as a common methodology used in social sciences (Jeffrey & Troman, 2004).

There are many forms of ethnography, such as autoethnography, feminist ethnography, visual ethnography found in electronic media, video and in photography, realist ethnography and critical ethnography, with the latest two probably being the most popular ones (Creswell, 2007). Like many methodological terms used in social sciences though, ethnography cannot be viewed as a term that can be easily and precisely described or categorised. It is used and applied in different ways and occasions to indicate work of one kind from that of another. Several attempts have made trying to give a form of taxonomy for ethnography. For example, Eisenhart and Bork (1993) give five criteria for accepted practice in ethnography. However, as Hammersley (2006, p.3) points out ‘there is probably not much point in trying to draw tight boundaries around its meaning’, but, as he continues, there is a need to
acknowledge its variety and always indicate and explain how this term is used on each occasion.

Nevertheless, despite its methodological variation Hammersley (1994, 2006) identifies some core elements regarding ethnography in educational research, which I summarise below:

- It is important to study at firsthand what people do and say in particular contexts. Therefore, it is concerned with the collection and analysis of empirical data drawn from 'real world' contexts rather than being produced under experimental conditions created by the researcher.
- It involves lengthy engagement in a particular setting.
- The researcher's aim is to make sense of the phenomena under study from the participants' points of view.
- Data are gathered from a range of sources, but observation and/or relatively informal conversations are often key tools.
- The analysis of the data involves interpretation of the meanings and functions of human actions and mainly takes the form of verbal descriptions and explanations, with quantification and statistical analysis playing a subordinate role at most.

The way that Hammersley (2006) deals with the pluralism of ethnography's meanings and his descriptions about the key principles of ethnography in educational research made me believe that this methodological approach might be appropriate. As a methodological approach it would allow me to interact with the participants of my study in a meaningful way, in order to have the chance to co-create or co-construct a mutual understanding and a common perception of reality.

3.4.2 Challenges of ethnography

While trying to deal with the large amount of literature about ethnography, I realised that there are certain difficulties in employing this approach that needed to be addressed.

First, when researchers point out in the community what has been learnt from their study, they have to put it in their own terms. This might mean that the researchers would no longer talk about the reality as it is understood by the participants, since it is the researcher's voice that has the final word. A possible
solution to this issue is that a researcher might just report the case with no further explanations about the reasons or the causes of the phenomena under study. However, that would be of little scientific value (Pring, 2000a) and, what is more, it would not address the aims and questions of my research.

Since every person has their own understandings and interpretations, how then is it possible to present in my findings a completely shared and mutual understanding without marginalising participants' truth? Winch (1972) makes a very interesting point. He argues that a researcher who undertakes ethnographic research might need to use concepts that are taken from her own understanding to explain a phenomenon under investigation and these concepts might not be common with the concepts that participants have about the same phenomenon. Yet, her concepts imply a previous interpretation and explanation of those other concepts that belong to the phenomenon examined. Therefore, although the interpretations that a researcher makes are not completely in the same terms that the participants used, they can still be viewed as a negotiated understanding of both sides. In section 3.9 the procedures used in order to avoid my personal bias as much as possible are pointed out.

The second challenge deals with the issue of transferability. Since every social reality under study is unique in the sense that it is constituted by unique interactions and understandings of the participants with the researcher, is it possible for the findings of such a study to be applied or located to another group or context? Pring (2000a, p.109) argues that this criticism rests on the 'uniqueness fallacy'. In ethnography the phenomena under study are indeed in several ways unique. However, in many other ways they are not unique. In this study, each case (i.e. each class) is unique, in the sense that it is constituted of different pupils, different teachers and different cultural backgrounds in two different countries. However, in many other ways these two cases have many things in common. They are both classes in a special school, constituted of similar number of pupils, similar lessons and so on. Therefore, although I do not raise arguments for generalisation of the findings of this study, still they may hopefully prove to be important and useful for the educational society, since they are based on a social reality of two typical special schools.
Another difficulty pointed out by Hammersley (2006), which seems closely related to the above issues, deals with what is sometimes called micro or macro ethnography. Hammersley (2006, p.6) suggests that there is a debate ‘about what is and is not ethnography (...) whether the researcher must locate what is being studied in the context of the wider society, or whether instead he or she should concentrate on studying in great detail what people do in particular local contexts.’ Some fundamental questions are raised based on this dilemma regarding the micro or macro context of the ethnographic research. First, how can a researcher determine what is the wider macro context and how can she gain knowledge of this context? Is this wider context able to be discovered based on existing social theory or do we have to construct it by studying it ethnographically? In case of finding that an existing social theory is the answer, how can we know that one theory can define the context under investigation better than another? Or do the researchers have to make just a documentation of the surface of events taking place in the particular macro context under study, consequently, concerning only the micro context? None of these questions has a straightforward answer. The best way to deal with these arguments is to keep them in mind while carrying out the research. Since I had a sustained engagement in the research sites and used multiple data resources (observations, interviews, documentation), I managed to a great extent my research goal of contextualisation, thick participation (Sarangi, 2006, 2007) and thick description (Geertz, 1973). Therefore, I hold the belief that the social reality and the social context that have been constructed in this study are based on a shared understanding of both myself and the participants, so the readers by themselves can make their own assumptions whether the findings can be valuable or not for their contexts.

The third difficulty that arises in ethnographic research is the impact of the researcher's presence in the interactions of the group under study. The impact of the researcher in every research circumstance is undeniable. However, as Pring (2000a) argues, participants' beliefs and understandings of their social reality are too deeply internalised in the social setting under investigation, therefore, even if the questions of the researcher may impact the perceptions of the participants, still those perceptions and understandings of the people under study are embedded in their everyday activities and interactions. Therefore,
these perceptions are not easy to be shifted or hidden by the researcher. If the researcher is careful and cautious and repeatedly reflects upon the nature of social reality, this will limit this danger to a great extent. In section 3.9, I detail the ways used for avoiding the impact of my presence as much as possible in the two classrooms.

A final challenge for ethnographic research lies in the changes that have been introduced to the traditional style of ethnography, as established by anthropologists at the beginning of the 20th century. The basic changes deal with the extensiveness of time spent in the context under investigation and with the ethnographers observing what happens merely in a single context of participants' lives, for example their work place. While anthropologists used to spend at least a year and almost 24 hours a day in participants' settings, nowadays ethnographers in educational research usually spend months rather than years and just a few hours per day and a few days a week in a particular setting, probably because of pressure on academics for productivity and because of the nature of modern society, where people do not work and live together in a single setting.

These changes in the practice of ethnography raise some important issues. As Hammersley (2006) suggests ethnographic researchers might treat the behaviour of people under investigation as if it is entirely a product of the situations studied and not as result of the wholeness of the person (i.e. what they do when they are in other contexts). For example, while anthropologists tended to locate what happens in schools within the context of the local community in which the participants live, social scientists focus merely on what happens within school buildings. This, in combination with the fact that nowadays researchers spend less time within these contexts (i.e. schools) may lead to a rather a-historical or de-contextualised perspective of social reality. I do not believe, however, that the answer to these changes in ethnography is to return back to the early 20th century anthropologists practices; rather it is important to keep in mind the consequences of these changes and try to limit them as much as possible.
3.4.3 My personal sense of ethnography

As stated in section 3.4.1, since there are many forms of ethnography, there is a need to acknowledge its variety and always indicate and explain how this term is used. I had already decided that my findings would be based on an understanding of social reality that would be co-created and co-constructed along with the participants. Therefore, I wanted to give the chance to the participants to reveal their perceptions of the phenomena under study (i.e. teaching approaches and strategies that promote the social skills of the children, CL in general and the CL model in particular). Finally, I wanted to avoid judgements about what was most significant till the end of the fieldwork (Eisenhart & Bork, 1993). In order to achieve that, I had to establish a close, meaningful and relatively prolonged interaction with the participants to be able to understand their beliefs, motivations and behaviours (Hammersley, 1992). My first concern then was to spend as much time as possible in each setting, considering the time expectations of the project.

Jeffrey and Troman (2004) in their widely cited article ‘Time for ethnography’, suggest, due to the changes in practice of current ethnography, three forms of ethnography, each one with specific features regarding the time modes of the research. As they argue, the selection of the most appropriate form depends on the purpose and aims of the research. The first form of the ethnographic research is the ‘compressed time mode’ which can be viewed as a short time of intense ethnographic research, where the researcher inhabits the research site from a few days to a month. The second one is the ‘recurrent mode’ where the researcher visits the context under investigation a few times over a specific period of time. For example, visiting a school at the beginning, middle and end of the year, aiming to investigate changes over time. The last one is the ‘selective intermittent time mode’. In this case the length of time spent in the research context is longer, for example several months to several years, yet with a flexible approach to the frequency of the visits.

The most suitable form of ethnography for this study is the ‘selective intermittent time mode’. Its basic feature is an in-depth study and presupposes a progressive focusing (Strauss & Corbin, 1998) for a sustained period. Although it specifies the area of investigation, the researcher has the flexibility to decide during the process which aspects of the site are more significant and to respond
to unexpected events (Woods, 1996). Lastly, this kind of research is based on a trustful relationship between the researcher and the participants and on researcher-participant discussion and conversation. My intentions for this study matched perfectly with these features, since I wanted to spend enough time in each setting to gain their trust and be able to communicate with the participants in a meaningful and productive way, and although I had pre-specified the area of investigation, I wanted to be open and to welcome any events that seemed interesting for the study. Lastly, as Jeffrey and Troman (2004) argue the 'selective intermittent time mode' gives you the chance to be a little flexible regarding the frequency of your visits, thus having the chance to reflect on your observations and conversations and to experiment with relevant theories to interpret your data. Although we had decided with the teachers about the schedule of my visits, there were very few exceptions that I would need a day away from data collection to be able to deal with their large amount, reflect on my notes and transcriptions and get back to the site with a clearer mind.

Moreover, there was a 'break' in my visits to the two settings, between phase one and two of this study, since I needed adequate time to reflect on and interpret the data of phase one and challenge them with relevant theories in order to design the initial characteristics of the CL model. For more details about the time frame of my visits to the schools see section 3.8.

3.5 The methodological approach of action research for phase two

The methodological theory guiding the second phase of this study complies with the principles of an action research approach. Action research was appropriate for the study's second phase, since its aim was to examine how the CL model could evolve in collaboration with the participants and based on a shared understanding with them to explore its effects when utilising it with regard to the social skills of the pupils. As mentioned in the Literature Review chapter (see section 2.4), there is an on-going debate of how the national curriculum can be employed and fit in the daily practices of special settings for children with SLD. This debate draws on issues regarding the appropriate pedagogies and teaching approaches for children with SLD. As the literature and research-base suggest, few teaching approaches have been investigated specifically for children with SLD. For that reason literature highlights the need for action research evidence that would explore the appropriateness of teaching approaches for this group of children (Imray &
Therefore, phase two of this study aimed to introduce, explore and re-define a teaching approach (i.e. the CL model) for children identified as having SLD who attend special schools to provide a rich picture of the reality as this was constructed between the participants and the researcher of this study, about the implementation of this model. An action research design enabled the participants, who are the ultimate consumers of the findings of phase two, to contribute to the investigation of this approach in terms of its implementation and utility and make suggestions for improvement regarding its appropriateness. As defined by Stringer (2007, p.19), action research gives the opportunity for people to find effective ways in overcoming problems that they confront in their daily lives and focuses on 'the need to understand how things are happening rather than merely on what'.

The core of an action research approach is based on two premises: firstly, it intends to change the social dynamics of the situation under study so that the lives of the participants can be enhanced and, secondly, it presupposes a collaborative effort on this attempt between the researcher and the researched. I personally do not consider action research in education as a panacea that can easily change and improve current practices in schools. My intentions for phase two of this study were not exactly to change radically the social dynamics of classrooms practices, but to make a suggestion about the utility of CL arrangements in special schools. Since the literature and research for teaching approaches for pupils identified as having SLD is limited, an effort on exploring whether CL arrangements can be a practical approach for them is definitely a suggestion that might contribute to overcoming this issue.

From a historical point of view, action research can be tracked back to the 1940s when Kurt Lewin (1946) developed an interest in the study of human issues, particularly those concerned with problems faced by minority groups, in order to help them establish their social status in the community (Morton-Cooper, 2000). In the following decades action research became a tool that supported social and educational reform (O'Hanlon, 2003). Narrowing down aspects of action research to result in an operational definition can be complicated, due firstly, to the diversity of its application and, secondly, to the variety of theoretical positions on action research, which appear in the literature.
Kemmis and McTaggart (1988) draw a number of different features of action research offering a definition:

'(It is) a form of collective self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social and educational practices, as well as their understanding of these practices and the situations in which these practices are carried out(...) The approach is only action research when it is collaborative, though it is important to realize that the action research of the group is achieved through the critically examined actions of individual group members.' (p. 5)

Some years later they highlight the difference between action research and everyday actions of practitioners by pointing out that action research is not the same as the usual actions that practitioners do when they reflect on their practices. Action research is more systematic and collaborative in the collection of evidence and suggests the need for group reflections on those evidence. They suggest that action research presupposes planning, acting, observing and reflecting more systematically and rigorously than an individual usually does in everyday life (Kemmis & McTaggart, 1992). Therefore, someone could conclude that educational action research acts as a bridge between research and practice (Somekh, 1995) and seeks to have an impact on practice (McCormick & James, 1988; Rapoport, 1970). Furthermore, action research contributes not only to educational practice but to educational theory as well, by making educational practice more reflective and accessible to other teachers (Elliot, 1991).

John Elliot, a British proponent of educational action research, challenges the notion of 'traditional' educational research, by contrasting it with the notion of educational action research (Elliot, 1994). He points out that 'traditional' educational researchers do not merely passively mirror practitioners' views, but present those as stories. However, he suggests that these stories, as a contextual meaning, are personal constructs, which can be read in an infinite number of ways therefore, practitioners' experiences can be interpreted in several ways. Moreover, he continues by arguing that these stories construct meaning for the person telling the story but, few researchers report whether these stories are affirmed by the practitioners. On the other hand, Elliot (1994)
presents his view on the educational action research by arguing that its main features differ from the 'traditional' educational research in that:

- It involves practitioners in the process of generating new forms of practices by taking into consideration their aspirations and knowledge.
- It challenges tacitly existing theories, by identifying inconsistencies between practitioners’ aspirations and practice.
- It has a pedagogical aim and all those involved in the research process have to realise this aim.
- It focuses on changing practice by gathering evidence to make it more consistent with the pedagogical aim.

Thus, Elliot (1994) considers educational action research as different to traditional educational research, since the researcher embeds practitioners' aspirations and knowledge in concrete practices, in order to produce or advance theory. Moreover, according to Elliot (1994), educational action research is not threatened by new theories that are embedded in concrete practices, since it is the teachers who decide what theories to adopt as a basis for practice. In educational action research the gap or challenges between theory and practice might be overcome, as the teachers become active participants of the research process. The ideology of educational action research complies with the philosophical propositions of this study, which aimed in constructing along with the participants a common and shared understanding of the utility and implementation of CL practices for the pupil participants.

Lewin encouraged action researchers to allow participants to work closely together in an effort to wipe out issues of inequality and exploitation (Carr & Kemmis, 1986). Giving the chance to the participants to engage in the process of the research is a fundamental feature of action research, and its basic principles rest there. Stringer (2007) suggests that the key features of action research are relationships, communication and participation. He argues that relationships in action research should promote feelings of equality for all people involved, and encourage personal and cooperative relationships and interactions. Moreover, communication includes listening attentively to what people say, and accept and act on what they suggest. Lastly, participation of the people under study can be effective only when it enables an active involvement, including performing significant tasks. A great pleasure for
me, as a researcher, was the fact that in this study all the above elements were applied to a great extent and the collaboration among the participants and myself was an enjoyable and fruitful experience. More details about the data collection and analysis procedures of phase two are given in chapter 5.

The importance of collaboration among the participants and the researcher was the key element that inspired me to explore and eventually utilise this approach for phase two. I believed that working closely with the participants gave me the opportunity to reveal unique results based on a common and mutual understanding of the phenomena studied. Giving the chance to the participants to share with me their opinions and understandings about this model was an invaluable experience and an important feature of my study, since I believe that they know better than anyone else what is practical or useful for them.

The action research process is based on a cyclical routine that can be described by a simple, yet very powerful framework. Lewin (1946), who researched extensively on social issues based on an action research approach and his work is considered as a major landmark in the development of action research as a methodology, provided a model that describes the dynamic and cyclical mode of the action research process. This model is presented below in figure 3.1, as illustrated in Dicken and Karen (1999). Since then, a number of figures and ways of presenting the cycle of action research process have been generated. However the main ideology of this cycle remains the same and it is based on three basic steps: Look, think and act. These three steps were my guide during the process of data analysis. In the first step, and assuming that the problem in a particular context has already been established, the action research team works within that context to observe and collect data by putting the plan in action—in my case the CL model. In the following step the team explores and interprets those data, tries to find explanations of how or why things are as they are and makes suggestions and revises the initial plan. In the third step, they put the plan in action again and they re-look at it and then re-think and so on. From my personal experience, this process was not neat and straightforward; rather we had to revise the procedures many times and re-think the interpretations. A detailed explanation of this cyclical process is given in chapter 5.
Criticisms about action research are related to views suggesting it is an individualistic process, which simplifies its strategies for the sake of educational purposes and potentially has a narrow conception of practice (McTaggart & Singh, 1987). However, as O'Hanlon (2003) argues, the term practice as it is used in action research is misunderstood. She provides the early definition of practice suggested by McIntyre (1982) which points out its socially constructed nature, and defines it as ‘any coherent and complex form of socially established co-operative activity through which goods internal to that activity are realised’ (p.175). O'Hanlon (2003) continues to argue that action research in education may be faced with hostility and receives criticism from relevant institutions because it challenges and threatens their practices. Nevertheless, I believe, that when a group of people share their understandings through a productive and logical dialogue and co-construct a common and mutual reality, they are able to make a great achievement for the benefit of their group. The issues of transferability and the individualistic nature of action research are dealt in section 3.9. A detailed account of the data collection and analysis procedures of phase two is given in chapter 5.

3.6 Data collection methods

Driven by the philosophical theories of critical realism and social constructionism and by the methodological propositions of ethnography and action research that guided the two phases of this study, there was a need to employ methods that
would allow me to discover the reality of the phenomena under study along with the participants. The core elements of ethnography as summarised by Lillis (2008) are sustained engagement in participants' context and the collection and analysis of different resources of data in order to build holistic and mutual understandings along with the participants. Ethnography, as mentioned above, places great emphasis on the researcher's participation and observation of the people and their context under study. In addition, it is important that the researcher engages in conversations with the participants about their understandings of the phenomena under study. These comply with action research principles, which predominately use ethnographic methods, such as interviews and observations (O’Hanlon, 2003; Stringer, 2007). The intentions of this specific study were to create along with the participants a common understanding regarding social skills and teaching approaches as well as constructing together a CL model specifically for the pupil participants. This naturally led me to explore observations and interviews as two main sources of data collection and eventually adopted them as the two main methods for this study. Some of the schools’ documents, about their aims and aspirations, were also taken into consideration, although they were treated as a secondary source of evidence. Tables 3.1 and 3.2 illustrate the methods employed for data collection for the first and second phase of the study respectively.

Table 3.1: Data collection methods used for phase one

<table>
<thead>
<tr>
<th>Methods</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations</td>
<td>Unstructured, naturalistic and participant observations of the daily routines and practices of the two classes, guided by ethnographic principles</td>
</tr>
<tr>
<td>Interviews</td>
<td>Semi-structured interviews with the practitioner participants, eliciting their views on the notion of social skills and on teaching approaches that promote their pupils' social skills, including CL activities</td>
</tr>
<tr>
<td>Documentation</td>
<td>Examining the two schools’ documents about their aims and aspirations. These documents were treated as a secondary source of evidence.</td>
</tr>
</tbody>
</table>
Table 3.2: Data collection methods used for phase two

<table>
<thead>
<tr>
<th>Methods</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations</td>
<td>Unstructured, naturalistic observations during the implementation of the CL model, taking the form of an action research cycle.</td>
</tr>
<tr>
<td>Interviews</td>
<td>Semi-structured interviews with the two teachers after the completion of the implementation process of the CL model to elicit their views and reflections regarding the evolution of this model</td>
</tr>
</tbody>
</table>

3.6.1 Observations

'A key feature of participant observation is that the observer seeks to become some kind of member of the observed group. This involves not only a physical presence and a sharing of life experiences, but also entry into their social and 'symbolic' world through learning their social conventions and habits, their use of language and non-verbal communication.' (Robson, 2002, p.314)

This was the key principle that encouraged me to choose a participant observation approach for the first phase of the study. My intentions were not to explore the phenomena under study merely based on my own understandings, but to co-construct a common understanding with the participants. Therefore, by being a member and participating in these daily routines, and by sharing experiences and reflections of their everyday activities helped me build a shared understanding of all the aforementioned phenomena. My observations were mainly unstructured and I did not use any observation schedule. However, since I had well pre-defined research questions I already had in mind that my focus would be on teaching approaches, participants’ interactions and communication and CL activities. Details about the data collection procedures of the observations for phase one are given in section 4.3.1.

As mentioned above, observations were also employed for the second phase of the study. The observations were conducted during the implementation of the CL model, taking the form of an action research cycle. Therefore, every observation could be considered as one cycle of action research process. By observing, reflecting and revising the initial propositions of the CL model in collaboration with the participants, a new observation took place; hence a new action research cycle was conducted. During these observations I mainly
observed, rather than participating, since I wanted to ensure that I would account accurately all the events and all the participants' acts during the observations. Observations in action research are underpinned by ethnographic ideology, enabling the observer to build a picture of the life-world of the participants. As Stringer (2007) suggests for observations in action research, observers should visit the context under study and stay there for an extended period of time. This would enable them to look at what is happening and meet the people that potentially would participate in the process, learn from their experiences and practices, reflect on those experiences and try to find out what is needed to gain an in-depth understanding of these practices and experiences. Phase two of this study complied with these suggestions to a great extent, since before employing the action research process I spent approximately three months in each setting to get a deep insight of their daily practices. The intentions of this study were not simply to explore the CL model's assumptions based merely on theoretical propositions, but to construct those assumptions based on propositions emerged by a common understanding of me with the participants during phase one. Therefore, an ethnographic approach to observations was needed for both phases to enable me to construct a common understanding with the participants about their practices and expectations. Moreover, observations in action research provide to the observer the unique opportunity to reflect along with the participants to the observations' accounts through conversations to ensure that a common understanding is constructed. Details about the data collection procedures of the observations for phase two are given in section 5.2.

Observations are considered as a uniquely humanistic, interpretive approach (Atkinson & Hammersley, 1994) that enables the researcher to construct an understanding of the phenomena under study along with the group observed. However, this unique strength of the participant observation, is considered at the same time by those trained in experimental designs and quantitative research, its basic weakness, in terms of subjectivity, since interpretations are based on the observer's subjective judgements. However, the social world involves subjective meanings and experiences of individuals in social situations. Therefore, the effort of interpreting these meanings and experiences can only be achieved through participation and interactions with those individuals (Manis
Regarding this particular study, in order to overcome the possibility of drawing conclusions of the phenomena observed based merely on my personal subjective judgements, I used to ask the participants at the end of each lesson observed their interpretations about the practices and events observed (see section 4.3.1 for details of the questions asked). Having participants' own voice complementing my own interpretations enabled me to construct with them a common understanding of the phenomena under study.

Beyond criticism regarding the issue of subjectivity, it has been also argued that the observers' role may have a disturbing effect on the phenomena observed and affect participants' opinions and reflections (Whyte, 1984). Several strategies have been suggested in the literature to overcome the issues of subjectivity and disturbance of the daily practices of the group under study and these are: sustain engagement to the context under study, distribute attention evenly and widely, start and keep an open mind during data collection and analysis procedures, write up field notes into a narrative way promptly and recognise and discount all biases (Robson, 2002). All these strategies are interrelated and interconnected with each other and were taken into consideration and employed during my visits to the two settings and data analysis.

I spent approximately three months in each setting for the first phase of the research and more than a month for the second phase, which is approximately a half school year in each setting. Therefore, any assumptions for disturbance during my visits might have been arguable during the first weeks of my visits in each setting. My sustained engagement to their contexts, gave me the opportunity to establish close relationships with the participants and gain their trust, therefore, their genuine and true actions and reflections were expressed. Moreover, during the observations I made a conscious effort to distribute my attention evenly and widely while observing their daily practices, focusing on all the participants, and taking notes of their surroundings, sitting arrangements and the equipment needed for every activity to build a holistic picture of what I observed.

Robson (2002, p. 324) suggests that 'expectations inevitably colour what you see, and in turn affect the encoding and interpretations'. For this reason I kept
an open mind throughout the data collection and analysis procedures, by employing the strategy already mentioned above, to ask the participants about their interpretations and opinions of the phenomena and events observed. Moreover, I was well aware that if I did not write my field notes in a narrative way right after the end of the school day, I might lose important aspects of the practices observed. Robson (2002) suggests that the longer you wait to write down your narrative account the more it will be in line with your existing expectations and interpretations. For this reason the field notes were written in a narrative way straight after the end of the school day, in order for the accounts to be as rich and accurate as possible. During observations the interpersonal factors have an important effect on the observer's accounts. There are instances, as Robson (2002) points out, where the observer interacts mainly with specific members of the group under study who are more friendly and open towards her. This might affect observers' accounts, as they might not present holistic understandings and interpretations of all the participants, but merely those understandings of the individuals that the observers interact with more. This issue is interrelated with the sustained engagement in the context under study. Such a long engagement enabled me to build, as mentioned above, a trustful relationship with all the members of the group. Therefore, I had the chance to interact and exchange opinions and understandings with all the members of the group; even with pupils that were less outgoing than others. As time passed the pupils got used to my presence in the class, therefore, they gave me their permission to talk to them and understand what they enjoyed and did not enjoy of their daily practices. In section 4.3.1 and 5.2.2 a detailed account is given of the procedures used for the observation data collection in each phase.

3.6.2 Semi-structured interviews

Interviews usually take the form of conversations (Miller & Brewer, 2003) and they are regarded as an interchange of views between two or more people on the issues under study (Kvale, 1996). However, interviews are not simply conversations but deliberately set up conversations aiming to explore and investigate the phenomena under study to address its research questions (Miller & Brewer, 2003). They are one of the most widely used data collection methods in social qualitative research (Brinkmann, 2008) and in case studies
(Hancock & Algozzine, 2006) and as Hammersley (2006) suggests interviews have always been part of ethnography. Moreover, Stringer (2007) suggests that interviews are a widely used technique for data collection in action research, and by drawing on ethnographic principles, points out that they should be characterised as informal conversations, so the participants can feel that they can say what they really think and feel about the phenomena under study. The main task of the interviewers 'is to grasp the natives' point of view and to realise their vision of their world' (Malinowski, 1922/1961, p.25). The decision to employ interviews in both phases however, was not based on the high frequency of use of this method in qualitative research, but rather on adding knowledge to the phenomena under study and for triangulation purposes.

The primary intention of this study was the construction of a common and in-depth understanding of the phenomena under investigation along with the participants. Therefore, interviews seemed to be an appropriate additional method to pursue the purposes of this research, because they provide opportunities for participants to describe the phenomena and the situation under study in their own terms and enables them to reflect on their experiences and eventually reveal many features of that experiences that are related to the issue under investigation (Stringer, 2007). Similarly, Cohen, Manion & Morrison (2007) state that interviews give the opportunity to the participants to discuss their interpretations of the world in which they live, and to say how they perceive situations from their point of view.

In addition, interviews seemed to be appropriate for the present study because they emphasise the importance of the role of the participants. The traditional perspectives of interviewing which consider participants as 'passive vessels' of answers (Barlow, 2010) have given way to approaches that perceive the participants as active members in the construction of knowledge and understandings through conversations (Kvale, 1996; Cohen et al, 2007). These approaches to interview comply with both ethnographic and action research principles, which place great emphasis on the role of the participants. The interview process not only provides a record of participants' views and understandings but also recognises the importance of their role and participation in the research process (Stringer, 2007). Participants are considered, along with the researcher, co-constructors of the interview process.
Regarding objective or subjective meanings and understandings as outcomes of an interview, Seidman (2006) points out:

‘Although the interviewer can strive to have the meaning being made in the interview as much a function of the participant's reconstruction and reflection as possible, the interviewer must nevertheless recognise that the meaning is, to some degree, a function of the participant's interaction with the interviewer.’ (p.23)

Any efforts to disembody interviews from their interactional nature are pointless, since the meanings produced are a result of participant's and researcher's interactions (Brinkmann, 2008; Seidman, 2006). As Schutz (1967) points out, it is impossible to understand completely other's meanings because the only possible way to do so is to be this other person or to have exactly the same lives and experiences within the same contexts. Nevertheless, constructing a common understanding of the phenomena under study complies with the philosophical assumptions of social constructionism that underpinned this study.

**a) Interviewing the practitioners**

For all the reasons mentioned above, along with the observations, semi-structured interviews were employed in both phases as an additional source of data. The interviewees in phase one were the staff of the two classes and the Heads of the two schools. In phase two the interviewees were the two teachers of the two classes. Semi-structured interviews enable the researcher to adapt the instrument to the individuality of the interviewee (Miller & Brewer, 2003). Therefore, the wording and the sequence of the questions were flexible, based on the process of the conversation and took the form of non-directive, open-ended questions (Cohen et al, 2007). Open-ended questions give the opportunity to the participants to choose which meaningful experiences to report by referring to their specific personal descriptions, without being biased by the researcher's terminology and without enabling the researcher to make any assumptions about their answers (Roulston, 2008). The interview protocols used for each of the phases of this study were separated in main broad topics with open-ended questions in each (see appendix 1 and 2). These questions
were used as a guide to remind me of the key issues needed to be discussed. More details about the interview procedures and how they were carried out for each phase are given in sections 4.3.2 and 5.5.1.

b) Eliciting the pupils’ views

One of the statements from the United Nations Convention of the Rights of Persons with Disabilities (UN, 2006), is for disabled people to participate in their communities. One way of participating is when people with intellectual disabilities do research on issues that are of concern to them (Johnson, 2009). Moreover, the SEN Code of Practice, (DfE, 2014) suggests that the views of the children should be sought and taken into consideration in decisions relevant to their educational provision. Therefore, researchers should recognise the importance of eliciting the views of pupils with SEN, when conducting research (Porter & Lacey, 2005). This study in particular recognised the importance of exploring the perspectives of all participants involved, since it aimed to reveal a common and holistic understanding of the phenomena under study as these were constructed between the participants and myself. As Porter and Lacey (2005, p. 86) point out, ‘if we want to understand what is happening in a particular environment then we need to see it through the varied perspectives of those who are part of it’. The emphasis in this study was on the subjective experiences of the participants and how these experiences along with my personal ones constructed the outcomes of this study. Therefore, taking into consideration pupils' views was one of the main aspects of this study.

Ware (2004) makes an interesting distinction between pupils expressing their likes or dislikes for some activities or events, and expressing their views on them. She suggests that expressing choices and preferences or reacting to a variety of events and activities are different from expressing a view about them. Moreover, Ware (2004) suggests that all studies about eliciting the views of pupils with profound difficulties relate to pupils expressing their choices and preferences between immediately available activities and that no studies were discovered of pupils expressing their opinions on events that will be ongoing or will take place at a future time. Ware (2004) concludes that when attempting to ascertain the views of pupils with profound learning difficulties there is a need to acknowledge the limits of what we are able to do. Similarly, Harris (2003) points out the absence of a common consensus regarding the notions of choice and
view and highlights the need for further research to understand the ways in which pupils with severe and profound learning difficulties can give concrete accounts of their views.

As a result, trying to elicit pupils' views on a variety of events and activities was indeed a challenging procedure for this study. A common approach suggested in literature and research in order to elicit the views of pupils that experience communication difficulties is to use a person who knows the pupil participants well to help the researcher gather the information needed, since proxies are more familiar with pupils' idiosyncratic ways of communication (Whitehurst, 2006, Nind, 2008). For this reason, at the beginning of my visits I asked the practitioners of the class to encourage their pupils to express their views on whether and what they particularly enjoyed during the activities observed. As the time passed, a trustful relationship was established between me and the pupils and I was familiar with their idiosyncratic ways of communication, therefore, I used to ask them myself during participant observations or at the end of a lesson whether they liked particular activities and events or not and I tried to understand through prompting questions what they enjoyed or did not enjoy during the activities. Their replies were added to the field notes of the observations and were incorporated with the field notes about their actions and reactions, interactions, feelings and emotions during the activities and were treated as main sources of data, within the observation transcripts. I used this approach on a systematic basis and that enabled me to have their own voice on a variety of practices along with their behaviours and emotions during the activities. I believe that I managed, to some extent, to elicit their opinions about a variety of events, as the questions were asked on a systematic basis and furthermore, they were relevant and meaningful to them, since they dealt with their own practices within their own contexts. Moreover, in phase two, their responses during the implementation of the CL and their replies immediately after each observation played an important aspect while revising it with the teachers.

Inclusive research is based on values which emphasise the importance of research arising from the expressed interest and issues of people with intellectual disabilities, and in which they should be involved not as sources of information, but in the research capacity as well (Walmsley & Johnson, 2003).
could not make claims that pupils were actively involved in the data collection and analysis procedures of this study, but I could definitely make claims that their participation was similar to that of their teachers. In phase one during breaks I asked their opinion about the activity and their responses were treated as main sources of data. Similarly, in the second phase, at the end of a CL activity, the pupils were asked about their opinion on the activity and were prompted to explain the aspects they enjoyed or did not enjoy. Their responses played a determined role about the revision and evolution of the CL model.

3.6.3 Documentation
As an additional source of data, in phase one, each school's documents about the education of their children and their aims and purposes were also taken into consideration. However, documents usually report what the author wants to impart, therefore, they should be carefully used and should not be accepted as literal facts or events (Yin, 2009; Robson, 2002). For this reason, these documents were corroborated with evidence from the interviews and observations in order to find valid and precise answers to the research questions. Moreover, they were not analysed in a systematic and rigorous way, rather I read them carefully and summarised each school's objectives and purposes regarding the education of their children. The information from these documents was taken into consideration during field work and data analysis and was contrasted with the relevant themes which emerged from the analysed data. I believe that a deep insight about the background of each school and their objectives was achieved through my everyday interactions and conversations with the participants and not just through a reading of typical documents. Therefore, these documents were treated as a supportive source of data and not as a main one.

3.7 Participants
a) Phase one
Guided by ethnographic principles regarding the population under study, an 'investigation of a small number of cases' (Atkinson & Hammersley, 1994, p.248) was employed. A purposeful sample was used for this study, as all the participants selected were pupils identified as having SLD, who attended special schools and their practitioners. At the same time the sample can be considered as an opportunistic type of sample as well, as these two specific
special classrooms were available at the time the study was carried out and fitted the criteria of the study. The current study does not intend to demonstrate generalisations of the findings on a representative sample of this population. It aims instead, to explore the issues under investigation on a specific group of people. It is anticipated however, that the findings may contribute to the debate regarding teaching approaches for this group of pupils, where adequate suggestions for pedagogies have not yet been published (Imray & Hinchcliffe, 2012). Therefore, two cases, which came from different cultural backgrounds and educational systems, were chosen for exploration.

The first case was a class of a special primary school in Cyprus for children identified as having SLD. I had worked there as a volunteer some years before I visited that school for the purposes of this study. I had a discussion with the Head teacher regarding the possibility of visiting their school before I started this study and she was positive towards it. The participants of phase one in the Cyprus class were six pupils (three boys and three girls) of an age range of 8 to 15 years, their teacher, the two teaching assistants of the class and the Head of the school. All the children were identified as having SLD and were registered as full-time pupils in the school.

The second case was a class of a special primary school in England for children identified as having significant physical difficulties. Although the school in England was not designated for children experiencing physical difficulties, the pupils participating in this study experience SLD in addition to significant physical difficulties, apart from one child, who experienced merely physical difficulties and visited the school half a day a week. The reason for selecting this specific school was because during a presentation that I gave at a conference regarding this study, a teacher of the specific school, who was in the audience offered that I could visit her class for the study's fieldwork. Eventually, the teacher left from the specific school, therefore, I visited a different class of the same school. In England the participants were eight children, four girls and four boys of an age range of 6 to 9 years, the teacher and the two teaching assistants and the Head of the class. Only two of the children were registered as full-time pupils in the school. However, since I was visiting the school only three days a week, two pupils attended once a week, one child two of the days that I was visiting and the other five children were there all the three days of my
visits. More details for each participant of the two schools about their characteristics and condition are given in tables 4.6 and 4.7.

**b) Phase two**

Phase two was conducted during the following school year, therefore there were some differences with the participants. As far as the staff is concerned, the teachers of both schools and the teaching assistants of the English school were the same. The two teaching assistants of the Cyprus school were different.

Regarding the pupil participants in the Cyprus school, one boy was transferred to a different class and a girl joined and that resulted in a class that constituted of six children, four girls and two boys. In the English school, eight pupils were observed (five girls and four boys), four of whom were the same children as those from the previous year. All the pupils that participated in phase two were pupils identified as having SLD. More details for each participant of the two schools for the second phase of the study are given in tables 5.1 and 5.2.

**c) Differences and similarities between the two settings**

Although the pupil participants from both settings in this study experienced SLD, the fact that the English school was designated for pupils experiencing significant physical difficulties results in a differentiation of the characteristics and the difficulties that the pupils experienced in the two settings. For example, most of the pupils in the English school had cerebral palsy, which affected their motor skills and most of them used powered wheelchairs. On the contrary, most of the pupils in the Cyprus school did not face any significant physical difficulties. Only one pupil in the Cyprus school had cerebral palsy and used a powered wheelchair. Every person, however, is unique and different from each other. The fact that most pupils in the English setting had cerebral palsy does not imply that they had similar difficulties or abilities as each other. The same thing stands for the Cyprus pupil participants. Therefore, although all the pupil participants in this study were identified as having SLD, they experienced different difficulties and had different needs and abilities. As mentioned in section 2.3.2, the priority of the study has been to understand participants’ behaviours at a deeper level which takes into account their unique needs and abilities. Nonetheless, as mentioned already, in tables 4.6, 4.7, 5.1 and 5.2 details are provided for each pupil describing their characteristics and condition.
Beyond this difference, both settings can be considered as typical classrooms for pupils with SLD in special settings. The Cyprus school accommodated approximately 45 pupils and the size range of each class was from 5 to 7 pupils. The English school accommodated approximately 30 pupils and the size range of each class was similarly from 6 to 8 pupils. The pupil participants of both schools were pupils identified as having SLD and all classrooms in both schools had the same number of staff (i.e., one teacher and two teaching assistants). Moreover, the pupils attended similar subject lessons, such as numeracy, literacy, craft and gymnastics and had similar therapy sessions, such as physiotherapy, hydrotherapy or music therapy. Both schools had a sensory room and a swimming pool to support their pupils’ learning and therapy experiences. Nevertheless, how the differences in pupils’ characteristics had an impact on the findings of this study is discussed in the findings section of the following chapters (see sections 4.5.2, 4.5.3.3 and 6.2.1)

3.8 The time frame of the study
In this section I summarise the time frame of this study. A table describing the time frame of both phases of the study in detail is presented in Appendix 3. The first phase of the study was an exploratory one drawing on ethnographic principles, therefore I wanted to stay in each school as much as possible, in order to get a clear idea of their every day practices. Fieldwork was firstly carried out in the Cyprus classroom from February to April 2011, and then in the English classroom from May to July 2011, spending approximately ten weeks in each setting. I visited both classrooms three times a week for the whole school day. A brief pilot study was also conducted in the Cyprus school, immediately before the main data collection process (see section 4.2.1). I visited the Cyprus setting first for convenient reasons, since my visits to the English school required some bureaucratic procedures that needed time to process.

On the conclusion of this phase the second phase commenced, which dealt with the exploration of the CL model. Field work was again repeated twice, once in each of the aforementioned classrooms; firstly, in the Cyprus one in April and May 2012 and then in England in June and July 2012, spending approximately 5 weeks in each setting. I visited both classrooms two or three times a week for one or two observations each day. My visits for the discussion of our reflections and interpretations of the model with the teachers were not on a fixed basis, as
they were arranged according to the teachers' busy schedule. All the conversations took place in the schools, either during breaks or lunch time.

3.9 Procedures for ascertaining the quality of the study
The concepts of validity and reliability are of vital significance in quantitative research, but in qualitative research these concepts seem to be problematic (Bassey, 1999). There is a large variety and diversity in the criteria used in addressing the quality of qualitative research (Patton, 2002) and an extended and still on-going debate exists in order to overcome this issue. Although the appropriateness of the concepts of validity and reliability in the domain of qualitative research seem to be challenged, this does not suggest that they are unimportant (Yue, 2010). This particular study has taken into consideration three strategies in order to address the issue of its quality. These strategies have been adopted by Yin (2009), suggesting that they are commonly used to establish the quality of any social empirical research. These are: construct validity, dependability and confirmability, and transferability.

a) Construct validity
Construct validity is concerned with establishing the correct operational measures for the concepts being studied (Yin, 2009). This dimension is especially challenging in case studies and critical views point out that a case study researcher fails to develop a sufficient operational set of measures, therefore data are collected in the researcher's subjective judgements (Yin, 2009).

This problem has been overcome in this study firstly, by a prolonged engagement in the contexts under study. I knew that a brief interview or few observations would not enable me to develop a deep and shared understanding with the participants of the phenomena under study. Stringer (2007) points out that in action research participants should be given extended opportunities to explore and express their experiences, their acts and activities and issues related to the problem under investigation. For this reason, I spent in total four months in each setting, I engaged, discussed and participated in their everyday activities and routines to be sure that the collected data of both phases and their outcomes were not based merely on my reflections on what is considered as significant and interesting.
Another strategy employed, in order to increase construct validity, was *persistence observation* (Stringer, 2007). Stringer suggests that merely being present in a situation and describing it from memory does not count as an observation; rather it is necessary to take notes of events and places and of what is actually happening. For this reason, notes were taken during my observations of what was actually happening in each lesson and these were transcribed on the same day into a narrative way to ensure that I would not forget or miss anything. Moreover, Stringer (2007) highlights the importance of taking into account not merely participants' actions and information provided to the researcher, but their feelings and emotions as well. Thus, during the observations in both phases notes were taken not only about their actions and acts, but about their feelings and emotions to have a holistic picture of the events observed.

Moreover, the member check technique (Lincoln & Guba, 1985) was used to increase the accuracy of the study. Member checking occurred twice both as an official and unofficial procedure. Unofficially, after the end of each observation I discussed with the participants my initial interpretations, to check whether we had similar understandings and to verify the accuracy of the collected data (see section 4.3.1). Official member check occurred approximately a week after the interviews. A summary document was given to each of the staff participants, which summarised their answers during the interviews, to verify if I had a clear understanding of what they had reported. No disagreements were reported. Moreover, during the second phase of the study, the teachers had the opportunity to review the raw data of the observations, and their analysis as well as the final reports about the CL model. This links with another issue, that Stringer (2007) terms as 'diverse analysis'. Diverse analysis deals with researcher's effort to ensure that the perspectives of all the people involved are incorporated into the study. Since the staff participants had the chance to review the raw data of the observations, the analysis of the data and the final report of the CL model, claims that their perspectives were incorporated into the study can be made. Regarding the pupil participants, this study acknowledges the importance of including pupil participants as much as possible to the process of the research, especially in this current study, as the pupils are the immediate consumers of the product of the study (i.e., the CL model). Their
Another technique used to establish the construct validity of the study was to use triangulation of data (Yin, 2009). Multiple sources of evidence were employed to ensure that the collected data represented the reality of the two settings and that data is based on a mutual and common understanding between me and the participants. Moreover, the study used the technique of person triangulation. According to Denzin (1989) person triangulation is a subcategory of data triangulation and involves the collection of information from more than one level of persons, including individuals and groups. The present study collected data from different individuals, in two different culturally contexts, who although sharing some common characteristics, inevitably hold unique experiences and views. Therefore, person triangulation was used as well and took the form of comparisons and consistency within and across cases.

**b) Dependability and confirmability**

Guba and Lincoln (1989) suggest that these terms deal with the issue that if another investigator repeats the exact same procedures of this research to the same population, within the same context, she should normally come to the same conclusions. In order for someone to be able to do that, research procedures must be clearly defined and open to scrutiny and the necessary evidence that the procedures described actually took place must be provided. Yin (2009) recommends that in order to deal with these issues researchers have to illustrate and describe in detail each and every step of the research process. Regarding this study, a detailed description of its methodological rationale, aims and procedures used for data collection and analysis are explicitly and clearly reported in the following two chapters; therefore, the reader is able to follow and understand every step of the study. Moreover, the method of *peer debriefing* (Lincoln & Guba, 1985) was employed. The supervisors of the study were aware of the data collection and analysis procedures used in this study. Parts of the raw and later analysed data were presented to them and through conversations a comparison was made between mine and their interpretations to enhance reliability. Peer debriefing had been an ongoing
process throughout the study; from the conceptualisation of the rationale of the study until the data analysis and presentation, the supervisors of this research played the 'devil's advocate' (Bassey, 1999) and through discussions and conversations challenged all theoretical assumptions, research procedures and outcomes.

**c) Transferability**

This technique deals with what the positivistic designs refer to as external validity, which implies the generalisation of the research findings to broader populations. This issue seems to be problematic or even impossible in qualitative studies (Yin, 2009), since their strength lies in the in-depth investigation of a phenomenon within its specific context (Yue, 2010). Therefore, researchers who conduct case studies hesitate to generalise from one case to another because the context of each case differs.

Bassey (1981) argues, however, that the findings of many traditional positivistic researches—which are considered generalisable due to the use of large samples—are seen by professionals (e.g. teachers) as being irrelevant to their daily life. Contrarily, a rich, in-depth and accurate description of a case may be seen as more relevant and useful. Nevertheless, Yin (2009) points out that in case studies the method of generalisation is ‘analytic generalisation’, where a theory developed by one case is used as a template to compare if another case study supports the same theory. If two or more cases support the same theory, replication is then claimed. For this reason, in this particular study the implementation of the CL model took place in two different contexts to investigate whether a similar theory would be produced. This research however, does not intend to make any broad generalisations. This would not be in line with the study's philosophical rationale, which seeks to explore a phenomenon by constructing a common understanding with the participants within their natural contexts. Since the issues of dependability and confirmability, as described above, have been addressed, people can make their own judgements whether the situation is sufficiently similar to their own or not and therefore, the outcomes can or cannot be transferred to their own situations (Stringer, 2007). Bassey (1999) refers to this as 'fuzzy generalization', which proposes that the findings of the research may be applicable in other cases, though without any certainty.
3.10 Ethical considerations

Ethical issues tend to arise at all research stages (Miller & Brewer, 2003), varying from the selection of the topic and the planning of the research design, to the actual conduct of the study; the procedures of data collection and analysis; the presentation of the findings and the relationships with participants (Cohen et al, 2007). For this reason, from the early stages of this study, along with the development of fundamental research questions and appropriate design, I engaged in developing an ethics protocol, which complied with the guidelines suggested by the British Educational Research Association Guidelines (BERA, 2011) and was cleared by the University of Exeter, Graduate School of Education research ethics committee (see appendix 4 and 5).

One of the main concerns of this study was related to the issues of confidentiality to ensure the anonymity of both the participants and the schools. For this reason pseudonyms are used throughout the study instead of participants' real names and full details of the two schools' geographical locations are intentionally not mentioned in the project. Moreover, central to any ethics protocol and the start of any project is the need for informed consent. Two consent forms were developed for the purposes of each phase of the study, one for the parents of the pupil participants and one for the practitioner participants. The consent forms explained clearly the purpose and aims of each phase, how the research findings would be used and that they have the right to refuse participation, even after the research process starts without giving any explanation. Moreover, the consent forms explained that none of the information that identifies them, their children or their schools would be made public, or be revealed to others and that they have the right to ask for the results of the research. My telephone number and e-mail address were included, letting them know that they could contact me at any time, in case they needed further explanations or clarifications. See appendix 6 for examples of consent forms from parents and practitioners in both phases.

In the following three subsections the ethical considerations and actions undertaken in this study relevant to pupil and practitioner participants are presented in more detail.
**a) Ethical considerations of the parents' consent and pupils' assent**

Ethical issues regarding the pupils were addressed in a careful way and their assent was sought in an ongoing process throughout the research. This is a very sensitive area of research as it deals with children whose age and intellectual capability may limit the extent to which they can agree voluntarily to participate in the research process.

During my first visit to both schools, I asked the teachers for the procedures that they would like me to follow to get consent from the pupils. I offered to design a research information leaflet, especially designed for the pupil participants. This leaflet, as I suggested, would be based on a symbol system including clear and precise pictorial cues, which would describe to them their role in the research process. Both teachers had a similar reaction to my suggestion. They argued that not all of the pupils in the class are able to comprehend pictorial cues, therefore, it did not seem to them a practical solution. They suggested instead to introduce me to the pupils, to explain to them the reasons for my visits and to ask them if they agree with me being present in their classrooms, and this they did. Both teachers explained to the pupils the purposes of my visits and that I would keep notes about them. They also clarified to them that this will help us to understand more about group work.

However, Turnbull (1975-1976) pointed out that, to give informed consent, a person must have the sufficient information, the capacity to understand the consequences and give their consent voluntarily. Harris (2003) explains that many people with learning difficulties are deemed not to have the capacity to give informed consent, as it cannot be certain that they fully understand the information about the research given to them, the consequences of agreeing to being researched and whether they can actually have the option to refuse participation at any time. For this reason, I took additional precautions to ensure that my role and presence in the class would not cause any anxiety to the pupils. Obtaining assent from the pupils was an ongoing process throughout the research, on a daily basis. I always asked the children whether they had agreed for me to sit with them and work together, even if the teachers had done so on my behalf. Moreover, there were a lot of instances when I reminded the children that I was taking notes about them and their lessons. For example, when sometimes the children asked me to join them during break time or lunchtime, I
explained to them that I could not do so, because I had to go to the staff room and make notes about them and their lessons, and asked them if this was OK with them. Their answers were always positive. In general, I had the feeling that the children as time went by started to like me and feel comfortable around me. Very often children would giggle or smile at me when I entered the class. In addition, during activities that children had to choose an adult to work with them, very often they would pick me, some of them on a regular basis. On the few occasions where the pupils did not demonstrate pleasure to work with me, it was due to a general denial to work at this particular time. On those occasions, I did not press them to do so. It was the teachers that prompted them to work.

Informed consent from parents of pupil participants was also obtained in both phases of the study. As mentioned above an informed consent form was sent to the parents through their children. The document had two parts. The first part presented information to parents about the research aims and processes and the second part informed the parents about their and their children's rights in the research process, highlighting the voluntary nature of their children's participation, their right to withdraw their child from the research process at any time and ensuring them that anonymity of their child and the school would be preserved. An attention was given to the language used. For example the term 'group activities' was used instead of 'cooperative learning' to make sure that the parents would fully understand the concept and purposes of the study. All the parents signed it, detailing the date and returned it to me. The parents gave their consent without contacting me, apart from one case, when a mother needed to be assured that no video recordings or photographs would be taken. As soon as I assured her, she signed the consent form.

b) Ethical considerations for practitioners' participation

Regarding the staff who participated in the study, two information leaflets were given to them, one for each phase of the study. This leaflet was given to the staff in person, they signed it detailing the date and returned it to me. Similar to the parental informed consent form, the leaflet consisted of two parts giving the same information for the practitioners.

Visiting the classrooms for such an extended period of time, it was inevitable that I would begin to bond with the participants and feel comfortable with them.
This was apparently a mutual feeling, since as time went by, the staff started sharing personal experiences, as well as perceptions of the phenomena under study 'off the record'. This information, although not included in the data analysis, was very helpful to gain an idea about their background, understand where they were coming from, and have the chance to see the phenomena under study from their point of view to eventually construct together a common understanding. In addition, to the above, the fact that a trustful relationship had already been established between the participants and myself before conducting the interviews, gave them the chance to talk in a relaxed atmosphere about their experiences and understandings during the interviews. Pilot interviews were conducted before interviewing the practitioners in phase one, not only to ensure that the questions asked would result in rich and fruitful data, but also to make sure that the language used in the interviews was appropriate, by using terms that practitioners were familiar with and that the questions were put in a clear and not threatening way, that might cause discomfort to them (Robson, 2002). The issues which arose during interview pilot are discussed in section 4.2.3

c) Ethical considerations for phase two

It is important to mention, at this point, the ethical aspects taken into consideration with regard to the second phase of the study. In an action research study, because of its participatory nature, ethical considerations work in a special way (Stringer, 2007). Because in action research participants are much more engaged than in any other form of research, researchers have to ensure that all participants know what is going on in every stage of the research process. With regard to the practitioners who participated in this research, I believe that this principle was taken fully into consideration. The teachers were engaged in the action research cycle and the final characteristics of the model were based on a shared understanding between us. Ensuring though that pupils consciously participated in this effort and understood its purposes and aims were challenging issues for reasons mentioned at the beginning of this section. Both the teachers and I repeated to the children many times throughout my visits our intentions. However, I am not sure to what extent pupils understood their and my role in the class. The only thing that I can be sure of is that my presence in the class and in the action research process in general, did not
cause them any anxiety or discomfort, for reasons already explained above. Moreover, their feedback about the CL activities, their actions and feelings during the implementation of the CL model were taken into serious consideration while revising it with their teachers.

I consider the second phase of this study as a collaborative effort of both myself and the participants. Without the invaluable help of the children and staff, their kind willingness to participate and inspiring ideas and suggestions, the second phase of the study would not have been completed. Any potential acknowledgements about this effort, should be awarded firstly and mainly to them.

3.11 Summary
This chapter firstly presented the philosophical rationale of the study, by justifying the choices of critical realism and social constructionism as the ontological and epistemological assumptions guiding this research project. The aims and research questions of the study were also presented. A discussion about the choice of ethnography and action research as the methodological principles of the two phases was provided as well along with the data collection methods employed. A justification of the choice of the sample and the time frame of the study was also provided. Lastly, it outlined the procedures undertaken for ascertaining the quality of the study and the ethical considerations guided the research project. A detailed description of the participants, the data collection and analysis procedures used and the findings of each phase are given in the two following chapters.
4.1 Introduction
This chapter presents, firstly, an account of the data collection and analysis procedures used for phase one. Following this, it presents the findings of this phase with the aim of answering phase one research questions.

4.2 Data collection procedures
This section presents firstly the impressions and experiences gained from the pilot study in the Cyprus school. Following this, a detailed account of the data collection and analysis procedures used for this phase of the study are illustrated.

4.2.1 Pilot study
The main observation data collection period was preceded by a short pilot study in the Cyprus school, which lasted two weeks and served a number of objectives, mainly dealing with practical considerations such as the choice of the class and testing the viability of the unstructured observations as a source of data. Moreover, before conducting the interviews with the practitioners at the end of the field work I conducted three pilot interviews to test the appropriateness of the interview questions and ensure that I would gain rich data. A brief review about these issues is given in the following subsections.

4.2.2 Piloting Observations
A very important purpose of the pilot study was to identify the class with which I would work throughout the main study period. There were three teachers in the school kindly willing to accommodate me in their classrooms; hence I visited these three classrooms, so that I could decide which class served the purposes of my research better. The final choice of the class was based on criteria that may be described as responding to practical feasibility. For example, the constitution of one class was all boys and the teacher of the second class was due to leave during the period of my visits and a new one was supposed to replace her. The issue of changing a teacher right in the middle of the data...
collection was not something that I wanted. Finally and by the process of elimination the chosen class consisted of 6 children, 3 boys and 3 girls and their age range was 8 to 15. Therefore, the second week of the pilot study I was visiting only the chosen class.

Another concern was whether it would be possible to obtain viable observation data in a classroom, as this could be a noisy place where pupils may be engaged in different activities at the same time. I wanted to ensure that the choice of unstructured observations of pupils and practitioners during their regular classroom activities was practical and test my own abilities as an observer. I did not want to use a video recorder, as I wanted my presence to remain as unobtrusive as possible. Piloting helped me indeed find a better way of observing the participants during unstructured observations. I realised that trying to observe all the participants at the same time and trying to keep notes about everyone was not always possible. Therefore, I was usually focusing my attention for some period of time on one or a couple of participants and then moving to others, although I was always trying to be aware of what all the participants were doing. Moreover, I realised that drawing the physical layout of the class and marking where each participant was sitting were very important aspects. This had a major impact when interpreting participants interactions and teaching approaches and strategies.

Lastly, the pilot study also served the purpose of testing the viability of collecting data relevant to the research questions. It was apparent from the beginning that the teacher could use a variety of strategies and approaches underpinned by different principles or theories of learning in a single task, or even change the teaching approach during the task. Therefore, it became evident that by asking the teacher questions relevant to the activities at the end of the lesson helped me to get a clearer view of the approaches used.

4.2.3 Piloting Interviews
A very important concern was to conduct interviews that would result in rich and fruitful data. I wanted to be fully prepared and ensure that I put questions to the participants in a clear and precise way. Three teachers were recruited for the pilot interviews. These teachers were ex-colleagues of mine, two from the University of Exeter and one from the University of Athens and all had been
working in special schools or units for the previous three years. The interviews were conducted in relaxed conditions at their homes. These interviews were recorded, however they were not transcribed since my intention was not to present these as data in the thesis. I considered the pilot interviews as a self-reflecting process, dealing mostly with my role as an interviewer and my behaviour towards the interviewees. After completing the interviews with each of the three teachers, we had a discussion regarding the interview questions, for example, whether some of them were challenging or hard to understand. A brief review of the outcomes and some minor amendments for the subsequent interviews are described below.

The number of interviewees for the pilot study was not set in advance. My intention was to carry out the first interview and then, based on the feedback to decide whether I needed more ‘participants’. The first interview made me realise the importance of setting some ‘warm up’ and easy questions first, before moving to the main part of the interview to settle down both myself and the interviewee (Robson, 2002). Beginning with questions regarding teaching strategies and social skills gave me the feeling that I made the interviewee a bit anxious. Therefore, I added some non-threatening questions at the beginning that were relevant to their years of experience and their reasons for choosing to work as special teachers. After listening to the recorded interview I realised I was rather impatient. I was not giving the ‘participant’ the chance to think before answering the question. I was immediately using prompting questions, whenever there was a delay in answering. A period of silence or repeating back part of what the interviewee has just said (Robson, 2002) was something that I tried in my next pilot interview to give the participants the chance to think.

The second interview was considerably better as the interviewee seemed more relaxed than the previous one and using the tactic of a period of silence, allowed her to reflect on what she had just said and continue by giving more information. Her feedback was mainly positive, although she pointed out that some of the prompting questions that I used were leading her in particular directions. Hence, I wrote down some prompting questions to be more prepared for when I felt that the participants had more to give.
In the final interview, I was more confident about myself as an interviewer. This interview lasted considerably longer, about 45 minutes, approximately 20 to 15 minutes longer than the previous ones. Moreover, the feedback I obtained from the 'participant' was positive. For example, she mentioned that the questions were clear, and the fact that I asked her to give me specific examples of her pupils, made her feel more confident about her responses. Later, listening to the recorded interview I was convinced that I could obtain rich and thick data from the participants.

4.3 Data collection procedures of phase one

In the following two subsections a detailed account is given for the observation and interview data collection procedures used in the two settings. The procedures used for data collection in phase one were identical in both settings; therefore, in the following account of these procedures, I refer to both settings.

4.3.1 Observations

It took approximately a week to gain parental consent in each setting. During this week I only observed events, without making any field notes or interacting with the children. The teachers made it clear that they would be happy for me to join in the daily routines and activities of their classes, after the parents had given their consent. During this week I concentrated on the routines of each class, formulated a main idea of the interactions which were taking place and learned to identify the pupils by name and their more noticeable characteristics, such as their idiosyncratic forms of communication and their preferences and dislikes during a variety of activities. Therefore, when I actually began to interact and work with the children I was able to address them by name and had an initial understanding of their idiosyncratic way of communication; furthermore I was not a total stranger to them.

After obtaining parental consent, I kept handwritten field notes of the classrooms' daily activities. The pilot study helped me to become more confident as an observer. The lack of structure during observations can be sometimes considered as problematic because it appears to underestimate the issue of systematic investigation (Yin, 2009). However, the natural flow of the events that took place during the routines and activities of the classrooms was a very important aspect of my methodology. It was my intention to make my
observations within the participants’ own context, interact with them as smoothly as possible to achieve together a mutual understanding of the nature of their practices. Certainly, it was neither my intention to make judgements about best practices, nor to consider effectiveness in the casual sense of what may be optimal practices which influence pupils’ success of social competence. Rather, I aimed to get a deep and shared understanding about the practices taking place in each setting and the reasons for these being considered effective in promoting positive social relations. However, I was open and welcomed any other events taking place in those two settings.

My initial observations were rather descriptive in nature focusing on nine dimensions as suggested by Spradley (1980). These were:

- the **layout of the class**: the physical layout and the sitting arrangements in each activity
- the **participants** of each lesson: the pupils and the practitioners
- the **activities** and the **acts** of the participants during these activities, such as initiation of interactions and responses
- the **objects** used in each activity such as special equipment for the lessons or for the pupils
- the **time** in terms of the duration of the activities or sequence of several events
- the **goals** and aims of each activity and on which area of skills the emphasis was placed
- participants’ **feelings** and emotions during the implementation of a variety of practices

The handwritten field notes contained a combination of sentences, diagrams of the physical layout and time duration of a variety of events during the activities. An example of field notes is given in appendix 7. Data analysis started in the middle of the data collection process and that helped me shape its development. A set of concepts started developing based on the descriptions contained in the observation field notes, and the observations became more focused, rather than descriptive, prioritising several patterns and features that took place during practices relevant to the research questions of this study.
Moreover, I included in my notes some thoughts about my impressions and hunches, which I shared with the teachers at the end of the school day or during breaks to build a shared understanding about their daily activities. Therefore, I had short conversations with the teachers about the activities that I had just observed and with their permission I wrote down their comments. My questions to them included:

- How do you think the lesson went?
- Why have you chosen to separate the pupils into these specific groups?
- Why did you decide to work with them individually?
- What were the learning objectives of the activity?
- What were the learning objectives for (specific children)?

I applied a similar approach with the pupils as well. During breaks I accompanied the pupils, along with the teaching assistants, to the playground or the assembly room. Whilst walking there I took the opportunity to ask the pupils:

- Did you like (specific practice/activity/event)?
- Do you want to do (this specific practice/activity/event) again?
- What did you like the most (from this specific practice/activity/event)?
- What did you not like (from this specific practice/activity/event)?

This strategy proved to be valuable during data analysis, since I did not have to deal merely with my own interpretations and understandings, but with those of the participants as well. However, I have to recognise that eliciting the pupils' views was not always a straightforward procedure, as there were occasions that the pupils did not give me specific answers on aspects of the activity; rather they shared their general opinion whether they liked the activity or not. This issue has been further discussed in section 3.6.2.b.

One of the biggest challenges that I faced was during the participant observations, probably because piloting did not give me the chance to work on this issue. Whenever the teachers asked me to join them in various activities I could not write notes and, even if I could, I did not, because I did not want to distract the pupils by writing notes. As Yin (2009) points out, the participant's role may require too much attention relative to the observer role, thus she may not have sufficient time to take notes. My plan was to write a detailed transcript about these activities as soon as I got home after the end of the school day.
However, I realised that this was not a valid solution since I was not able to remember completely some critical events that had taken place. Therefore, during breaks or lunch time I went to the staff room and I took notes. I transcribed them later at home in a narrative way.

As my desire was to make as little disturbance as possible to the regular routines and work of the classrooms, I did not make any requests for special activities to take place during the observations. Besides, this was in conflict with the purposes of phase one of my study, since I wanted to explore the classroom during their regular daily routines in order to understand a variety of approaches regarding children’s social skills. The teachers were certainly aware that I wanted to observe the class in its natural regular state, although several times they kindly asked me whether I would like them to do some special activity for me.

Professional ethics led me to offer my field notes to the teachers. This offer, however, was never taken up. Therefore, I did not discuss my observations with the teachers. Probably, after such a long time of visits, I gained their trust and they were confident that I would never write anything inappropriate. They often asked me though if I was getting what I wanted and I assured them that I was.

My general experience from my visits in these two schools was entirely positive not only regarding the quality of data gathered, but regarding the relationships built with the participants as well. By spending three months in each school the participants became part of my daily routines and I believe that I became part of their daily routines too. In both settings all the people involved in this study made me feel like a member of their group. For example, the staff of both classes mentioned several times that the children were looking for me on the days that I was not scheduled to visit them, or they invited me to join several special events, such as sports day, parents’ day and school trips, and I thankfully accepted their invitations.

4.3.2 Interviews

For phase one, one-to-one, semi-structured interviews were conducted after the completion of the observations. The interviewees were the two teachers, the two teaching assistants of each class and the two Heads of the schools. The interviews were digitally recorded with their permission. The flexible structure of
the interviews was based on the observations made, and the questions that were asked acted as a group reflection for me with each of the participants about the phenomena observed. The interview protocol was separated in main broad topics with open-ended questions in each (see appendix 1). These questions were used as a reminder of the key issues needed to be discussed. The semi-structured interviews enabled me to ask open-ended questions that gave me the opportunity to ‘see’ clearer the professionals’ opinions. The questions asked during the interviews of the teachers and the teaching assistants were relevant to their understandings about their daily practices, teaching strategies and approaches employed in the class and about the social skills in general and of their children in particular. Some amendments were made to the interviews with the Heads, since they were not present in the classes. For example, the two Heads were not asked to provide examples of specific pupil participants’ social skills. However, similar issues were addressed in a more general sense. Moreover, their opinion regarding group activities and how they organise them were also explored. Their propositions, reflections and insights served as guidelines for developing the CL model. By discussing these issues with the teaching staff, I had the chance to ‘triangulate’, along with the observations, practitioners’ beliefs about the issues under investigation.

In Cyprus, the interviews with the four practitioners took place on the same day based on the school's time schedule. Similarly, in England all the four interviews took place on the same day as well. The interviewees, the place that the interviews took place and their duration are presented in table 4.1. The interviews were conducted in a relaxed and friendly atmosphere. A trustful and friendly relationship had already been established with the interviewees after approximately three months of almost daily contact with them and all of them gave me the impression that they were in the mood to talk and share their opinions and understandings with me. The interviews in the Cyprus school were conducted in Greek.
Table 4.1: Details of the interviews of phase one

<table>
<thead>
<tr>
<th>Participants</th>
<th>Place</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>Head’s office</td>
<td>30 minutes (approximately)</td>
</tr>
<tr>
<td>Teacher</td>
<td>Teacher’s classroom</td>
<td>40 minutes (approximately)</td>
</tr>
<tr>
<td>TA1</td>
<td>Cooking room</td>
<td>20 minutes (approximately)</td>
</tr>
<tr>
<td>TA2</td>
<td>Cooking room</td>
<td>20 minutes (approximately)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participants</th>
<th>Place</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>Head’s office</td>
<td>30 minutes (approximately)</td>
</tr>
<tr>
<td>Teacher</td>
<td>Conference room</td>
<td>30 minutes (approximately)</td>
</tr>
<tr>
<td>TA1</td>
<td>Conference room</td>
<td>30 minutes (approximately)</td>
</tr>
<tr>
<td>TA2</td>
<td>Conference room</td>
<td>45 minutes (approximately)</td>
</tr>
</tbody>
</table>

4.4 Analysis procedures of phase one

The analysis of the interview and observation data involved five levels. The first four levels were conducted within each case (i.e. Cyprus and English class) and the final level proceeded to cross-case analysis. The preparation for the first level of analysis for the observation data involved transcribing the field notes in a narrative way. The Cyprus observation transcripts were written in Greek. Some of them were later translated to English, to enable my supervisors to reflect on them and make comments regarding my interpretations. Immediately after each class visit I prepared a transcript of the field notes. While preparing and editing the transcripts I also took brief notes on the margins of the text regarding some patterns of the participants’ behaviour and their interactions or the sequence of several events. During this process and due to time limitations (I was still collecting data) I had no clear intentions except to become more familiar with the data, since, at this stage, data seemed to be very fluid. This strategy proved to be eventually very important, since it gave me the chance to get to know each participant better, their likes and dislikes and their patterns of reactions in specific situations. In other words, this procedure allowed me to build a picture for each pupil and identify possible common features or contradictions among the participants. In this first stage, I did not intend to make any interpretations beyond what was directly ‘observable’ from the transcripts. Each observation transcript was dated, the lines were numbered,
and the right margins were extended to leave enough space for coding notes. This resulted in approximately 200 observation transcripts, approximately 100 transcripts from each class. The subjects of the lessons observed in each school are presented in table 4.2.

**Table 4.2: Subjects of lessons observed in each school**

<table>
<thead>
<tr>
<th>Cyprus class</th>
<th>English class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numeracy</td>
<td>Numeracy</td>
</tr>
<tr>
<td>Literacy</td>
<td>Literacy</td>
</tr>
<tr>
<td>Craft</td>
<td>Craft</td>
</tr>
<tr>
<td>Music</td>
<td>Music</td>
</tr>
<tr>
<td>Gymnastics</td>
<td>Gymnastics</td>
</tr>
<tr>
<td>Snack time</td>
<td>Snack time</td>
</tr>
<tr>
<td>Personal care</td>
<td>Circle time</td>
</tr>
<tr>
<td>Cookery</td>
<td>Active start</td>
</tr>
</tbody>
</table>

Similar procedures for analysis were used for the interview data as well. The preparation for the first level of analysis involved transcribing the audio recordings from the interviews. Transcribing is a critical stage in research because there is a potential for data loss, reduction or distortion (Cohen et al, 2007). In this study the audio recordings were transcribed with accuracy, using the participants' exact wording. Punctuation marks, such as full stops, commas, three full stops in a row to indicate moments of silence, question marks or exclamation marks were also used in order to represent as much as possible the meaning that participants attributed to their words during the interviews. Moreover, the transcripts were double-checked against the original recordings to avoid any misinterpretations. Each interview transcript was named by the pseudonym of the interviewee, the lines were numbered, and the right margins were extended to leave enough space for coding notes.

The data analysis procedures of both observations and interview data were based on two different analysis approaches. Due to the great volume of the collected data, the first level of analysis was based on the 'relying on the theoretical propositions' strategy (Yin, 2009, p.130), letting the theoretical propositions and the research questions of the study guide the analysis. The rest of the analysis levels, however, were based on an inductive approach, allowing new concepts, categories and themes to emerge from the raw data.
The ‘relying on the theoretical propositions’ strategy and inductive analysis, although they are two different approaches to analysis, they complement each other. By keeping the claims made by Benaquisto (2008) in mind, existing ideas were kept and at the same time I stayed alert to the possibility of new emerging themes. Figure 4.1 demonstrates the first four levels of analysis and a discussion follows.

**Figure 4.1: The four levels of data analysis procedures for phase one**

The first level of analysis, as mentioned above, was based on the ‘relying on the theoretical propositions’ strategy (Yin, 2009, p. 130), where the researcher allows the theoretical orientations of the study to guide its analysis. Therefore, all the observation transcripts were divided firstly into two very broad categories. I named the first one ‘individual work’ and included activities where the pupils had to work individually with the help of an adult. The second category, ‘group work’, included all kinds of activities where children were expected to work together, either working in pairs or in larger groups or even the whole class as a group. The reason for doing this division was because one of the aims of this phase was to design an open-to-amendments CL model for the pupil participants. Therefore, separating the data at the beginning was helpful in order to identify strategies and tools used for group work. Four box-files were used, two (group work and individual work) for each class. I could not term the group work as CL since the group activities observed in the first phase were not considered to be CL activities for reasons explained later in the findings in section 4.5.5. Each group (i.e. individual and group work) was separated into six
sub-groups in accordance to where the emphasis was placed on every activity (see figure 4.1: First level of analysis); for example, emphasis placed on social skills, or cognitive skills, motor skills or social and academic skills, or motor and social skills and so on. Since one of the main intentions of this phase was to explore teaching strategies that promote social skills, I believe that this kind of division was necessary in order for me to stay focused on the aim of the study. Similarly to the observation data, in the interviews first level of analysis, extracts that referred to group or individual work were highlighted with two different colours in each transcript and brackets were used to group together what the staff said regarding social, cognitive, motor skills and so on. The categorisation of the data into areas of skills was not a neat process, since the teachers focused on a variety of areas of skills in every session and the focus on the areas of skills was not always clear-cut. The interpretation of which skill areas the emphasis was placed on was based on a combination of my understandings along with the understandings of the two teachers, since I had a brief discussion with them at the end of every session about this issue (see section 4.3.1 for specific questions asked to the teachers). The initial categorisations are illustrated in Appendix 8.

The first level of data analysis described above was descriptive rather than interpretive, mainly indicating what was explicitly observable from the transcripts. The second level of analysis involved coding and it was more interpretive in nature. Therefore, inductive coding took place with close text reading of the observation transcripts. I started coding the variety of actions, reactions, instructions, responses, interactions, communication acts, and so on, of the participants by labelling different segments of the text, marking by hand through the text and in the right hand margins and between the lines. Different colours of pens were used during this procedure, although, the different colours were not representing clearly different groups of codes at that moment, since the data were still fluid. However, the different colours were indicating different aspects during a lesson such as feelings (e.g. excitement, affection, discomfort), instructions, prompting, rewards and so on. Since my intention was to construct knowledge and understanding about the phenomena under study along with participants, I took into consideration, during coding, the notes I had made after the end of each lesson about the participants' views of the lessons
(see section 4.3.1). Having participants' own words stating their perspectives about each activity was helpful information and made me more confident that the understandings about a variety of practices were indeed co-constructed among myself and the participants.

During the interviews' second level of analysis, inductive coding took place as well. Consideration was given to the embedded meanings and the identification of sections of the texts that held meaningful units. Therefore, codes were generated for these sections and attached to 'chunks' of text of varying sizes (Miles & Huberman, 1994, p.56), assigning a description of my first interpretations. Different colours of pens were used as well, indicating different issues discussed during the interviews such as social skills, social competence, teaching strategies, teaching tools and so on.

The third level of analysis involved organising the second level of analysis (i.e. codes) into broader, more abstract categories. Therefore, the third level of analysis (i.e. categories) was more interpretive in nature, focusing on the meanings of the labelled segments, by marking in the right hand margins as well, using, however, more 'chubby' pens of different colours to avoid confusion. Following this, I wrote all the categories of the third level of analysis in new documents and displayed under these categories the codes created in the second level of analysis along with the segments from the texts. Therefore, data were re-organised in 35 categories. Table 4.3 illustrates the categories which emerged from the third level of analysis. Moreover, while categorising, reflective memos about my thoughts and how these categories connect and link to each other were taken and written on post-it notes attached to the relevant documents. According to Groenewald (2008), memos reinforce the credibility and the trustworthiness of qualitative research and provide a record of the meaning of the data. Appendix 9 shows an example of transcribed data with the second and third level of analysis (i.e. coding and categorisation).
Table 4.3: Categories which emerged in the third level of analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Off-task</th>
<th>On-task</th>
<th>Delayed prompts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excitement/ Enjoyment</td>
<td>Functional instructions/ guidance by adults to pupils</td>
<td>Functional instructions/ guidance by pupils to peers</td>
<td>Pupil's assistance to peers</td>
</tr>
<tr>
<td>Off-task</td>
<td>Excitement/ Enjoyment</td>
<td>Functional instructions/ guidance by adults to pupils</td>
<td>Pupil's assistance to peers</td>
</tr>
<tr>
<td>Immediate prompts</td>
<td>Aggressiveness</td>
<td>Adult's assistance to pupils</td>
<td></td>
</tr>
<tr>
<td>Delayed prompts</td>
<td>Distracted</td>
<td>Pupil's assistance to peers</td>
<td></td>
</tr>
<tr>
<td>Prizes as a motivation</td>
<td>Discomfort</td>
<td>Pupils responding to adult's communication efforts</td>
<td></td>
</tr>
<tr>
<td>Content of the activity/activity itself as a motivation</td>
<td>Initiation of interaction by adults</td>
<td>Pupils responding to peer's communication efforts</td>
<td></td>
</tr>
<tr>
<td>Verbal rewards</td>
<td>Initiation of interaction by pupils to adults</td>
<td>Pupils not responding to adult's communication efforts</td>
<td></td>
</tr>
<tr>
<td>Negative reinforcement</td>
<td>Initiation of interaction by pupils to peers</td>
<td>Pupils not responding to peer's communication efforts</td>
<td></td>
</tr>
<tr>
<td>Real contexts</td>
<td>Adult's instructions for interaction with pupils</td>
<td>Concrete materials as equipment</td>
<td></td>
</tr>
<tr>
<td>Imaginary contexts</td>
<td>Adult's instructions for interaction between peers</td>
<td>Other materials as equipment</td>
<td></td>
</tr>
<tr>
<td>Sleepy/ Quiet</td>
<td>Adults’ encouragement for pupils to express opinion</td>
<td>AAC equipment</td>
<td></td>
</tr>
<tr>
<td>Not pushing pupils to work individually</td>
<td>Not pushing pupils to work together</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The fourth level of analysis involved an interpretation of all the third level (i.e. categories), exploring the relationships and connections between them and narrowing down the categories to broader themes. At this level of analysis the categories from the interviews and observation data from each case were brought together to create together the themes for each case. At this level the labels of the themes used were usually borrowed from the theoretical propositions found in the literature. Table 4.4 illustrates how some extracts of the observation and interview transcripts were initially coded, then categorised and then grouped into a theme.

Table 4.4: An example of the second, third and fourth level of analysis

<table>
<thead>
<tr>
<th>Raw data</th>
<th>Codes (1st level analysis)</th>
<th>Categories (2nd level analysis)</th>
<th>Themes (3rd level analysis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>'The teacher tells him to hi-five Vicky' (Observation raw data)</td>
<td>peer bonding</td>
<td>Adults’ instructions for interactions between peers</td>
<td>Aspects of communicative approach</td>
</tr>
<tr>
<td>'Do you want to help Kim count the people in the class?' (Observation raw data)</td>
<td>encouragement for peer assistance</td>
<td>Adults’ encouragement for pupils to express opinion</td>
<td></td>
</tr>
<tr>
<td>'to help the children communicate' (Interview raw data)</td>
<td>pupil communication</td>
<td>Adults’ encouragement for pupils to express opinion</td>
<td></td>
</tr>
</tbody>
</table>
In the fourth level of analysis, concept maps were created as well in an effort to conceptualise these broad themes and their categories. Appendix 10 presents an example of such a concept map created for the theme of group activities. Such concept maps enabled a visual reading of all the levels of analysis and provided a coherent view of the broad themes. Moreover, they enabled me to have a top-down and at the same time a bottom-up view of my findings. In addition, at this level of analysis a 'pattern matching' strategy was used, as described by Yin (2009), to compare the themes and their sub-categories with the theoretical propositions of the literature. For example, in the concept map given in the appendices about group activities, some categories such as rewards and reinforcements matched with the theory, but at the same time incorporated other characteristics, such as not pushing pupils to work together that emerged from the inductive analysis and were not included in the theoretical propositions. These differences or similarities with the theoretical propositions, as shown in the example given in the appendix 10, were noted on post-it notes attached to the concept maps.

The fifth level of analysis involved a cross-case analysis by combining the themes of the two cases (i.e. the two classes). This cross-case analysis involved an exploration of the themes created from the data of each setting and the construction of a coherent theoretical proposition. Miles and Huberman (1994) suggest that cross-case analysis enhances generalisability and deepens the understanding under study. This cross-case analysis was mainly a 'variable oriented' approach (Miles & Huberman, 1994) based on the analysis of the major themes (see findings section). Therefore, meta-concept maps were created by bringing together the categories of similar themes of each case. Appendix 11 presents a meta concept map of the group activities. The main reason for choosing the variable oriented strategy lies on the aims and purposes of this study. The study's aim was not to provide a comparison of the practices of the two classes. Rather it aimed to develop an understanding of what teaching approaches were employed in the two settings, how they were implemented and what strategies were used during group activities. Therefore, a variable oriented approach seemed appropriate. Moreover, another reason for choosing this approach rather than a case-oriented one was because no major differences regarding the staff's views and implementation of approaches and
strategies had emerged. However, inevitably during the creation of meta-concept maps (i.e. bringing the categories of each similar theme of each case together), some case-oriented differences emerged that are presented and discussed in the findings section, along with the overall presentation of the themes. Consequently, by bringing together the themes of each case, the intention was to give answers to the research questions of phase one. For that reason, the themes were separated into three main dimensions (a) social skills, b) teaching approaches that promote children's social skills and c) group activities. Each dimension corresponded to the relevant research questions. All the themes of these three dimensions are presented in the findings section of this chapter.

As mentioned already, one of the aims of the study was to develop an open-to-amendments CL model for phase two. Therefore, the meta-concept map of group activities (see appendix 11) created in the cross-case analysis was explored and combined with the one created in the literature review chapter (see figure 2.3) through a pattern matching approach. Based on this exploration the initial characteristics of this ‘working’ CL model emerged that combined aspects of both bases (i.e. theoretical and empirical). The open-to-amendments CL model is presented in the findings section in figure 4.3. To conclude, figure 4.2 indicates all the five levels used for data analysis.

Along with the observations and interviews some of the documents relevant to the aims and objectives of the schools were taken into consideration as well. As mentioned in section 3.6.3 these documents were not analysed in a systematic and rigorous way, rather they were treated as a supportive source of data. A deep insight about the background and objectives of the schools was achieved through my everyday interactions and conversations with the participants and not just through a reading of typical documents.
Figure 4.2: The five levels used for data analysis
4.5 FINDINGS

In this section the findings which emerged from the interviews and observations are presented. Evidence appears in each subsection, using extracts and citations from the observations and staff participants' own words from the interviews. The country of each setting and the number and date of the observation are included in brackets at the end of each excerpt. Similarly for the interviews, each participant's pseudonym, country and occupation are mentioned, before presenting their own words.

4.5.1 Introduction

As mentioned in section 4.4 themes from different categories were grouped together to answer the research questions and the additional aim of phase one.

Research questions and additional aim of phase one

1) What constitutes social skills for the practitioners in the two special schools in England and Cyprus?
2) What teaching approaches do the teachers in the two classes usually utilise for developing the social skills of their children?
3) How do these teachers implement CL in the classroom?
4) Additional aim: Develop an open-to-amendments CL model for phase two

This resulted in four main topic areas, each one corresponding to the above research questions. The purpose of this phase was not to identify what works best in terms of teaching approaches and strategies, rather to explore what and how different kinds of teaching approaches and strategies are implemented in these two settings, in order to develop an initial CL model for the pupils. Moreover, an additional topic area was created. This topic area derived from the examination of the documents of each school regarding their aims and aspirations. It can be considered as a supportive topic area and briefly summarises the main ideology, aims and ethos of the two schools to shed more light in understanding their beliefs and attitudes towards the notion social skills, teaching approaches that promote social skills and CL activities. In concluding, this resulted in five main topic areas. Table 4.5 illustrates the five main topic areas in relation to the research aims and questions of phase one.
Table 4.5: Main topic areas and the corresponding research aims and questions

<table>
<thead>
<tr>
<th>Main topic areas</th>
<th>Research questions and aims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools' aims and purposes</td>
<td>Documentation</td>
</tr>
<tr>
<td>Social skills</td>
<td>Answering research question 1</td>
</tr>
<tr>
<td>Teaching approaches for social skills</td>
<td>Answering research question 2</td>
</tr>
<tr>
<td>CL</td>
<td>Answering research question 3</td>
</tr>
<tr>
<td>Initial proposals for a CL model</td>
<td>Additional aim</td>
</tr>
</tbody>
</table>

There has been an effort to preserve participants' understandings and perceptions as much as possible and I believe that the following sections present a co-constructive understanding of reality between them and myself. The presentation of the findings has been carried out by citing participants' own words and actions, in an effort to represent their voice and actions along with mine. Some comparisons between the two different settings were made, although the main aim was not to compare the practices of the two classes, rather to identify the different kinds of perceptions about social skills and practices in the two classrooms and their implementations. Brief details about the participants of the two schools are given in the following two pages, in tables 4.6 and 4.7. The names of the participants have been changed to preserve their anonymity. These tables are provided to give a general idea about each participant and the basic characteristics of the pupils.
Table 4.6: Introducing the Cyprus school participants of phase one

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Characteristics¹</th>
<th>Condition²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicky</td>
<td>11</td>
<td>Sociable and talkative girl, seeks and enjoys attention, does not always obey instructions, sometimes cries and shouts without expressing what she needs, walks without assistance.</td>
<td>Autistic characteristics, verbal difficulties, difficulties with fine motor skills</td>
</tr>
<tr>
<td>Melina</td>
<td>12</td>
<td>Sociable and talkative girl, follows classroom routines, walks without assistance.</td>
<td>Brain dysfunction</td>
</tr>
<tr>
<td>Tina</td>
<td>15</td>
<td>Smiley girl, enjoys school time and obeys instructions and daily routines, she does not talk most of the time and points with her hand as a mean of communication, walks without assistance.</td>
<td>Down Syndrome, severe mental retardation, selective mutism, moderate difficulties in motor skills</td>
</tr>
<tr>
<td>Marcus</td>
<td>11</td>
<td>Talkative and smiley boy, sometimes finds it difficult to obey classroom rules and instructions, walks without assistance.</td>
<td>Severe mental and verbal retardation, epilepsy, difficulties in fine motor skills, moderate hearing impairment</td>
</tr>
<tr>
<td>Andreas</td>
<td>11</td>
<td>Enjoys working with peers, likes attention and communicating with others, is hyperactive and sometimes finds it difficult to obey classroom rules and instructions, walks without assistance and uses pointing and cards as means of communication.</td>
<td>Mental and verbal retardation, moderate hearing and visual impairment</td>
</tr>
<tr>
<td>Aris</td>
<td>8</td>
<td>Smiley boy when he is happy, but cries and lies on floor when he has to do something he does not want to, he says some words but he uses pointing as a form of communication, walks without assistance</td>
<td>Severe mental and verbal retardation, difficulties in fine motor skills</td>
</tr>
</tbody>
</table>

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¹ Descriptions used as found in their Individual Educational Plans
² Terms used as found in the Individual Educational Plans
Table 4.7: Introducing the English school participants of phase one

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Characteristics</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kim</td>
<td>6</td>
<td>Sociable girl, likes to talk and follows instructions with a pleasant manner. Uses powered wheelchair that she operates herself</td>
<td>Cerebral palsy, verbal difficulties</td>
</tr>
<tr>
<td>Katelyn</td>
<td>8</td>
<td>Smiles a lot and obeys classrooms rules with a pleasant manner. Uses powered wheelchair, operated by staff. Uses eye pointing and Big Mac and communication board as main forms of communication</td>
<td>Cerebral palsy, severe verbal difficulties</td>
</tr>
<tr>
<td>Rachel</td>
<td>7</td>
<td>Sociable girl, sometimes finds it difficult to follow the classroom rules. Uses Makaton signs as the main form of communication</td>
<td>General developmental delay, severe verbal difficulties</td>
</tr>
<tr>
<td>Lisa</td>
<td>6</td>
<td>Sociable and talkative girl, follows classroom rules with a pleasant manner. Visits the school only on Fridays mainly for the physiotherapy session. Uses a wheelchair that operates herself</td>
<td>Cerebral palsy</td>
</tr>
<tr>
<td>Tim</td>
<td>9</td>
<td>Sociable and talkative boy, obeys classroom rules. Uses a powered wheelchair that he operates himself. Apart from talking uses Makaton signs as a mean of communication</td>
<td>Cerebral palsy, verbal difficulties</td>
</tr>
<tr>
<td>Chris</td>
<td>9</td>
<td>Due to medication he is sleepy most of the time and this has an impact on his responsiveness to stimuli as well. Uses BigMac and arm moving as means of communication. Uses a powered wheelchair operated by staff</td>
<td>Identified as having profound and multiple learning difficulties and visual impairment</td>
</tr>
<tr>
<td>Gar</td>
<td>8</td>
<td>Sociable boy, follows classroom routines with a pleasant manner. Uses eye-pointing as a mean of communication. Uses a powered wheelchair operated by staff</td>
<td>Cerebral palsy, severe verbal difficulties</td>
</tr>
<tr>
<td>Richard</td>
<td>7</td>
<td>Sociable and smiley boy, follows the classroom rules with a pleasure manner. Uses Makaton signs as a main mean of communication</td>
<td>General developmental delay, hearing and visual impairment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joanna (EH)</td>
<td>Head teacher</td>
</tr>
<tr>
<td>Linda (ET)</td>
<td>Teacher</td>
</tr>
<tr>
<td>Helen (ETA1)</td>
<td>Teaching Assistant</td>
</tr>
<tr>
<td>Tiffany (ETA2)</td>
<td>Teaching Assistant</td>
</tr>
</tbody>
</table>

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3 Descriptions used as found in their Individual Educational Plans
4 Terms used as found in the Individual Educational Plans
4.5.2 Schools' aims and purposes
This brief section provides a summary of the main aims of the two schools, based on their documents. Both settings were primary special schools, however, the English school accommodates pupils from the age of 2 to 12 and the Cyprus one from the age of 6 to 21. Both schools comply with their National Curriculum provision for pupils identified as having SLD. Educational legislation in both countries suggests that pupils with severe and significant difficulties should have access to the national curriculum and teachers should apply every effort to adjust these curricula to their individual and unique needs and abilities. Beyond this similarity, in terms of legislation agendas, the two schools appear to have some differences regarding their aims and aspirations.

The English school, according to their documents, suggests that their overall aim is to provide each child with a challenging environment in which they can develop confidence as individuals, be accepted as members of the school community and as part of the wider world. Moreover, they highlight the importance of listening to children and opportunities are made to talk and listen to them. Children are encouraged to communicate with staff and they will take on an advocacy role, where appropriate, particularly in the cases of children with more severe difficulties who are unable to voice their own views clearly. On the other hand, the Cyprus school suggests that their overall aims are to offer to their children the basic education and help them develop their 'mental potential' to the highest possible degree. Moreover, they value as significant importance to assist their children to become as self-reliant and independent as they possibly can.

It is apparent that there is a differentiation among the primary aims of the two schools. The English school sets as a priority pupils' entitlement to their own voices and opinions and it also points out the importance of assisting the pupils to be accepted as members of the school community, whereas the Cyprus school sets as a priority to facilitate pupils to be as much self-reliant as possible. A possible reason for this differentiation in the aims and purposes of the two schools might be the fact that the Cyprus setting was a special school for pupils identified as having SLD, whereas the English setting was a school for pupils identified as having significant physical difficulties. The fact that the pupil participants in the English classroom experience significant physical difficulties
in addition to SLD, may affect the aims of the school. Individuals who experience significant physical difficulties may never be physically able to be self-reliant, where as individuals who do not experience significant physical difficulties (i.e., the Cyprus pupil participants) may be able to fulfil their practical, functional/life needs independently in the long run. Nonetheless, how these views affect and interrelate to the daily school practices and practitioners' beliefs and attitudes are pointed out throughout the following sections.

4.5.3 Social skills

Identifying all the different attitudes and understandings relating to social skills as derived through the interviews and classroom observations was a really interesting procedure for me. At the beginning of the data collection journey, I had in mind as a guidance the working definition of social skills and social competence that emerged from the literature review (see section 2.3.3):

*Social skills* are behaviours demonstrated in specific situations by taking an active role in a social interaction. These behaviours reward others for being with you, while showing an enjoyment and desire to be with others. *Social competence* deals with the expectations of the outcomes of these behaviours. Parents, teachers and peers are the people that would decide whether these social outcomes are important, positive and functional, based on their own expectations.

The reason for having this definition as a guidance is because it can accept a variety of interpretations of how social competence can be perceived, which might be personally and culturally situated. Therefore, I believe that since I explored two different culturally settings, having a definition open to many interpretations as a guidance enabled me to be open and redefine my own perceptions of social skills, and construct along with the participants what might be defined as aspects of social skills in the two settings. Section 4.5.3.6 presents a new, revised definition for social skills as it emerged based on the findings of this phase.

The following two subsections deal with the data interpretations derived from the interviews. Following this, staff’s views regarding social skills are compared with their actual practices in the other two subsections.
4.5.3.1 Staff perceptions about social skills: Ability to communicate, interact and comply with classroom rules.

The words 'communication', 'interaction' and 'follow classroom rules' were the basic key elements to which the staff referred when describing their notion of social skills.

For example Linda (ET) mentions:
"(the pupils) communicate back to me is very important. Using the Makaton, the symbols, everything to help children's communication with adults and peers... social skills is when children interacting with people around them (...) and follow the rules of the classroom".

Similarly Joanna (EH) mentions that social skills are "to interact with other people and listen to what the teacher asks you to do". Sophia (CT) suggests that it "is about children communicating with each other not just with adults and only when they are being asked to do so (...) to listen to the teacher, accept the instructions that I give them."

Lea (CTA1) mentions that social skills are about pupils "communicating what they think and what they want to do politely (...) they have to respond to what the teacher says".

It is clear from the given examples above that when staff refers to social skills they highlight not merely the ability to interact but to comply with the rules of the classroom as well.

4.5.3.2 Staff perceptions of social skills: Desire and enjoyment to communicate and using good manners.

The staff from both schools considered that it is of vital importance for the pupils not merely to demonstrate an ability to interact and communicate, but express this ability by showing a desire and enjoyment to do so by being polite and respectful to the people around them.

Marina (CH) mentions:
"Social skills are related to having good relationships with people around you. (...) a kid to be able to see someone and smile at him. This is the first thing. That means he accepted him, that he is in a mood to communicate in any way
(...). To be comfortable when they talk to them and be able to react in any way they can."

Sophia (CT) seems to share similar views:
"When you ask something from a child and he responds to your request, or the child asks something nicely from you. To show to you that he wants to communicate, even a smile is important."

Later on in our conversation when I asked her what exactly she means by saying 'nicely' she said "to wait for their turn, to respect others, to ask for their help or to join them in play, to reward others."

Helen (ETA1) says that social skills are "good behaviour and manners, and to interact with others in a positive way." Similarly Lea (CTA1) mentions that "demonstrating a good behaviour is very important. (...)just demanding things is not the thing."

Linda (ET) mentions that social skills "is when children interact with people around them, and the way they interact, are they being polite, are they using manners."

Joanna (EH) shares similar views: "Getting along with other people (...) to interact with other people, to know how to behave, to disagree politely". Helen (ETA1) mentions that it is important for a pupil to be "polite and respectful to others."

By summarising the above perceptions the teaching staff seem to have the same expectations when using the terms good behaviour and agree that social skills is about pupils demonstrating enjoyment when being around others as well as showing a desire and ability to interact with others.

4.5.3.3 Self-dependence and self-care versus communication, interaction and pupils expressing their opinions

The Cyprus staff considers the issues of self-dependence and self-care aspects of social skills as well. Although Sophia (CT) did not mention these two issues when discussing about social skills, she mentioned them when we talked about teaching approaches that promote social skills. She argues that children should be:
“(…) as much independent as possible (…) (a child should) be able to use public transportation, with assistance of course, or be able to shop from a supermarket or a convenience store, or order something in a restaurant, make simple meals, a sandwich for example (…)”.

Similarly, Marina (CH) argues that:

“(…) helping children to be able to take care of themselves, to be independent… to be able to use spoons or make breakfast… children should be able to take care of themselves as much as they can… even asking water or toilet is part of self-care. By self-care I don’t mean that the children should be able to take care of himself completely on their own… but you know… to be able to express their basic needs and satisfy them by themselves as much as they can."

While talking with Katrina (CTA2) about social skills she mentions that “teachers should place a great emphasis on helping children be independent. Self-reliance is what the children have to work on the most”.

The issues of self-dependence and self-care seem to be dominant during the everyday activities of the Cyprus school. The teacher seems to put great emphasis on these issues in the daily routines of the class. On the contrary, the teacher from the English school appears to place more emphasis on aspects of communication and interaction and pupils expressing their opinions. This differentiation is apparently rooted in the general ideology of the two schools, as discussed in section 4.5.2, which seems to affect some of their daily routines.

For example, in the Cyprus class, the children have to brush their teeth, wash their face and comb their hair every morning. This is the target of the first activity of the school day, called ‘personal care’. Below is presented an extract of an observation of this daily routine to give a clear idea of this daily-based activity. During this activity the staff mainly gave instructions, guidance and assistance to the children to complete their individual tasks (i.e. to brush their teeth).

(...) Lea (CTA1) asks Marcus to pick his tooth brush(...)Marcus is brushing his teeth and Lea (CTA1) rewards him and instructs him ‘Good boy, Marcus! Clean the inner teeth, as well.’ (...) Andreas goes to the sink and starts brushing his teeth without prompting. Lea (CTA1) rewards both Marcus and Andreas.
The teacher approaches him (Aris) and says 'Good morning'. Aris smiles and makes happy vocalisations (...) (She asks him) to brush his teeth (...) (Aris) picks his tooth brush and waits for Andreas to finish. Andreas looks at him and touches his head. Aris giggles. Lea (CTA1) rewards them for saying 'Good morning' to each other: 'What kind boys you are!' Andreas touches her head as well and Lea (CTA1) tells him 'Good morning to you too!' (...) Andreas is still brushing his teeth, so Aris watches him and waits patiently(...) Lea (CTA1) helps Aris to brush his teeth, who seems that he does not enjoy it and pushes her back gently. Lea (CTA1) tells him "A little be more and we are done, sweetie' (CY,OB1, 4th Apr. 2011).

Moreover, every day in the Cyprus setting, the children prepared their own snack, usually a sandwich. The children sat around the table, the teacher put all the necessary ingredients in the middle of the table and with the help and guidance of the staff they prepared their own snack. Although all the children were sitting together there was not much interaction among them since the aim of the teacher for this particular activity was to help them develop the necessary skills to be as independent as possible when preparing and eating their snack. The staff prompts and rewards were mainly to an individual level. When any of the children had a difficulty, the teacher encouraged them to keep trying and she did not prompt pupils to help each other.

On the other hand, in the English school, the first period of the day was 'Circle Time' where children said 'Good morning' and waved to each other and shared their news. The children sat in a circle and the teacher sang the 'Good morning' song to each child individually. The child replied back and then he waved to the rest of the class or chose a specific classmate to 'pass' the 'Good morning' to. Following this, the children shared their news. In their individual communicational devices, the parent recorded a highlight of the previous day, the pupil played it in the class and the teacher initiated a conversation relevant to the event that the parent had mentioned and prompted the rest of the children to participate in the conversation. Moreover, during snack time, the children had a snack served by the staff and during the rest of the break were encouraged to play together. One extract of such practices are presented
below. It took place during ‘Sharing news’. This example demonstrates the teacher's encouragement to the pupils to express to each other their opinions.

(…) Then it’s Rachel’s turn (to share her news). Linda (ET) asks her if she wants to share her news. Rachel nods “No”. Linda (ET) says that she is really curious to find out who left a massage on her Big Mac today, and asks the children if they think that it's her dad! Tim says “Nooo!!” Then she tells Rachel that Tim does not believe that it is your dad and prompts her to press the button to see who left the message. Rachel nods “No”. She asks her if it is OK with her for Richard to press the button instead of her. Rachel looks at Richard and nods “Yes”. Richard looks at the teacher and smiles and Linda (ET) asks Richard to press the button for her. Richard presses it and giggles. (…) (EN, OB1, 9th June, 2011)

These examples demonstrate that the teachers' understandings about social skills as discussed above had a different focus. The Cyprus teacher emphasised those skills that would enable pupils to be independent as much as possible, whereas the English teacher focused on those skills that would enable pupils to communicate and express their opinions to each other.

4.5.3.4 Communicating and interacting with adults and peers /Peer relations: random or consistent?

Another issue that arose was that of initiation of interactions. Staff in both schools seemed to share the same view that it is equally important for a pupil to initiate and react to a call of interaction. Moreover, the staff of both schools shared similar views and considers it equally important for pupils to interact with both peers and adults.

Sophia (CT) has a clear view that social skills do not merely imply a child "to do what has been asked to do (…) but to be able and be in the mood to request things politely (on her own)". Later in the conversation she suggests that "…it is about children communicating with each other not just with adults (…)"

Linda (ET) supports that social skills are about communication "(…) and not just with adults, but with peers as well".
Joanna (EH) mentions that "succeed together" is an essential aspect of social skills and she explains that in order for children to succeed in something together they have to make "equal efforts to communicate with each other". Lea (CTA1) mentions "interacting with others is the most important thing! And that includes everything! And by saying interacting I mean not just a child to do what they have been asked to by the teacher, but to ask things on his own as well".

The matter of initiation of interaction and willingness to communicate, based on the observation analysis, appears an interesting similarity in both classes. While separating and categorising all types of interactions (e.g. initiations of interactions by pupils to pupils, or by pupils to staff, or by staff to pupil) I noticed that when the children worked within the context of daily routines and daily habits of the class, they were much more active and more frequently initiated interactions and communication acts among them and with the staff; whereas when the children worked together but during practices that did not take place on a daily basis in the class, the initiation of interactions was dominated by adults.

For example, in the Cyprus school, the children left their classroom on a daily basis to go to the music or gymnastic rooms, or to go to the yard for the school breaks, and they had to walk there by holding hands in pairs. The pairs were consistent and set by the teacher at the beginning of the year. Every time the teacher asked them to get ready for music or gymnastic sessions or for the school break the children sought each other's partner without being prompted by the teacher to do so. Similar incidents took place during the music sessions. Children at the end of the lesson had to sit down in a circle, close their eyes and hold hands while listening to a relaxing music. Whenever, the teacher said 'Time for our circle!', children sat down without any prompts and took each other's hands. Of course, sometimes prompting on an individual level was necessary, for example: "Come on, Vicky, we are all waiting for you!" or "Aris, sit next to Melina, she is waiting for you". There is a variety of such examples. Below, there are presented two extracts from the Cyprus observations of such examples during the brunch time. Each child made their own sandwich with as minimum assistance as possible, during that time. However, there were some individual procedures for some children that had to be followed. For example, the teacher usually cut the outer hard part of the sliced bread for Andreas, or
she cut Aris’ sandwich into small pieces to help him eat with a fork. Below are presented two instances, where the teacher apparently forgot to help them with their sandwiches and the children communicated their needs by asking the teacher to help them.

(...)He (Andreas) looks at her (the teacher) and points to his sandwich. The teacher smiles and apologises to him for forgetting and cuts for him the outer part of the bread slices, while rewarding him for reminding her. (CY, OB3, 22nd Feb, 2011)

(...)Everybody’s eating apart from Aris. He looks around; then he stares at the teacher and raises his hand that holds the fork and with his other hand points to the fork. Teacher approaches him and asks him if everything is OK. Aris points to the fork again. Teacher says ‘I forgot to cut your sandwich, sweetie! I’m sorry. Well done for asking me!’ and she cuts his sandwich .(CY, OB3, 28th March, 2011)

Similar incidents took place on a daily basis in the English school as well. For example, everyday, after ‘Circle time’, they had an activity called ‘Active start’, where the children carried out simple exercises, usually stretching while listening to music. Some children had to work individually with the help of the staff and some others had to work in pairs or triads. The groups were set by the teacher at the beginning of the year. Usually when the teacher announced to the children that it is ‘Active start time’, the children approached each other or the more ambulant peer approached his partner, and held hands without prompting. During the dance they needed minimum guidance, mostly used as a reinforcement to keep up with the exercise. Such an example is presented below with an extract of such activity.

(...)Then Linda (ET) plays the ‘Maraca’ song on the CD player. (...) Rachel approaches Chris without prompting and touches his hand. Helen (ETA1) rewards her for being such a good friend and helps her to hold his hand. With the other hand she plays the maraca. (...) Linda (ET) rewards both Chris and Rachel for being such good dancers. (...) Helen (ETA1) tells Rachel “Come on, Rachel, move Chris arm!” Rachel becomes more active again and moves his hand more intensively. (EN, OB1, 10th June, 2011)
Another usual routine of the class was during 'snack time', where Richard used to play with Gar with bricks. Richard used to bring the bricks box on Gar's desk and play with the bricks together. Usually during 'snack time' the staff had their own break as well, so the children's free time was unstructured with not too many instructions from the staff. Yet, without any assistance children's initiation of interactions took place. Below, an example of such incidences is presented.

Richard goes to the playroom and takes the bricks box. (...) He puts it in front of Gar's desk and picks some bricks and puts the one on top of the other. Gar looks at him very carefully. He tries to grasp a brick but it falls down. Richard takes it and puts it on the top of the bricks' 'tower'. (...) Gar now holds a brick and leaves it next to the brick tower. Richard picks it and adds it to the 'tower'. (EN, OB1, 20th May, 2011)

It is important to mention two more common characteristics of the activities in which children initiated interactions apart from being embedded in the daily routines of the class. The first one is the issue of having fun. The children enjoyed all the activities described above very much. All the children in the Cyprus school liked music sessions and of course were really happy to go to the yard to play. The same thing applies to the English school as well. All the children enjoyed 'active start' or play time during 'snack time'. Moreover, these activities were meaningful to the children, since they knew the reason for doing them. These two characteristics (i.e., enjoyment and meaningfulness) are further discussed in section 4.5.4.3.

On the other hand, during practices that did not take place on a daily basis, the interactions were usually initiated by the staff in both settings, probably because the children were not familiar with the procedures. For example, in the Cyprus class after spending the previous period revising colours, the children were asked to sit in pairs and each pair had to paint a piece of canvas with a colour that they chose; later they drew something on it. There were four children in the classroom in that activity (Marcus and Aris was one pair, Melina and Tina was the other one).

The teacher asks the girls to choose a colour and Katrina (CTA2) does the same with the boys. Melina chooses pink and Marcus yellow. The teacher asks Tina to pick the pink one. She had to prompt her several times to do so and
eventually Melina picks it by herself. Katrina (CTA2) asks Aris to pick the yellow one and he picks the red. She asks Marcus if this is the yellow one and Marcus says "No". Then she encourages him to pick the yellow one and he does so (...) The teacher asks Tina to pass to Melina the bowl with the pink paint. She prompts her several times and she does it eventually. "Well done, Tina!" says Sophia (CT). (...) Katrina (CTA2) asks Marcus to put some paint on Aris' brush and he does so (...) (CY, OB4, 8th March, 2011).

This brief extract from the observation reveals that although there were forms of interaction and communication among the pupils, those were guided and initiated by the staff. The children needed a constant guidance and prompting in order to interact and help each other. A similar example derived from the observations in the English class, when children were asked to work in pairs or triads to make drawings using recyclable materials. On the previous day, the children had learned about the importance of recycling and how some useless recyclable materials can be used in order to make something else. Therefore, they had to glue different types of material on a piece of paper.

Rachel, Richard and Chris are working together with the help of Tiffany (ETA2). Richard plays with his fingers which are covered in glue. Rachel looks around. Tiffany (ETA2) asks her to choose a material and put some glue on it and give it to Chris to glue it on the paper. Rachel says "No". Tiffany (ETA2) prompted her two more times and Rachel takes the material and puts it in front of Chris without putting glue on it. Tiffany (ETA2) asks Richard to put some glue on it to help Chris glue it on the paper. Richard smiles and does so and puts it next to Chris. Tiffany (ETA2) signs to Richard "Good boy" and Richard giggles. Then she helps Chris to hold it and glue it. Rachel chews a piece of fabric and looks around. Tiffany (ETA2) asks her if she wants to put some glue on it and she does so and gives it to Tiffany (ETA2). Tiffany (ETA2) asks her to give it to Chris and she does so and Tiffany (ETA2) rewards her. Richard rolls on his desk a lid of a bottle (...). (EN, OB2, 19th May, 2011)

Therefore, activities that included procedures that the children were not familiar with resulted in interactions and communication among the pupils that took place after prompts, guidance and reinforcement by the staff.
4.5.3.5 Within and outside the school context: Generalisability of their social skills

The staff of both settings believes that social skills are not something that should take place merely within the context of the school, but outside of it as well. They highlight that communication, good manners and demonstration of enjoyment when being with others should take place outside the school classrooms as well.

While talking with Linda (ET) about social skills and the way she plans the lessons she mentioned a very interesting incident with a pupil that took place outside the school classroom:

"For example, if you look at Kim, .... the lunch lady actually said that she bumped into Kim at the weekend, at a social event at the weekend, and Kim shouted out at the lunch lady and said 'Hello' then introduced her to the three people that were with her, she was aware that, you know, the lunch lady doesn't know these people-this is so and so, this is so and so. I mean for a little girl who's six years old that's a really good thing to do and this is something we try to get across... is something very important... similar things that we do in the class a child does them outside as well."

I found this example very interesting, not merely because it was important for the teacher but because similar incidents happened twice while visiting the Cyprus school and the teacher considered them very important as well. One Saturday afternoon I was in the playground of a park with my niece when Marcus shouted at me, approached me, took my hand and dragged me to his mother who was sitting on a bench and by pointing at me he said "Maria-school!" to introduce us. When I described this incident to Sophia (CT) on the following Monday she was very excited. She explained that it is very important for her to see that pupils are able to transfer what they have learnt at school to a different context. A similar incident happened during a school trip to a farm, when the farmer asked Vicky what her name was and the name of her teacher and if she is a good girl. Vicky replied to his questions with pleasure. Sophia (CT) saw what happened, approached Vicky, and rewarded her by telling her that she made her so proud.
During the interviews the staff mentioned the importance of children being able to generalise good manners and communication acts outside the school as well. For example Joanna (EH) pointed out that good behaviour and communication is essential to take place "in classroom groups, school groups and outside the school". Katrina (CTA2) by suggesting similar views mentioned that "(...) all these (i.e. interacting in a polite and pleasant manner) should happen not only in the class during the lessons but at home as well". Linda (ET) by coupling all the above views mentioned "(...) it's about meal time experiences, social visits, it's about school community and outside of the school community, playing with peers in and out of school."

4.5.3.6 Revision of the working definition of social skills

The working definition of social skills presented in section 4.5.3 was further evolved based on the outcomes of this phase. The new definition summarises what constitutes social skills in the two settings and served as a guideline for the second phase of the study during the action research process. The new definition is presented below:

*Social skills describe the ability of the children to express their opinions and needs to others, to demonstrate a willingness and enjoyment when interacting with peers and adults, to stay engaged in those interactions in a meaningful way and finally to generalise these abilities in different contexts and contents.*

In this definition reside a variety of aspects as these discussed in the previous subsections. The first part of this definition, i.e., 'Social skills describe the ability of the children to express their opinions and needs to others', refers to those skills through which the pupils express their needs, preferences and choices. This aspect as presented in section 4.5.3.3 appears an interesting differentiation in the two settings. While in the English setting this notion was perceived as an aspect of social skills where pupils practised their right to express their opinions and preferences on issues concerning their learning experiences and lives to others, in the Cyprus setting this notion was perceived as an aspect of social skills where pupils practised the necessary skills to be as independent as possible, by expressing their needs on issues relevant with functional/life skills. This differentiation is further amplified in section 6.2.1.
The second part of the definition, i.e., 'to demonstrate a willingness and enjoyment when interacting with peers and adults' refers to pupils' ability to demonstrate willingness and enjoyment when interacting with peers and adults, by using good manners, as discussed in section 4.5.3.2.

The third part of the definition, i.e., 'to stay engaged in those interactions in a meaningful way' refers to the academic dimension of social skills, which describes pupils' ability to stay on task and engaged in an activity and to follow the classroom rules, as discussed in section 4.5.3.1.

The fourth part of the definition, i.e., generalise these abilities in different contexts and contents, as discussed in section 4.5.3.5, deals with teachers' concerns, whether pupils are able to generalise their skills gained during structured learning in other situations within and outside and outside the school context.

4.5.4. Teaching approaches for social skills
Since phase one was exploratory in nature and the theoretical foundations that underpin this study suggest that knowledge is co-constructed with the participants, my first intention, while coping with data relevant to teaching approaches, was to make sure that a common understanding was constructed of why and how the observed teaching approaches were implemented. Therefore, in this section, findings regarding staff's perceptions of teaching approaches, how they were implemented in practice and whether there was any kind of differentiation regarding teaching approaches for the social, motor and cognitive skills of the pupils are presented, along with observation extracts.

While trying to make sense of the teaching approaches used in each setting, I realised that this was not a straightforward procedure. Teachers during lessons and activities used a variety of teaching approaches and strategies and most of the time a combination of some characteristics of them. The themes have been categorised into six subsections of teaching approaches, based on their basic characteristics and are presented below.

4.5.4.1 Behavioural approach
Aspects of the behavioural approach were used in both settings. In the Cyprus class, usually the teacher during the lessons would use expressions such as
"So far Melina deserves a big star sticker! Let me see who else is going to get one!" or "Well done Marcus, you will get a star!" There is a variety of such examples that were used on a daily basis during my school visits. However, always, at the end of the lessons every child was given a prize (most of the times a star sticker). This type of strategy, however, revealed that there was not any obvious pattern that could suggest that children were more engaged in the activity whenever the teacher mentioned the star prize. The children's willingness to communicate and interact did not seem to be linked to the fact that they would receive a sticker at the end of the lesson, probably because there was not any consistency, since all the pupils at the end of the lesson received one. Interestingly, however, children's willingness to communicate and interact with the people in the classroom seemed to be linked with the immediate verbal rewards that they received during the lessons, in both settings. In my visits to the English class there were not any incidents of giving the children prizes such as stickers or little presents. However, immediate verbal reward was a common strategy used on a daily basis in both settings. The most noticeable pattern that emerged from both settings regarding immediate verbal rewards was that rewarding was followed by children's signs of satisfaction, such as giggling and smiles and an effort to keep being concentrated and responsive to the interactions taking place at the moment. An extract of an observation from the Cyprus class relevant to this issue is illustrated below.

Sophia (CT) works with Marcus, who has to identify some edible objects, such as bananas, cheese, bread, from different rows of pictures most of which presented clothes. 'Come on Marcus, pick up your pencil, please'. Marcus looks outside of the window. (...) 'If you finish the exercise, you will get a big star!' says Sophia (CT). Marcus keeps looking at the window. Sophia (CT) keeps encouraging him to pick it up by telling him that they will finish in a while. Marcus still looks outside of the window, when eventually picks his pencil up and holds it. 'Well done, Marcus! What a nice grasp!'. Marcus smiles and says 'Me good!', 'Yes, Marcus, you are a very good boy!' the teacher says, 'What can we eat from this row?' Marcus shows the bread. 'Well done, Marcus! You are such a good boy'. 'Marcus, good boy!' he repeats. 'Yes, you are! Now put it in a circle.' 'Marcus good' he repeats and puts it in circle." (CY, OB4, 4th April, 2011)
In the interviews none of the staff from both classes mentioned that giving to the children prizes such as stickers can affect their willingness for interaction and communication. However, most of them seem to consider immediate verbal reward a very important strategy. For example, Joanna (EH) mentions that "being positive" and "focusing on their achievements is very important (...) to show your appreciation to the children, praise them for succeeding in something". Sophia (CT) suggests that "praising them is very important, you give them a reason to try harder" and continues "Praises can be anything... a hug, to tell them 'Well done!', these sort of things."

4.5.4.2 Communicative approach/ pupils expressing their opinions
Aspects of communicative approach were used in both settings by giving the opportunity to the pupils to communicate and interact while practising their learning objectives. In regards to the daily routines of the two classes, however, in the Cyprus setting there were not any clear signs that during the daily routines there were activities that comply with the ideology of the communicative approach. In the daily routines of the class the pupils practiced instead functional/life skills. On the contrary, during the daily routines in the English class, there was a tendency for the lesson to be implemented in such a way for the children to communicate and interact with the members of the class. Activities such as ‘Good morning time’ and ‘News sharing’ (examples have been given in section 4.5.3.3), encouraged the children to learn through communication and interaction. Apart from the daily routines of the English class, in most of the lessons, the teacher included time for the children to interact and communicate, while practising their learning objectives. Usually, whatever the subject of the lesson was, she started the lesson by organising an activity where all the children could communicate and interact with the members of the class. Then she used to separate the class either in smaller groups or individually so for the pupils to work on their individual targets. Below there is an extract of such approach:

It was numeracy time and the teacher asked them if they wanted to do a fun activity first.
She asks Kim to count all the people in the room. Kim looks around and smiles. Linda (ET) asks the rest of the pupils "Do you want to help Kim count the people in the class?" Tim shouts "Yes!" with excitement. Linda (ET) approaches one by
one the people in the room and counts along with the pupils. Tim and Kim shout out loud and smile while counting, while Helen (ETA1) shows each number to Richard and Rachel (They had individual labels in front of them with numbers). Tiffany (ETA2) does the same to Gar and Katelyn (...) Linda (ET) asks how much 10-2 is by writing it down on the board. Tim shouts "Five". Linda (ET) asks the rest of the group if they agree and Katelyn presses the button and says "No" after being encouraged by Tiffany (ETA2). Linda (ET) asks her if she knows how much it is and Katelyn does not respond. Linda (ET) asks which two children want to hide in the kitchen so as to see how much 10-2 is. Rachel raises her hand anxiously. Linda (ET) tells her to pick one more person. Rachel approaches me and takes my hand and I lead her to the kitchen area of the class. Richard stares at us curiously and Katelyn and Kim smile. Linda (ET) prompts the children to count one more time out loud. (EN, OB2, 15th, June)

Moreover, both teachers made an extensive use of AAC to support pupils’ communication and interaction with others as much as possible and to enable them to express their opinions. During their daily practices there was an extensive use of AAC and AAC devices, such as eye pointing, vocalisation, signs, conventional pointing, showing pictures, forming sentences and requests by using pictures and operating speaking devices. Every child was encouraged to use different or a mixture of such communication aids based on their own preferences and abilities.

During the interviews, Linda (ET) mentioned the importance of encouraging the children to communicate and interact during lessons as this affects their learning. She believes that it is important for the children to "express their feelings, they are entitled to their own voice" and that "we are not able to assess their knowledge, unless they are communicating well (...) using the Makaton, the symbols, pictures, everything to support their learning, to help the children communicate, we are able to assess them later(...) The most important thing for me is to make sure that I have all the communication aids that the children need(...) to make sure that they communicate back to me as much as possible. I'm trying to deliver them a total communication, making them understand what I am saying".
4.5.4.3 Constructivist approaches

Constructivist approaches to learning are interrelated to some aspects of the communicative approaches, in that both aim to give the opportunity to the pupils to construct learning through communication and interactions. There was evidence during my visits to both settings that the teachers sometimes tried to provide a learning style where knowledge was constructed actively by the pupils, either by working individually with the assistance of an adult or by the children working together. Two common characteristics of these activities were that they were meaningful to the children, since the teachers gave them an explanation and rationale for doing them and that the children were having fun during their implementation. These two aspects had an effect on children's engagement and willingness to interact. These kind of activities can be further categorised into two groups. The first one deals with the concreteness of the activity where the real concept was given to the pupils. The second one deals with the simulation of a concept where an imaginary scenario was created to be meaningful and fun to the pupils.

a) Actual concepts

Example of such activities took place in both settings. For example, in the Cyprus class, after spending some lessons talking about the importance of plantation, the pupils planted their own seeds. A similar example that took place in both settings was about recycling. After spending a lesson talking about the importance of recycling, children in the English class made a frame by using recyclable materials by working in pairs or triads, while in the Cyprus school they made their own recyclable paper by working individually with the help of an adult. An extract from the Cyprus observation is presented below.

The children had already cut paper in small pieces and left it in buckets with water and perfumed colour from the previous day. The teacher gave them the wet mass of paper the following day to complete the procedure. (...) Katrina (CTA2) helps Melina, both of them sit in front of her desk. Melina is holding a rolling pin and tries to thin down the wet mass of paper. 'Well done, Melina! You are doing great!' Melina giggles and smells it. (...) Melina keeps thinning it down 'Good job, Melina! When you finish you can write your name on it!' Melina is wondering if this is paper. Katrina (CTA2) tells her that it will look like paper when it dries. (...)Sophia (CT) explains to the whole class that the paper they
use for printing is from recycling paper and that if they thin theirs down enough they will look similar. Marcus looks at the paper that Sophia (CT) is pointing to and asks if this is the same as the one that he has in front of him. Sophia (ET) tells him that if he thins it down enough it will look the same when it dries. Marcus keeps using the rolling pin and Sophia (CT) rewards him ‘Good job, Marcus! You are such a good boy!’ Marcus smiles and repeats ‘Good boy-Good boy’. (CY, OB2, 16th Feb, 2011)

In such activities, where the rationale for doing something was obvious and meaningful to the children, data analysis illustrated that children were engaged in their tasks and interactive with the people in the classroom, since they understood the reason for working on these specific tasks, therefore it was more interesting and meaningful to them.

**b) Imaginary scenarios**

Activities including imaginary scenarios to be more interesting and meaningful to the children were used in the English class. Such an example took place during Gymnastics. Katelyn and Gar were set in the same team. Instead of simply guiding them to do some exercises with the teaching assistants’ help, such as rising up and stretching their arms, the teacher invented a story to do these exercises. Both children lay on their mattresses facing each other’s feet. She told them to imagine that it was snowing and asked them if they wanted to play snowballing. An extract from this observation is presented below. Linda (ET) gave them the soft balls/snowballs and the pupils with the help of the teaching assistants threw it to each other or avoid each other’s snowball by rolling, rising up or stretching their arms.

(...)Katelyn giggles and makes an effort to roll over to avoid the ball. Tiffany(ETA2) helps her to roll over and the ball does not touch her. Gar watches Katelyn and smiles. (...) Tiffany (ETA2) helps Katelyn to hold the ball and throw it to Gar. (...) The ball touches him right to the forehead. Katelyn screams with excitement and Gar giggles. Tiffany (ETA2) rewards Katelyn for throwing the ball so well. Linda (ET) asks Gar which ball he wants to use. Gar eye-points the big orange one. Linda (ET) helps him to hold and throw it and asks Katelyn if she is ready. Katelyn has already rolled over and giggles. (EN, OB3, 23rd June, 2011)
Activities with imaginary scenarios were not observed in the Cyprus school. This might be due to the age range difference between the pupil participants of the two classes. While talking with Linda (ET) about imaginary scenarios activities she suggested "I think it’s important for children at this age to play while learning, they are still under a play structure anyway, that’s how they learn anyway."

During the interviews the issue of the meaningfulness of the activity and letting children actively construct their own knowledge did not come across.

4.5.4.4 Concrete approaches
Teachers in both schools seemed to implement activities by using the real objects of the subject under study whenever possible to make the lessons more concrete. For example, in the Cyprus school, in a literacy lesson, the children reviewed the concepts of colours and sizes. The teacher brought in the classroom balls in different sizes and colours for the children to actually see them and touch them. The activities for planting and recycling mentioned above are some other examples pointing this issue as well. Below is presented an extract from an observation from the Cyprus setting, illustrating the use of such strategies.

(Pupils had a literacy lesson about almond trees. The teacher brought to the class some flourishing branches of almond trees and placed them in a vase. Marcus, Melina and Tina were sitting in a row in front of their desks and the teacher was sitting opposite to them pretty close) (...) "What are these?" the teacher asks by pointing at the leaves. Melina says with excitement “Tree” The teacher explained to her that the whole thing is a tree as shown in the picture and she clarified to her that she is asking them specifically about these (i.e., the leaves) by pointing again on the actual leaves. Nobody is responding. (...) The teacher prompts them “Pick up some leaves from the vase”. Melina takes some without a second prompt. The teacher prompts individually Marcus and Tina to take some too and they do so. The teacher asks them what they are holding. Nobody is responding. Tina looks at the leaves in her hand "Come on, sweeties! You know what these are! You just picked them!” (...) Melina says “Leaves” with excitement! The teacher rewards her verbally (...) (CY, OB2, 4th March, 2011).
In cases where the teachers could not use the actual materials the use of photographs, pictures or videos were also employed. An example from the English school was when a bird had its nest in a tree in the school yard and the staff placed a camera in its nest. Pupils used to watch from their classroom’s TV the bird nesting its eggs for a brief time every day.

Most of the staff from both schools mentioned, during the interviews, the importance of giving the chance to the children to have a real contact with the subject being studied, whenever it is possible. Marina (CH) mentioned that if she has "to teach them about different sizes I will give to them objects with different sizes and not just show them pictures." Similarly, Sophia (CT) pointed out that she believes it is important "to give the chance to the children to see in reality the thing that they have to learn. To be able to touch it, to smell it, to feel it... instead of just talking about things". Similarly Tiffany (ETA2) shares the same opinion and believes that when the real thing is not possible to be used, "it’s good to use (...) feely and touchy things similar to the real one, make it a bit real, rather than just... flat". Joanna (EH) similarly suggested that 'bringing to life' whatever the child has to learn is more beneficial for them.

4.5.4.5 Learning in routines within the natural context approach

It seems that the daily routines of the classes are of great importance and have positive effects on children's communicational attempts and initiation of interactions. The findings regarding these issues have been presented extensively in section 4.5.3.4. Moreover, all the variety of practices in the two settings took place within the natural context of the schools.

4.5.4.6 Cognitive, motor and social skills: Different skills same approaches

As mentioned in the data analysis procedures of this chapter (see section 4.4) the first level of analysis included a general categorisation of the activities based on which skill area the emphasis was placed on. Interestingly, there were not any patterns between teaching approaches and different areas of skills. Activities were implemented by using similar approaches and strategies whether the main focus was on cognitive, motor or social skills, or in a combination of these in both settings. The teaching staff in both schools agreed to this finding as the analysis of the interview data revealed. It seems to be an
agreement among them that when planning an activity the focus is on each child's needs, abilities and learning objectives, which combines all areas of skills. The teaching staff shares a common view that when planning a lesson the focus is on what each child needs and what he has to work on and achieve in each area of skills.

Linda (ET) mentions:
"When I plan a lesson, I follow the same procedures whether the subject is numeracy, literacy, circle time (...) The most important thing for me is to make sure that I have all the communication aids that the children need, BigMacs, their communication boards, to make sure that they communicate back to me as much as possible.(...) Each lesson is different and the equipment can be different, but not the approach. The main focus is on communication, making sure you’ve got the communication right."

Sophia (CT) seems to share similar views:
"I think the important thing is to be consistent as a teacher about the things you expect from the children. This is the main thing. You expect different things from each child, because they have different needs, and sometimes you group them all together, sometimes in pairs, sometimes alone... but when I plan a lesson the focus is on pupils' needs, what we have to work on this area, what we have to work on the other area; but the way I carry out each lesson and each subject is the same: encouragement, rewarding, making the lesson interesting with relevant equipment. I use all these things all the time and in all subjects throughout the day"

4.5.5 CL in the two classes
In this section the aim is not to present findings regarding CL in terms of its effectiveness, rather than to illustrate how it was implemented and planned in each class. The data analysis revealed that the term CL can be perceived, interpreted and implemented in a variety of ways, which sometimes does and sometimes does not comply with CL theory as suggested by literature. Therefore, in the following subsections the term CL is not used in the same way that theory argues, rather it is used in the way that the practitioners interpreted and implemented this notion.
4.5.5.1 Practitioners' notions towards CL activities

In this subsection an effort to categorise all the different ways that CL is perceived in the two settings is presented, by relying mainly on interview data and using examples from the observation data as supporting evidence to staff's views. CL was perceived in a variety of ways and it sometimes meant different and sometimes similar things to each practitioner, and on some occasions it differed and in others complied with what constitutes CL as described in the literature. A common pattern revealed during the interview analysis is that terms such as CL, group work, team work and group activities were used interchangeably during the interviews.

Prompts for interactions and sharing same experiences during the daily routines of the school day constitute CL for the practitioners. Sophia (CT) suggests:

"(...) There are some habits in the class that I’m very consistent about them. I want the children to learn how to work together, the way that I tell them to walk together to go to the toilet, or hold their hands to go together to the yard. I mean, they learn to do lots of things together, they recognise their pair and they know that they have to do things together every day."

Joanna (EH) shares similar views with Sophia (CT), as she gives examples of pupils sharing the same experiences to describe CL activities.

"(...) the whole school day is based on group work experiences, for example meal time: children are sitting together, the staff are encouraging them to behave nicely. Assembly time is another example: children are encouraged to praise each other for their achievements, we sing together songs about the importance of working together."

In the same line of thought, Linda (ET) mentions some incidents of interactions and communication acts that used to take place during the daily routines of the class as examples of CL.

"(...) I believe the children are used to working together, we use group work every day in the class. For example, Richard knows that he has to help Katelyn..."
“to drive to the assembly room, Rachel does the same for Chris, I encourage them to help each other.”

However, practitioners’ perceptions regarding CL were not merely limited to the group habits during the daily routines of the school day, but the staff referred to other activities as well. These other activities can be divided into three categories: grouping, work in a group and work as a group. **Grouping** refers to the seating arrangements, when the teachers ask the children to sit all together or in smaller groups, without this implying necessarily that they worked together. **Work in a group** suggests activities where children fulfilled individual tasks, and later these tasks were combined to produce a common outcome. **Work as a group** is a term used to describe activities where children by helping each other throughout the activity produced a common outcome. These categories are further explained in section 4.5.5.3.a since they are interrelated with the issues of implementation of the CL activities.

### 4.5.5.2 Rationale for using CL activities

Teachers in both settings appear to use CL activities for identical reasons. As discussed in section 4.5.4.6, the teachers used similar approaches for any area of skills, since in each subject or lessons they tried to meet all aspects of the children’s learning objectives. Therefore, CL activities were used for promoting social, motor and academic outcomes at the same time.

Although literature and research-based evidence for CL for children with SLD is at least very limited, group activities in the two settings were used very often during my visits to the classrooms. One of the reasons for implementing this approach quite often was because it was considered more **convenient** at specific times of the school day, where too many children were in the class and not enough adults to work with them on an individual basis. The implementation of CL activities due to convenience was apparent in both settings. For example, there were occasions where the teachers explained to the pupils that they would work for that moment all together or in smaller groups and later, when some of the pupils would be in therapy sessions, the staff would work with the rest of the pupils individually. Usually, the individual work concerned academic outcomes such as writing and reading skills or numeracy. Below are presented some examples of such incidences from both schools.
The pupils in the Cyprus class brush their teeth. (...) Melina has already finished and sits in front of her desk and watches Sophia (CT) attaching something in the bulletin board. She asks Sophia (CT) if they are going to have a lesson together now (She means if she is going to write and read). "Not now, sweetie. We will do it later, when the other children will be in the physiotherapy". Melina says "Now...". The teacher tells her that they cannot do it now, since other children are in the class and that they will learn about Easter now. Melina looks at her book (...). (CY, OB1, 7th April, 2011)

The pupils in the English class make cards for Father's day. There are two pupils in the class. (...) Linda (ET) approaches Gar and tells him "How is it going, Gary? Wow, what a beautiful card that you made! Your dad will be really proud of you" Gar looks at her and smiles and makes happy vocalisations. (...) Linda asks him (Gar) if they want to leave the class together for a while and work on numeracy and asks him "Yes or No". Gar eye-points at "No". "I'm sorry sweetie, but we have to do it now. Later Katelyn and Chris will be in the class and we will read a story all together!" (EN, OB3, 16th June, 2011)

Using CL for convenience seems to be in line with the practitioners' views as well. For example Linda (ET) suggests: "If they (CL activities) are planned carefully, I think they can be very useful to the teachers. Sometimes there are a lot of pupils in the class and I don't have time to work with them one-to-one, so I use group activities a lot. (...)" Similarly, Sophia (CT) points out that "Cooperative learning sometimes seems the best solution, especially when there are a lot of pupils in the class."

However, apart from convenience reasons, according to the teachers, CL activities were implemented quite often to promote learning in all areas of skills, because children were motivated to stay on task when they worked together rather than individually, since peer positive relations affected their willingness to work together, as teachers suggested.

Linda (ET) mentions "(...) children can feed off each other when working in groups. They see their classmates working and they keep working too (...) they hear me praising a child and it's like they want that too, it's like a motivation." Later on in the conversation she mentioned the aspect of positive peer relations
as an important element of group activities as well, by referring to a specific example of a group activity "The children enjoy working with their peers, they have fun and they like helping their friends (...) Rachel was very interactive with Chris when I was asking her to encourage him to shake his arm and Chris was responding. They were feeding off each other."

Similarly Sophia (CT) points out the importance of positive peer relations as a motivation in CL:

"For example, when they had to make the Easter pies, I asked them to work in pairs, to understand that if they don't work together they won't have pies. See Tina for example: If Tina hadn't put the filling in Melina's dough, they wouldn't have made it. Although sometimes Tina can be passive, she was very interactive that day because she wanted to help Melina. And Melina was prompting her to help her (...) I doubt that she would have been so active if she had to make it by herself. But they have bonded as a team and they like each other (...)"

The following section deals with the implementation of the CL activities, by presenting examples during the implementation of CL activities.

4.5.5.3 Implementation of CL activities
In this subsection are presented a variety of aspects regarding the implementation of CL activities as the data of both observations and interviews revealed. Two examples of CL activities are presented and used as exemplars throughout this section. The reason for choosing these two specific activities of group work as exemplars is because they illustrate most of the aspects observed during group work as the data analysis revealed. Some additional examples of group work are also presented to illustrate some more aspects observed during group activities that these two examples do not demonstrate.

a) Types of group activities
As mentioned briefly in section 4.5.5.1 practitioners consider a variety of activities as CL, which do not always comply with what the theory suggests as CL. These activities were grouped together in three categories: grouping, work in a group and work as a group.
Although literature does not consider that grouping the children to sit together necessarily implies CL, if they are not interacting in order to solve together specific tasks problems (Blatchford et al, 2007a), the staff considers these kind of activities as CL. Examples of these activities such as sitting together in brunch time were given earlier in the findings section. During the implementation of these activities all the children worked next to each other, but they were not encouraged to help each other to achieve something together.

The other two categories, i.e., work in a group and work as a group, comply with the notion of CL as described in the literature, since there is in both cases a common objective that needs to be achieved. The way activities, in these two categories, were implemented were similar in both settings. Two exemplars of these types of CL activities are presented below.

Below is presented an example of an activity that complies with the 'working in a group' notion and has taken place in the Cyprus class. The previous day the children of the Cyprus school went for a visit to a farm. The following day the teacher asked them to do an activity relevant to their visit, i.e. to 'build' their own farm. There were four children in the class (Aris, Andreas, Vicky and Melina), the two teaching assistants and the teacher and were all seated around the round table. The teacher displayed on the table six pictures of the animals taken the previous day and Aris, Andreas and Vicky were supposed to pick two animals each, identify them and then colour some drawings of these animals. Melina had to write the names of these animals on labels. She had the right spelling in front of her and she had to re-write the name of each animal in a separate label. At the end of the activity the children's drawings and their pictures were grouped together and displayed in a frame along with Melina's labels. Below, an extract from this observation is presented.

"Did you have fun at the farm yesterday?" Sophia (CT) asks while displaying some pictures of the animals taken yesterday. Melina says "Yes!!" with excitement. Andreas makes happy vocalisations and takes the picture with him and the dogs. (...) Then she (Sophia CT) asks Aris to pick the picture with the animal he likes the most. Aris picks the cows and the sheep pictures (...) Melina asks the teacher "Me?". The teacher tells her "You are going to do something special for us! Do you want to write down the names of each
animal?" Melina says "Yeees!!" with excitement and giggles! (...) Vicky meows while colouring the cats’ drawings. Katrina (CTA2) tells her "Well done, sweetie! How does the horse sound like?" Vicky makes the horse sound. "You are such a good girl, today, Vicky" the teacher says "A big star is waiting for you!" (...) Aris colours the drawings really rough and does not follow the lines/frames at all. Lea (CTA1) tells him to hold the pencil softer. Aris keeps drawing really rough. Lea (CTA1) takes his hand and stops him. Aris starts screaming. The teacher approaches him and tells him to calm down. She tells him to watch the other children, who work really nicely. Aris stops screaming and watches Andreas who colours the chickens. Sophia (CT) tells him that he has to choose: either to go the sofa and lay down or stay here and help his friends build the farm. Aris smiles and points to the cows’ picture and says "This!". The teacher rewards him for being a good boy and asks him to take the pencil and hold it nicely. (...) Lea (CTA1) rewards him (Aris) for holding it nicely (...) Sophia (CT) tells them that she is really proud of them all and that they are going to make a really nice farm. (...) (CY, OB4, 24th March, 2011)

During such activities, the children had to work individually on individual tasks but there was a common goal as well that needed to be achieved. Although the children were not encouraged to interact with each other, the teacher reminded to the pupils several times throughout the activity that they had a common goal to achieve. Moreover, in such activities the teachers used both individual and group rewards.

The following example demonstrates an activity of children ‘working as a group’. The children in the English class were asked to work in pairs to make together Van Gogh’s paintings. After the teacher explained to them that Van Gogh’s work can be broadly categorised in cheerful colours and dark colours the children had to choose which kind of painting they wanted to make. The first pair reflected on Van Gogh’s dark paintings and the other one on his colourful paintings. There were four children in the class (Rachel, Chris, Kim and Katelyn) the two teaching assistants and the teacher. An extract of this observation is presented below.

(...) The teacher approaches Rachel and asks her which of the two paintings she likes the most: the dark one or the colourful one. Rachel points to the
colourful one. (...) (She does that for every child, and then separates the children into two pairs according to their choices) Tiffany (ETA2) asks Chris which colour he wants to use by giving him two choices. Chris does not respond. Rachel is painting by using the orange colour. Tiffany (ETA2) rewards her. (...) Chris shakes his arm. Tiffany (ETA2) asks Rachel if she wants to bring the bowl with paint closer to help Chris put his hand in it. (...) Rachel gives it to Tiffany (ETA2). The teaching assistant rewards her for helping Chris. (...) Tiffany (ETA2) tells Chris: "What a bright yellow Rachel chose for you!" Chris moves his arm again and Tiffany (ETA2) rewards him for being such a good boy and helps him approach the paper. (...) Linda (ET) approaches the two children and rewards them for doing such a good job. She takes their drawing and shows it to the other two girls and asks them if they like it. Kim says "Yes". The teacher asks Katelyn if she likes it. Katelyn smiles. (...) Linda (ET) rewards them again and Rachel smiles. Linda (ET) approaches Chris and rewards him for doing such a beautiful drawing with Rachel. (...) (EN, OB4, 26th May, 2011)

Such activities encourage children to work together collaboratively in all stages of the activity to achieve a common goal.

**b) Focus on each child's AAC devices and individual learning objectives**

Both teachers believe that when planning a CL activity their first concern is to meet each child's individual needs and make sure that they have all the necessary equipment needed to meet those needs.

Linda (ET) suggests:

"(...) I have everything planned in advance and I know what each child needs to do, what they need to work on that specific time (...) I always make sure that I have all the necessary aids that children need (...). Each child needs different equipment to communicate and work. Some pupils need their BigMacs to communicate back to me or some pupils need their boards. I make sure that I've got everything I need."

Similarly Sophia (CT) suggests: "I keep in mind what each child's needs are. (...) Andreas, for example; I need to show him pictures to understand the concept of the activity or what he has to do. So I will make sure that I have the right pictures with me."
Moreover, the teachers place a great emphasis on each child's learning objectives and based on these they allocate the individual tasks to each child. Linda (ET), by giving a specific example of a group activity she points out: "(...) I mean if you could go back to my music group I did last week with Rachel, Richard and Chris I tried to meet different needs; for Rachel and Richard it was more cognitively about body awareness, pointing to different parts of the body, some number recognition and knowing how to count and that counting refers to numbers and being more physical with their gross motor skills, whereas with Chris I just wanted simple responses, I wanted him to be shaking his arm or using his voice, which he can do on a good day (...) so you adapt it to meet different needs."

Similarly, Sophia (CT) points out: "Some children are more advanced cognitively so they have to work on a different level during a group activity. I expect different things from each child, that's why I give them different tasks to complete within a group activity. (...) You have in mind what their targets are and you ask different things from the children based on these targets. They might work together, but I don't always ask them to do the same things."

The analysis of the observations regarding group activities coincided with teachers' views that it is important to keep in mind each child's needs and learning objectives during group activities. Based on the examples of group activities given above, Melina had to practise her writing skills, whereas the rest of the children had to practise their fine motor skills by colouring the animal drawings. Similarly, the example from the English class illustrates that the teacher expected different things from the two children. For example, Rachel's focus was on practising her fine motor skills and cognitive as well about colours recognition, while Chris had to respond to simple requests.

c) Adults' prompts and instructions for interaction

CL activities were dominated by adults' prompts and instructions for interaction, either between pupils and practitioners or among peers. As stated above, teachers consider it of great importance to meet each child's individual needs and learning objectives. Therefore, when implementing a CL activity, they placed great emphasis on meeting those needs and objectives. Consequently, teachers prompted and instructed the children constantly throughout the CL
activities to work on their individual tasks and common goal. Even when the activity was considered a 'working as group' type, where the interactions among the pupils were necessary to meet their common goal, practitioners used immediate prompts for interactions among peers throughout the activity. However, there were some instances where the children initiated interactions among them without adults' prompts. These instances were when the children had to interact with each other based on the routines that each class had. Below is presented an example of such instances, where the pupils initiated interactions with their peers, during the routines of specific group activities.

In the Cyprus school, at the end of the gymnastic lesson children used to be separated into two teams. Each member of the group went from the one end of the room to the other, either on a bike or by lying on a skate with wheels. Two members of the opponent team left from the starting point together, returned back, high-fived the other member of their team and then the other member sat on the bike or the skate and so on. During this game the teacher encouraged the pupils to praise their team member by calling her name out loud or by clapping hands. Pupils were used to these activities and therefore, they used to high-five and praise each other without teacher's prompts. An example of such practices is presented below.

(...) Melina is shouting out loud 'Vicky-Vicky' and Aris claps his hands and makes happy vocalisations; so does Andreas. Marcus stands up and Andreas raises his hand for high-five. Marcus responds (...) Vicky stands up and walks towards the teacher. Melina raises her hand for high-five. Vicky sees her and comes back and high-fives Melina. The teacher rewards her for being such a good girl (...). (CY, OB5, 10th March, 2011)

Similar incidences took place in the English school. In section 4.5.3.4 are given such examples during 'Active start' and 'Snack time'.

Pupils’ initiations of interactions among them, however, took place merely during group activities embedded within the daily routines of the school day. The examples given above about the farm and Van Gogh are two typical examples illustrating that initiation of interactions by pupils among peers did not take place in practices that were not embedded within their daily routines. This
phenomenon seems to coincide with teachers’ views regarding the implementation of the group activities. Although while talking about social skills (see section 4.5.3.4) the staff of both schools hold the view that an important aspect of social skills is peer relations and while discussing in general about CL activities both teachers suggested that the aspect of peer relations acts like a motivation to them to stay on task (see section 4.5.5.2), when discussing specifically about planning and implementing CL activities the issue of peer relations did not come across. Both teachers focused on explaining how individual needs and learning objectives can be addressed within a CL activity (see section 4.5.5.3.b for the specific examples given by the teachers). Therefore, although they believe that peer relations have positive effects on children’s willingness to stay on task, during the implementation of the CL activities, teachers placed greater emphasis on meeting children’s individual learning objectives by using immediate prompts and instructions, rather than giving space and time to the pupils to interact and assist each other. The issue of initiation of interactions by pupils among peers was an aspect taken into consideration in the second phase of this study, during the implementation of the CL model.

d) Pupils making choices
Another characteristic observed in both settings during group activities is that both teachers gave the opportunity to the pupils on some occasions to express their choices and decisions about aspects of the activity. The two examples given above illustrate such incidences. In the example from the Cyprus setting the children decided which drawing they wanted to colour based on their preferences about which animal they liked the most during their visit to the farm. Similarly, in the English setting, the pupils had the opportunity to decide which kind of painting they wanted to draw, based again on their personal preferences.

4.5.5.4 Challenges of CL activities
Below are presented the challenges emerged during the implementation of CL activities in the two settings, as these emerged from the observations and discussions with the practitioners.
**a) Equal opportunities and participation**

There were instances where some children were not active, therefore the rest of the group or their pair did all the work. An example from such incidents is presented below.

Sophia (CT) asked them if they wanted to decorate their class since the Greek carnival day was approaching. She separated the children into pairs and asked them to paint a white mask. She explained to them that later they would hang these masks from the ceiling to decorate their class. Melina and Tina worked together. Below is presented an extract from this observation, illustrating Melina and Tina's pair.

(...). Lea (CTA1) asks Tina again which colour she wants to use. Tina does not look at her, she keeps looking outside the window. Lea (CTA1) takes the brush and asks her to hold it. After prompting her several times she takes the brush. She asks her to choose a colour. Tina leaves the brush on the table. Lea (CTA1) encourages her to pick up the brush again. Tina does not respond. (...) Melina says "Done!" Lea (CTA1) rewards her and asks Tina if she wants to add an extra colour on it. Tina nods "No". (...) Lea(CTA1) rewards her (Melina) and asks Tina if she wants to help Melina. (...) The teacher approaches Tina and asks her if she is tired. Tina nods "Yes". The teacher asks her if she wants to sit on the sofa and Tina goes and sits there (...). (CY, OB4, 17th Feb, 2011)

Although there were some similar incidences during the implementation of the CL activities in both schools, the issue of equal participation did not come across during the interviews. This issue is interrelated with the following one, which deals with the personal characteristics of each child and the health difficulties that they face.

**b) Personal characteristics and health difficulties of each child**

The staff in both schools seemed to acknowledge the fact that the classroom is a dynamic context and sometimes things cannot work as planned. While talking about teaching approaches that promote the social skills of the children with Marina (CH) she pointed out that:

"There are no recipes. Every child is different and every child has different needs (...). You may have organised your lesson in advance very well (...) and
then you enter the class and a pupil has an emotional crisis or epileptic incidence... after that you cannot do anything. Your schedule has to change. It doesn't mean that just because I had in mind to do the lesson this way, I have to do it. Teachers in special schools have to be flexible according to the different needs, to the problems that our children face every day."

Similarly, Sophia (CT) mentioned that:
"A teacher has to follow, sometimes, children's lead. Some of our pupils in this school have serious medical conditions. They come to school and they might have had a rough night. I don't want to push them too hard. I might let them have a rest."

Linda (ET), while discussing about planning and implementation of CL, she highlighted as well the importance of considering the children's situation:
"(…) children are not always in the mood to communicate back to you. For example, Chris; sometimes he is sleepy (…) I don't want to put too much pressure on him. I will let him have a rest and come back to him later."

This was indeed what the teachers did in both settings. If a child was sleepy or had an emotional incident the teachers would leave them either to lay down or sit in their chairs, letting them know that they can have a rest and they would come back to them later. The example given above with Tina, illustrates such a strategy.

c) Peer interactions
The issue of peer interactions during group activities has been already addressed in section 4.4.5.3.c. As pointed out, although the teachers consider the peer relations as a motivation for the pupils to stay on task and achieve their individual and common goals (see section 4.5.5.2), usually peers interactions were guided by adults’ immediate prompts. Peer interactions during CL were further explored in phase two.

4.5.6 Initial suggestions for a CL model for the pupil participants for promoting their social skills
The final aim of this phase was to develop an open-to-amendments CL model for promoting the social skills of the pupil participants to explore its efficacy in the second phase of this study, by following an action research approach. As
mentioned in the data analysis procedures in section (4.4), a concept map was created for group activities as these were observed and discussed during my visits to the schools (see Appendix 11). The next step in designing this model was to combine aspects of the concept map about CL created in the Literature review chapter (see figure 2.3) with this one. Figure 4.3 illustrates some initial suggestions for a CL model for the pupil participants. The CL model’s suggestions could be grouped into four main broad categories: Ideology and theoretical background, types of CL activities, five main dimensions and their co-ordination and basic characteristics. These categories are discussed below.

Figure 4.3: The initial propositions of the CL model for the pupil participants

a) Ideology of the CL model
The first aspect of the ideology of this initial model was influenced by the basic underpinnings of the CL theory as derived from the literature review, which suggest that CL activities could be designed in such a way to favour meaningful
interactions among the peers to assist each other to complete their individual and common tasks. The second aspect is derived mainly from the findings of this phase. The results of phase one suggest that rewarding the pupils on an on-going basis can reinforce their engagement to their tasks. Therefore, teachers can reinforce the children by giving them rewards on an individual and group level according to their performances.

b) Types of CL activities
The second category refers to the types of CL activities. Based on the findings of this phase two types of group activities were observed. The first one is 'working in a group', which suggests that each child has to complete individual tasks that later would be combined to produce a common outcome. The second one is 'working as a group', which suggests that pupils work cooperatively throughout the activity, by assisting and helping each other achieve their individual tasks and common goal.

Three main key elements emerge from these types of activities and these derived from both CL theory and the data analysis. The first two elements are individual accountability and equal opportunities. Both CL theory and the teachers of the two classrooms placed emphasis on the aspects of equal opportunities and individual accountability. Although pupils during CL activities try to achieve common goals, both the teachers and CL theory highlight the importance of allocating individual tasks to the pupils based on their individual needs. This enables them to have equal opportunities and participation during their interactions with their peers to achieve together their common goals. The third element is positive interdependence. CL theory and the teachers of the two schools recognise the importance of aspects of positive peer relations and interdependence, which favour and encourage pupils' meaningful interactions. According to suggestions made by the two teachers and research based evidence, reinforcements based on positive interdependence aspects encourage pupils to stay on task and interact with each other. Positive interdependence among the members of the group can be achieved by designing interdependent individual tasks to encourage pupils to communicate with each other and assist each other's efforts.
c) Co-ordination of five dimensions
The third category deals with five main dimensions that need careful co-
ordination. The first dimension deals with the necessary AAC equipment
needed to assist pupils' communication acts and interactions, such as
communication devices, pictures, symbols and so on. Literature on SLD as well
as the findings of phase one suggest that AAC devices are the main tools on
which pupils' interactions and communication acts are promoted. The second
dimension deals with the physical layout of the class and the seating
arrangements. As suggested by the literature on CL and the findings of this
phase the group-members should be sitting in such a way to foster the proximity
among the children and be able to have physical or eye-contact with each other.
The third dimension deals with the composition of the group, regarding its
size and the selection of its members. The fourth dimension deals with the
individual needs and learning objectives of each child that affect the
composition of the group. As derived from the data analysis, both teachers
placed great emphasis on these two dimensions and organised the groups
composition based on each child's learning objectives and individual tasks.
Therefore, teachers could have a clear picture of the learning objectives of each
child that need to be achieved to arrange appropriate groups that would enable
pupils to work together and assist each other while working on their individual
targets. Moreover, by having in mind each child's individual needs and abilities,
they will be able to organise in advance the appropriate equipment that each
child needs to be able to communicate effectively. Lastly, the fifth dimension
deals with the tasks of a CL activity. Based on CL theory, individual and
common tasks should be set in such a way to favour interactions among peers
and work together and not individually. It is apparent that all these dimensions
are interrelated with each other and must be viewed in a dialectical notion.

d) Basic characteristics
The fourth category deals with the basic characteristics of this initial model. The
first characteristic is relevant to the meaningfulness of the activity. As
discussed in the literature review chapter, literature on the field of SLD
highlights the importance of giving the pupils tasks that are meaningful to them
to motivate them to complete their tasks. One strategy in order to motivate the
children is to organise activities that their content is relevant and meaningful to
the pupils. As the findings of this phase suggest as well as literature and research base on SLD this can be achieved by giving opportunities to the pupils to express their choices and preferences on different aspects of the activity. The second strategy deals with peer relations. According to both literature on CL and the two teachers, positive peer relations and positive interdependence among them can encourage pupils to interact with each other in a meaningful way. Therefore, teachers could use positive interdependence encouragements to be further explored in phase two whether such a strategy could act as a motivation for the pupils to interact, assist each other and stay engaged in their tasks.

The aforementioned strategy is interrelated with the second characteristic of the CL model, which are delayed prompts. As the outcomes of this phase revealed, the group activities observed were dominated by adults' prompts. Therefore, most of the interactions among the pupils were guided by the adults. According to suggestions made by the literature in the field of SLD, in order to give the chance to the children to initiate interactions among peers, delayed prompts used only when necessary could be employed to allow enough time to pupils to initiate interactions and respond to each other.

The final characteristic deals with the context of the activity. Both the research literature and the findings of this study suggest that activities that are embedded within the natural context and the daily routines of the class can be more effective in terms of their engagement in the activity, since they are more familiar with these routines and contexts. Therefore, by adjusting the daily activities and routines of the class to be conducive to the CL ideology could prove to be more effective.

After developing the initial features of the CL model, I summarised them in bullet points to be more convenient when discussing about them with the teachers of the two classes. Details about the initial discussions with the teachers about this model are given in the following chapter.
Chapter 5: Phase Two

Data Collection and Analysis Procedures and Findings

5.1 Introduction

This chapter presents, firstly, an account of the data collection and analysis procedures used for the second phase of this study. Following this, it presents the findings of this phase, which aimed to answer the research questions.

5.2 Data collection and analysis procedures of phase two

The data collection and analysis procedures of the observations took place almost simultaneously in the second phase of the research. After each observation, transcription, analysis and suggestions for improvement of the model were undertaken. Following this, a presentation of my report to the teachers took place and together we discussed further suggestions and revisions. At the end of the implementation cycle, an in-depth semi-structured interview was conducted with each of the teachers of the two settings. More details of the data collection and analysis are presented below.

5.2.1 Preparation for the data collection and analysis procedures

The action research process required commitment from all collaborators, myself, the practitioners and the children, since without their help, participation and indications this model could have never been evolved and employed. An implementation can be considered successful when all the collaborators are satisfied (Stringer, 2007) and I believe this study addressed this issue to a great extent.

I had already informed the participants during phase one that I would like to revisit them the following year, without giving them details of my intentions, since phase two had not finalised at that point. After the completion of phase one, I contacted the teachers of the two schools and asked them if we could have a meeting and discuss my intentions of phase two in detail. I presented to them the initial characteristics of the CL model in bullet points (see Appendix 12) along with an exemplar activity implementing its initial characteristics (see Appendix 13). This activity acted as an example to give the chance to the teachers to see the characteristics of this model in practice. We discussed for...
approximately 40 minutes, and they agreed that all the characteristics seemed practical and interesting. I was quite confident about their concession to these characteristics, since they were based into a great extent on teaching strategies derived from their own practices as being observed during the first phase. We also agreed with the teachers that the implementation of the CL would be observed in a variety of subjects to allow us to get a holistic view regarding its utility in various areas and subjects. The subjects were numeracy, literacy, gymnastics, music, craft and one cookery lesson in the Cyprus setting. We also talked about their role in the research. I explained to them that I wanted it to be a collaborative effort between them, the pupils and myself, and I described to them the steps of the action research process that I would like us to follow. Both the teachers assured me that they would talk to the teaching assistants of the class and inform them about the model, its characteristics and the process of its exploration. The teachers offered to design the first activity themselves based on these initial characteristics.

It is important to mention that pupils’ participation was a central concern for phase two. There was an effort to give the opportunity to the pupils to participate as much as possible in the action research process. The evolution of the model, the suggestions and the revisions made, by both myself and the teachers, were guided by the different reactions and opinions of the children. During the evolution and the revision of the characteristics of the CL model, pupil participation was a vital feature of this particular action research process. At the end of the activities pupils were asked whether they enjoyed them or not and what specifically they liked or did not like. The children's reactions and opinions were always taken into consideration during our discussions and the revisions with the teachers.

After gaining the consent of the participants and the parents and pupils' assent (see section 3.10), the first round of the action research process began. The action research cycle was based on the three steps suggested by Stringer (2007), look, think, act (Figure 5.1). There was approximately a period of a week that visits in the classrooms and observations of CL activities took place, but no data collection occurred, since I had not yet had the parental consent. However, I had the opportunity to discuss with the teachers our first impressions and reflections.
5.2.2 The data collection and analysis procedures used for the observations, based on the three steps of the action research cycle

During the action research process I took into consideration the suggestions made by Stringer (2007) about the aspects that it is important an observer to record, therefore, during the field notes I focused on the following aspects:

- **Places**: The location where the activity took place and the physical layout of the class and the seating arrangements made by the teachers.

- **People**: All the participants involved in each activity, including staff and pupils.

- **Objects**: All the necessary equipment used for the activities: special objects relevant to the activity or communication devices used by children.

- **Activity**: The concept of the activity was taken into consideration by giving a detailed description. Moreover, the type of the CL activity was taken into consideration as well, i.e. whether it was a 'working as a group' or 'working in a group' one.

- **Purposes**: The aims and purposes of the activity were also taken into consideration, by keeping notes of both individual tasks and group goals. Moreover, I asked the teachers to explain to me whether the activity's purpose
was to practice existing knowledge or whether to build new knowledge. This parameter was not always clear-cut. Based on the teachers' views in all cases children practised existing knowledge by revising it or advancing it. Moreover, I asked the teachers to clarify to me in which area of skills the emphasis was placed on (i.e. social, motor or academic/cognitive skills). This parameter was not always clear-cut as well, since within a single activity, pupils had to work on a combination of areas of skills.

• **Times**: The times and duration of the activity or particular events as well as the frequency and sequences of these events and their duration were noted down.

• **Feelings**: The feelings of the participants during the implementation of the CL model were taken into consideration as well, by keeping notes of emotional orientations of the participants and their responses. For example excitement, interest in the activity, laughs, smiles or anger and frustration.

• **Acts**: This parameter was very important during my observations. Interactions and communication acts of the participants were noted down, as well as who initiated the interactions. Moreover, pupils' engagement in the activity was another parameter taken into consideration, as well as practitioners' prompts and rewards relevant to their frequency and sequence.

The first step (*look*) of the action research process was to observe the activity and keep notes, and involved all the aforementioned aspects. I did not prepare any pre-determined categories to guide my observations, although I had in mind, during the implementation of the CL model, all the aforementioned aspects. My personal thoughts and reflections about these aspects were also written down while keeping notes and were taken into consideration. Immediately after the completion of each observation the notes were transcribed in a narrative way.

Following this, the second step (*think*) took place. The *think* step was divided into two important phases: the first one was the data analysis of each observation and the second phase was the suggestions for improvement of the CL model through discussions with the teachers. Regarding the data analysis of the raw data, each observation transcript was analysed independently from the others. Based on the outcomes of each analysis, revisions were made and
employed in the following observation/implementation of the CL model. There were few instances, however, that two implementations of the CL model took place in a row in the same day and the analysis of both sets of data were conducted together. A detailed account of the rounds of the action research process in each setting are presented in the sections 5.3 and 5.4. The analysis involved four levels, similar to those used in the first phase of the research, described in chapter 4.

The first level of analysis involved coding the raw transcribed data. Each observation transcript was dated and marked with a number according to which round of the action research process corresponded. In addition, the margins were extended to leave enough space for coding notes. Following this, the transcript was printed out and the codes were marked by hand. The coding was based on both an inductive and deductive approach. An inductive approach suggests that the researcher has to be engaged in detailed readings of the raw data and derive concepts, categories and themes through interpretations made from the raw data (Thomas, 2006). On the other hand, a deductive approach to analysis suggests that the researcher has set out to investigate whether data are consistent with prior assumptions and theories identified or constructed by the researcher. In deductive analysis, key themes are often obscured, or left invisible because the preconceptions in data analysis procedures compel the researcher to identify new unpredicted themes (Thomas, 2006). In contrast, during inductive analysis, unplanned or unanticipated effects arising from a program implementation can be seen as an important evaluation task and taken into consideration (Scriven, 1991). Although these are seen as two different approaches to analysis, researchers might use both during data analysis (Benaquisto, 2008). Employing both inductive and deductive analysis was inevitable due to the aims of phase two. Its intentions and purposes were to explore, on the one hand, the implementation of a CL model in regard to the social skills of the pupils and on the other hand, to investigate how and in what ways the characteristics of this model could be further evolved, revised and re-defined. Therefore, keeping in mind the initial propositions of the CL model and at the same time being open to any critical events and incidences would enable me to both explore its usefulness and evolution. I started coding the variety of actions and reactions, instructions and responses, interactions and
communication acts of the participants, who initiated these each time and so on, by labelling and marking by hand different segments in the text. This type of coding could be considered as an inductive approach to analysis. However, at the same time, I marked down codes based on a deductive approach, having in mind the initial characteristics of the CL model such as its theoretical background, individual learning objectives of the pupils, the use of prompts and rewards, individual tasks and group goals and so on.

The second level of analysis involved organising the first level of codes into broader, more abstract categories. The second level of analysis was more interpretive in nature, focusing on the meanings of the codes, by marking in the margins, using, however, more ‘chubby’ pens of different colours to avoid confusion.

The third level of analysis involved an interpretation of all these categories, exploring the relationships and connections between them. Therefore, the categories were grouped together into broader themes. The themes were written in a new word document and under each theme I copied and pasted each category emerged in the second level of analysis, along with the codes emerged in the first level of analysis. At this level the labels used for each theme were usually borrowed from the theoretical propositions of the CL model as these appear in figure 4.3, and in the initial characteristics of the CL model as these were presented to the teachers (see appendix 12). There were instances, that some themes could not correspond to the theoretical propositions of the CL model constructed in phase one. These themes were the first things discussed with the teachers during the second phase of the think step of the action research process.

Following this, the fourth level of analysis took place, which was to write down my thoughts about the implementation of the CL model for each current observation and make some initial propositions about the revision of its initial characteristics. Having as a guidance the initial characteristics of the model, I engaged in an effort of reflection and interpretation, by exploring which ones were taken into consideration or not, which were practical or not and which ones needed revision and rethinking, based always on children's reactions, interactions and engagement.
After the completion of the data analysis, the second phase of the *think* step took place, which was to share my interpretations and thoughts with the teachers. This phase usually took place either the following day of my observation or a couple of days later, always before the implementation of the next CL activity, i.e., the next round of the action research process, either in an empty classroom or in the staff room. During our discussions I took notes of our thoughts and suggestions. Stringer (2007) highlights the unique opportunity that action research observations offer to the researcher. He suggests that observations in action research enable the researcher to engage later in conversations with the participants and extend the pool of information gained from the observations. He goes on by pointing out that phenomena such as purposes and feelings can be inferred only by a superficial manner by the observer, therefore they are needed to be checked for their accuracy with the participants. This opportunity was taken into consideration and employed to a great extent in this study. There were instances that I interpreted pupils' emotions and reactions in specific ways, but later when discussing these interpretations with the teachers they gave different rationale based on pupils' individual characteristics and needs or based on their current situation on that specific day in terms of health difficulties. These types of discussions especially during our first meetings with the teachers enabled me first, to get a clear picture about each child's unique characteristics, especially for those children that did not participate in the first phase and second, to keep in mind additional aspects of the CL model, that were not included in its initial characteristics. These aspects were taken into consideration and incorporated during the following implementation and added to its characteristics.

Apart from explanations of specific phenomena or actions observed, our discussions dealt with suggestions for improvement and revisions of specific characteristics of the CL model, either on a theoretical level regarding the rationale of specific characteristics or on a practical level, regarding the way some characteristics were implemented. Consequently, every round of the action research process, focused sometimes on different and sometimes on the same characteristics of the CL model, by focusing sometimes on the way some characteristics were implemented and some other times by revising the rationale of some characteristics. By the completion of the two action research
processes (i.e., one in each setting) most of the model's characteristics received minor or major changes and new ones were added. Moreover, after each discussion with the teachers, usually new characteristics emerged and these were integrated with the old ones. While reflecting and discussing with the teachers, I kept handwritten notes of our discussions and final decisions for amendments for the next round of the action research process. The teachers made a copied of those notes for their own reference. The completion of the two action research processes resulted in two main groups of themes, one for each setting. These themes were written in bullet points and presented to the teachers during the interviews to reflect on them.

Following our discussions about revisions and amendments, the teachers explained how they organised the next CL activity and adjustments were made accordingly to the suggestions and amendments discussed. This lead to the third step (i.e. act) of the action research process. Therefore, a new round of the action research cycle began. Each round followed the same procedures as described above. The transcripts in the Cyprus school and their analysis were written in Greek. Some of them were later translated to English so as my supervisors to be able to reflect on them. Appendix 14 presents the first round of the action research process in the Cyprus class, including all the four levels of the data analysis and the suggestions made during the conversations with the teacher. In the following two sections (5.3 and 5.4) a detailed account about every round of the action research process in the two settings is presented. In section 5.5 the data collection and analysis procedures used for the interviews are illustrated, along with the procedures used for the cross-case analysis of the data from the two settings.

**5.3 The rounds of the action research process in the Cyprus setting**

During my visits to the Cyprus class for the purposes of the second phase of the study, I observed, in total eleven lessons implementing the CL model. This resulted in nine rounds of the action research cycle, since I observed two lessons in the same day twice and no data analysis was conducted between those two lessons. Figure 5.2 summarises the rounds of the action research process and the subjects of the lessons observed each time.
The participants of the Cyprus setting

Before presenting the rounds of the action research process in the Cyprus class, table 5.1 gives details about the participants of this phase for the Cyprus setting. Moreover, each round of the action research process illustrates in pictures the layout of the class and the seating arrangements of each lesson.
Table 5.1: Introducing the Cyprus class participants of phase two

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Characteristics&lt;sup&gt;5&lt;/sup&gt;</th>
<th>Condition&lt;sup&gt;6&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicky</td>
<td>12</td>
<td>Sociable and talkative girl, seeks and enjoys attention, does not always obey instructions,</td>
<td>Autistic characteristics, verbal difficulties, difficulties with fine motor skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sometimes cries and shouts without expressing what she needs, walks without assistance.</td>
<td></td>
</tr>
<tr>
<td>Melina</td>
<td>13</td>
<td>Sociable and talkative girl, follows classroom routines, walks without assistance.</td>
<td>Brain dysfunction</td>
</tr>
<tr>
<td>Tina</td>
<td>16</td>
<td>Smiley girl, enjoys school time and obeys instructions and daily routines, she does not talk</td>
<td>Down Syndrome, severe mental retardation, selective mutism, moderate difficulties in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>most of the time and points with her hand as a mean of communication, walks without</td>
<td>motor skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>assistance.</td>
<td></td>
</tr>
<tr>
<td>Marcus</td>
<td>12</td>
<td>Talkative and smiley boy, sometimes finds it difficult to obey classroom rules and</td>
<td>Severe mental and verbal retardation, epilepsy, difficulties in fine motor skills,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>instructions, walks without assistance.</td>
<td>moderate hearing impairment</td>
</tr>
<tr>
<td>Andreas</td>
<td>12</td>
<td>Enjoys working with peers, likes attention and communicating with others, is hyperactive</td>
<td>Mental and verbal retardation, moderate hearing and visual impairment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and sometimes finds it difficult to obey classroom rules and instructions, walks without</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>assistance and uses pointing and cards as means of communication.</td>
<td></td>
</tr>
<tr>
<td>Kelly</td>
<td>12</td>
<td>Sociable and smiley girl, likes attention and communicating with others, uses eye pointing</td>
<td>Severe cerebral palsy, severe verbal difficulties</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and vocalisations as means of communication. Follows classroom rules.</td>
<td></td>
</tr>
</tbody>
</table>

Staff-Cyprus School

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophia (CT)</td>
<td>Teacher</td>
</tr>
<tr>
<td>Annie (CTA1)</td>
<td>Teaching Assistant</td>
</tr>
<tr>
<td>Nikos (CTA2)</td>
<td>Teaching Assistant</td>
</tr>
</tbody>
</table>

<sup>5</sup> Descriptions used as found in their Individual Educational Plans
<sup>6</sup> Terms used as found in their Individual Educational Plans
In the first round of the action research process, the teacher delivered a gymastics lesson, in the gymnastics room and lasted 30 minutes. The children had to 'transform' their classroom into a 'cool beach'. The lesson combined both 'working as a group' and 'working in a group' types of activities. The four children were divided into two pairs (Melina and Tina, Marcus and Andreas). Each pair worked as a group by raising together 'waves' and the whole class together worked in a group to reach their common goal, which was to transform the class to a cool beach. Each pair by holding the edges of a long blue tulle (acting as the sea), made a variety of movements to create waves. The teacher and the two teaching assistance were present in this round. The activity placed great emphasis on fine and gross motor skills with the pupils holding the tulle and making movements with their arms and legs. The pupils also practised concepts such as 'up' and 'down', 'in' and 'out' (cognitive skills) and social skills as well by working and interacting in pairs.

Regarding the characteristics of the CL model that were met, the pupils contributed equally towards the achievement of the common goal by completing similar individual tasks, since they all had to work on similar targets. Moreover, the activity was embedded within the daily routines of the class, since pupils had done similar exercises before. Lastly, the physical layout of the class enabled pupils to have eye and physical contact with each other.

However, three very crucial characteristics were not taken into consideration. The first one deals with the design of the activity, as it did not favour interactions among peers. Instead the common goal of the activity could only be achieved by following the teacher's instructions. The second one deals with the strategy of delayed prompts that allows enough wait time for the pupils to interact and communicate with each other. The teacher used instead immediate prompts to assist them. Lastly, although the concept of the activity seemed meaningful and
interesting to the pupils, since they demonstrated excitement to transform the classroom to a beach, no opportunities were given to the pupils to decide about aspects of the activity. It was obvious, based on the data analysis, that most of the interactions were between adults and pupils. The activity was rather teacher-centred, dominated by teacher's instructions and guidance.

During our reflections with the teacher, we decided that next time a child-centred approach was needed, that would favour pupils' initiations of interactions with each other. We also had a discussion about the role of the staff during the implementation of the model. The staff would allow enough wait time for pupils to respond to each other, therefore, delayed prompts would be given to the children and only when necessary.

**b) Second round**

In the second round of the action research process, the teacher delivered a literacy lesson, which lasted 30 minutes. It was a 'working as group' type of activity. There were five children in the class and they were separated into two groups (Marcus-Andreas and Tina-Melina-Vicky). There were two pegs and two piles of clothes. Marcus identified the types of clothes in the pile and their colours and by choosing one piece of cloth each time, he asked Andreas to hang it on their peg. Similarly, Melina and Vicky requested clothes from Tina. The teacher and the two teaching assistants were present in this activity as well. The activity focused on cognitive skills, with the pupils identifying different kinds of clothes and colours. Moreover, Marcus, Melina and Vicky practised their language skills. Tina and Andreas practised their motor skills by grasping and hanging clothes. Lastly, all the children practised their communication and social skills by interacting and helping each other to achieve their common goal.

In this round all the characteristics of the CL model were met. The activity's design encouraged pupils to assist each other, as their common goal could not
be achieved without pupils communicating and helping each other. Some children completed similar and some others different individual tasks, based on their learning objectives by contributing equally to the common goal. Moreover, the staff used delayed prompts and only when necessary, by allowing enough time for the pupils to interact with each other. The pupils initiated interactions and responded to each other more often than the previous time. Regarding the issue of the activity being embedded within the daily routines of the class, some of its aspects were familiar to the pupils, such as identifying real objects and colours. The pupils were familiar with such tasks during individual work.

The first thing that we discussed with the teacher was relevant to the issue of competition and prizes. In the middle of the activity the teacher told the pupils that the group that would hang all the clothes first would get a prize, although at the end of the activity all the children gained prizes. When the teacher asked what they would like the prize to be Melina suggested star stickers and Marcus suggested muffins. The teacher asked the rest of the pupils individually and they agreed that the winning team would get both. The teacher reminded the children about the issue of competition and prizes several times throughout the activity. While discussing this, the teacher suggested that competition is an important aspect of group activities, as it encourages children to be on task. Therefore the issue of competition was added to the parameters of the CL model for further investigation relevant to pupils' engagement in the activity.

As mentioned already, the staff used delayed prompts and the pupils initiated interactions among peers more often than the previous time. However, as the data analysis revealed, the incidents of initiation of interactions were mainly performed by Melina, who is talkative and sociable. Vicky and Marcus were eventually prompted by adults to request clothes. Andreas followed the requests from Marcus to hang the clothes without prompts from the staff, whereas Tina was prompted several times by the staff to hang the clothes. After discussing these with the teacher, she pointed out that Tina might have needed more prompts, because she had some difficulties in identifying the right clothes. The teacher explained that Andreas is more cognitively advanced than Tina. Therefore, the parameter of cognitively challenging activities affecting pupils' interactions was added to the model for further exploration as well.
c) Third round

In the third round the teacher delivered a numeracy lesson, and lasted 30 minutes. It was 'working as a group' type of activity. The group was constituted of Tina and Vicky. The teacher was the only adult who participated in this round. The two girls sat next to each other in front of their desk. The teacher was sitting next to Vicky. Each girl had in front of her a bulletin board. On Tina’s bulletin board there were several removable animals: three fish, two cats and a dog. On Vicky's board there were three rows. The left side of each row was empty and on the right hand side of each row there were the homes of each animal along with one animal next to its home. The teacher explained to them that the animals on Tina's board were lost and asked the girls if they would help them find their homes. Both seemed to be very interested in this task. Tina giggled when the teacher asked them if they would like to help the animals and nodded "Yes" and Vicky kept repeating "Help the animals". Vicky requested the animals from Tina and Tina gave them to her. Then, Vicky attached them to the right row of the bulletin board and counted them. The activity placed emphasis on cognitive skills with the two pupils identifying animals and with Vicky practising her language and counting skills as well. Moreover, the activity encouraged the pupils to practise their social skills by communicating and helping each other throughout the activity.

All the characteristics of the model were met. The design of the activity encouraged the pupils to assist each other, since their common goal could not be achieved without the two pupils communicating and helping each other and the seating arrangements favoured the proximity among the pupils. Each child contributed equally towards the achievement of the common goal, with the two girls completing different individual tasks, based on their learning objectives and targets. In addition, some aspects of the activity were embedded in the daily routines of the class, such as identifying animals and attaching them to the board. However, the pupils used to engage in those tasks during individual
work. Moreover, when a pupil seemed distracted the teacher used positive interdependence encouragements to motivate them to be on task, by telling them that their partner needs their help. The data analysis revealed that this kind of strategies reinforced the pupils to get back on task.

Delayed prompting did occur in this round. For the completion of the first row of animals, the teacher had to instruct Vicky to decide what animals (i.e., fish) she needed to request from Tina and then count them. The teacher also had to prompt Tina to identify and pick the fish. For the second and third row, Vicky counted the animals by herself, without prompting. However, the teacher had to eventually prompt Vicky to request the animals from Tina for every row. After Vicky’s requests, although the teacher did not use immediate prompts, she eventually prompted Tina to pick the animals and give them to Vicky. These prompts took the form of positive interdependence reinforcements, by encouraging Tina to help Vicky. As the data analysis revealed, although delayed prompts took place, this did not lead to initiation of interactions among peers, although there were few instances when Vicky touched Tina’s hair as a sign to get her attention, while Sophia (CT) was prompting Tina.

When reflecting on this issue with the teacher, she mentioned similar views to the previous round. She suggested that the reason that few initiations of interactions took place among peers might be due to the fact that the activity was cognitively challenging for both pupils. She pointed out that the pupils needed to be prompted not because they failed to follow each other’s guidance but because they were not sure about their responses. Therefore, prompts were necessary to encourage them to respond. The teacher suggested for next time instead of herself prompting the children directly, to ask their partner to repeat her requests. As she pointed out, this might help the children to follow each other’s communication acts without her interfering directly.
In the fourth round the teacher delivered a craft lesson, which lasted 30 minutes and took place in their classroom. She asked the pupils to decorate their classroom by creating a summer landscape altogether. There were five children in the class (Tina, Vicky, Kelly, Andreas and Marcus), all of them sitting at the round table, and between them the teaching assistants and the teacher. She presented to the children a big blue paperboard and explained to them that this represented the sea. She placed in the middle of the table, a variety of drawings of different kinds of fish, sea animals and sea flowers, mermaids and so on. She told them that after they coloured the drawings they would attach them to the sea. The teacher asked the children to pick a drawing each and colour it. Before they started colouring the drawings, she asked them to identify what the drawings represented, by asking them one by one. When a child did not know what the drawing represented she encouraged other children to suggest what it might be. It was a 'work in a group' type of activity. The activity placed emphasis on fine motor skills with the pupils holding the pencil and colouring. Moreover, they practised cognitive skills at the beginning of the activity by identifying what each drawing represented.

Some of the characteristics of the model were met. All the pupils by completing similar individual tasks, contributed equally towards the achievement of the common goal of the activity. Moreover, the activity was embedded within the daily routines of the class, since the pupils were familiar to their individual tasks. However, most of the basic characteristics of the CL model were not taken into consideration and these are discussed below.

The type of the activity itself did not encourage interaction among the pupils, since their common goal was achieved by completing individual tasks without
assisting each other. Therefore, the 'work in a group' type of CL activities might not be appropriate to favour interactions among peers. During the activity rewards and feedback were mainly on an individual level, although the teacher reminded the pupils throughout the activity of their common goal. Only after the completion of the summer landscape were the children rewarded for their excellent effort as a group. Moreover, the seating arrangements did not favour the proximity among the pupils, since the staff was sitting in between them. The issue of competition and prizes was not employed. The teacher explained that since only one group was used there was no reason to use competition. Our reflections with the teacher were mostly about the design of the activity that should favour interactions and assistance among peers. We decided that the 'work in a group' type of activity does not favour interactions among peers, therefore only 'work as a group' type of activities would be used from now on.

**e) Fifth round**

![image](image.png)

The teacher delivered a music session, which took place in the gymnastics room and lasted 30 minutes. The pupils would start practising their performances for the summer celebration. The class had to dance the Olympics song all together. The choreographic movements were similar to the ones observed in the first round during gymnastics. All the six children were in the gymnastics room and were separated into three groups. Each group held the edges of the long blue tulle and made movements with their arms and legs similar to the previous time. However, as soon as we entered the class Vicky started crying and screaming, so Annie (CTA2) took her out of the class for a walk to calm down. Therefore, Nikos (CTA 2) acted as Tina's partner instead of Vicky. The activity placed great emphasis on fine and gross motor skills with the pupils holding the tulle and making movements with their arms and legs. However, the pupils also practised concepts such as 'up' and 'down', 'in' and
'out' (cognitive skills) and social skills as well by interacting and following each other's lead.

All the characteristics of this model were taken into consideration. The activity complied with the main ideology of the CL model, since the common goal and their individual tasks could only be achieved through meaningful interactions among the children and by assisting each other. Although, at the beginning pupils followed the teacher's instructions, later the teacher gave the opportunity to the children to decide about some movements and the rest of the pupils followed their lead. Moreover, the teacher allowed enough wait time to give the chance to the pupils to interact and respond to each other and prompted them only when necessary. There were instances where interactions were initiated by pupils without the teacher's guidance.

Regarding the additional characteristics developed in the previous rounds, the issue of cognitively challenging activities affecting pupils' initiation of interaction did not come across, since this activity was not challenging for the pupils. Moreover, the teacher used the additional strategy suggested in the third round, which was to encourage pupils to repeat their intentional communicational acts to encourage the other pupils to respond, instead of the teacher doing so on their behalf. When a child made a suggestion she encouraged her to show it again so as the rest of the pupils to see her and do the same.

Our reflections with the teacher were mainly about the incident with Vicky and the way that she dealt with it. When Vicky came to the class upset, the teacher did not ask her to work with the group, rather she asked Annie (CTA1) to take her for a walk. The teacher mentioned an issue that was already addressed in the first phase of the study. She suggested that teachers have to acknowledge and keep in mind the personal difficulties that some children might face and not push them to work in instances where they are not able to do so.
**f) Sixth round**

The teacher delivered a literacy lesson, which took place in their classroom and lasted approximately 20 minutes. Tina and Marcus worked together with the help of the teacher. They sat in front of their desk next to each other. Sophia (CT) sat next to Marcus. Marcus had in front of him a plain face of a clown. The parts of his face, such as eyes, nose and mouth were missing and were displayed in front of Tina. The teacher asked the pupils to help the clown to assemble his face. Marcus requested different parts of the face from Tina and Tina passed those to him. The activity placed emphasis on cognitive skills, with the pupils identifying parts of the face. Marcus practised his language skills as well, by forming requests. Moreover, pupils also practised their social skills by communicating and helping each other.

All the characteristics of the model were taken into consideration. The design of the activity favoured interactions among peers, as the common goal and the individual tasks could not be achieved without the two pupils interacting and assisting each other. By completing different individual tasks they could contribute equally towards the achievement of the common goal. Moreover, some aspects of the activity were familiar to the pupils, such as identifying parts of a face and assembling them, since they engaged in similar tasks before, during individual work. In addition, the teacher allowed enough wait time for the pupils to respond to each other and prompted them only when necessary. Regarding the additional characteristics of the model, developed in the previous rounds, the teacher asked Marcus to repeat his requests to Tina, instead of herself doing so on his behalf. However, in the middle of the activity, Tina was passive and did not follow Marcus' requests or the teacher's prompts. The teacher eventually asked her to go to the sofa and lay down. Then, Marcus completed his task with the help of the teacher.
While reflecting on that incident with the teacher, she explained that Tina was quite sleepy and passive that day in general and pointed out that sometimes teachers have to respect a pupil's health difficulties. Moreover, there was a discussion about the meaningfulness of the activity. We concluded that it might be useful to give to the children the actual reason for doing an activity and not just the imaginary scenario's rationale. The example given to the teacher in the first meeting (see appendix 13) describes a CL activity based on an imaginary scenario. However, while discussing with the teacher, we concluded that explaining to the pupils the actual reason for doing an activity, so as the activity to be more meaningful to them, is very important. For example, in this particular case, it could be pointed out to the pupils that asking for things politely from others is very important, because everybody needs help sometimes.

**g) Seventh round**

In the seventh round of the action research process the teacher delivered a numeracy lesson, which took place in their classroom and lasted 30 minutes. The participants were the two teaching assistants, the teacher, Tina, Kelly, Melina, Andreas and Marcus. The class was divided into two groups and the teacher asked the pupils to decide who wanted to be in the same team. The teacher brought three boxes into the classroom. One was full of soft balls and the other two were empty; each of the empty boxes corresponded to each group. Each group member took balls from the box and threw them into their boxes. The group that had the most balls in the box was the winner. They repeated this process three times. At the end of every round the children were asked to look into the two boxes and make a prediction of which of the two boxes had more balls. She asked each child individually to say their opinion. Then, they counted out loud the balls in each basket and the pupils said which team had more balls. The activity placed emphasis on cognitive/counting skills.
However, the pupils also practised their social skills by encouraging and helping each other and their motor skills by gripping and throwing balls.

In this round all the aspects of the CL model were taken into consideration. The activity was designed in such a way to favour interactions among peers, since the teacher encouraged the pupils to praise and reinforce their group members, when throwing the ball and to hi-five their group member after throwing the ball. Moreover, the teacher allowed enough wait time to give the chance to the pupils to interact and respond to each other and the pupils initiated interactions with the members of their group without the teacher's guidance, such as praising each other. Such practices as praising and hi-fiving each other were embedded in the daily routines of the class.

When discussing these incidences with the teacher, she agreed that due to the fact that the activity was very similar to practices that the pupils were used to, she did not face any implementation challenges and all the children were on task all the time, even when their class mates performed by encouraging and rewarding them. However, the areas of skills that the children practised together cooperatively were relevant to the social and motor skills. The cognitive skills and aspects relevant to numeracy were performed by the pupils individually, since they gave individual answers regarding the issue of quantities. The teacher pointed out that these kinds of practices might seem individually instructed, however, the pupils listen to each other's opinions and learn within a group. She also pointed out the issue of counting, and that some pupils by listening and counting out loud along with their more 'capable' peers, learn eventually to count by themselves individually without their help. She pointed out that Marcus is such an example, since he can now count to ten without any assistance because he has been listening to Melina counting during lessons.

**h) Eighth round**

In the eighth round of the action research process I observed two lessons. The first one was gymnastics, where the children practised their choreographic movements for the summer ceremony and lasted 30 minutes. The second observation was a cookery lesson, where the children cooked pizza and it also lasted 30 minutes.
All the aspects of the CL model were taken into consideration in both activities. All the children worked in pairs. The staff allowed enough wait time for the pupils to interact and follow each other's lead and the pupils initiated interactions and responded to each other. Moreover, the seating arrangements favoured the proximity among the pupils and they had the opportunity to decide about their group members in the cookery lesson and about their movements during gymnastics. The teacher also explained to them the purposes of the activity by telling them that it is important to help and assist each other to achieve something together, by drawing on positive interdependence aspects.

The activities were designed in such a way to favour pupil interactions and communication. In the gymnastics lesson, the children were much more familiar with the movements that they had to follow than the previous time when I observed them, since they spent a half-hour period each day practising those movements. The familiarity of the pupils with the sequence of the movements gave them the opportunity to have direct interactions with each other, with limited prompting and guidance by adults. Most of the time the children followed each other's lead and the adults' participation was mainly about rewards.

At the beginning of the cooking lesson, the teacher asked the pupils to identify all the ingredients that were in front of them. Then she explained to the children that they would have to make the pizzas on their own and that Annie (CTA1), Nikos (CTA2) and herself would be there watching them and if they needed something they could ask for help. The staff had already prepared in advance three trays, three pieces of flat dough, and several bowls with pieces of different ingredients such as cheese, ham and so on. The teacher asked them to choose a partner. Marcus picked Andreas, Melina picked Tina and the teacher asked Kelly and Vicky if they wanted to work together and both agreed. The children had to place the dough on their tray and then, put any ingredients they wanted on top of the dough. The staff let the children to work together and interfered
only when necessary. For example, Marcus and Andreas started placing the ingredients in the tray without placing the dough in the tray. Annie (CTA1) guided them to follow the right steps. The teacher used delayed prompts and her role was mostly about rewarding rather than instructing. By working cooperatively, the pupils achieved their common goal.

While discussing the interpreted data with Sophia (CT) about the fact that during these activities the children followed each other's lead and worked together by helping each other, with limited guidance from the staff, she pointed out again the fact that the children were familiar with the routines of such activities, since they had done them before. No revisions of the CL model were made in this round.

i) Ninth round

In the final round of the action research process two lessons in a row were observed, both in literacy, which lasted 30 minutes each and took place in their classrooms. In both lessons the focus was on identifying parts of the body. In the first lesson the whole class worked together. The children sat in a circle with the teacher and the teaching assistants sitting behind the children. The teacher asked the children to identify different parts of her body by pointing and shaking different parts of her body each time and encouraging pupils to do the same on their bodies. After identifying several parts of the body, the teacher asked the pupils one by one, to shake different parts of their body and encouraged the rest of the pupils to identify again the parts of the body that their classmates shook and do the same.

In the second activity, the teacher asked the pupils to sit at the round table and work in pairs. Vicky returned from the break very upset and Annie (CTA1) took her out from the class to calm down. I focused my attention on Melina and Kelly as a pair. Andreas worked with Nikos (CTA2) by working on similar tasks. Kelly
had in front of her different pieces/parts of the body and Melina had a frame where she placed these parts in the appropriate place. Melina requested from Kelly different parts of the body every time and Kelly passed those to her.

The activities followed the CL model's characteristics to a great extent. Rewards and affective support feedback were given to the pupils on an individual and group level. The activities favoured interactions among peers by following each other's lead and by helping each other assemble the body figure. The common goals of both activities could not be achieved without pupils' interacting and helping each other. By completing, in the first activity, similar individual tasks, and in the second activity, different ones, every child contributed equally towards the achievement of the common goals. Moreover, the teacher used delayed prompts and the pupils initiated interactions between them. The pupils were familiar with the processes of the activities, since they did similar ones before. They also had the opportunity to decide about which parts of their body they wanted to move and which parts of the body to request.

Regarding the issue of cognitively challenging activities which might affect pupils' initiations of interactions, in the second activity, there were instances where the teacher interfered and encouraged the girls to assist each other (i.e., request or give parts of the body to each other). While discussing these incidences, the teacher mentioned again that when some of the tasks challenge the pupils, then prompts are necessary in order to encourage them to express their opinions and help each other. Moreover, the teacher used positive interdependence encouragements, instead of her prompting the pupils directly. In the first activity, the teacher encouraged pupils to watch their classmates and follow each other's lead instead of prompting them directly what to do. Similarly, in the second one, the teacher encouraged Melina to request things from Kelly several times, instead of the teacher repeating Melina's requests to Kelly.

The activities seemed to be interesting to the children, since they were very engaged in them and they smiled and made happy vocalisations several times. During the first activity, initiations of interactions among the peers took place. For example, in the first activity Melina, Kelly and Andreas followed the lead of their classmates and moved the corresponding parts of their bodies, without the teacher's prompts. Vicky had to be prompted several times by the teacher to
follow her classmates' lead, but she was very interested in suggesting movements, even without the teacher's prompts. Similarly, in the second activity, Melina was very interactive in terms of initiation of interactions and requested parts of the body from Kelly many times, without the teacher prompting her. She needed, however, prompts from the teacher to identify and name the missing parts of the body figure.

The final discussion of the data interpretations and reflections took place along with the interview with the teacher, therefore it was audio recorded, with her permission. While reflecting on the data interpretations the teacher pointed out again the importance of adjusting a group activity based on existing routines. "(…) children were very interactive the other day… they are used to these activities. Asking things politely is something that I'm very consistent."

Further, discussion about the teacher's reflections on the CL model and its evolution are given in section 5.6, which deals with the holistic synthesis of the findings of phase two.

5.4 The rounds of the action research process in the English setting
During my visits to the English class for the purposes of the second phase of the study, I observed in total ten lessons implementing the CL model. This resulted in nine rounds of the action research cycle, since once I observed two lessons implementing the CL model in the same day, therefore, no data analysis was conducted between those two lessons. As mentioned, before the implementation of the CL model, I had a discussion, with the teacher about its characteristics (see section 5.2.1). All the amendments made in the CL model during its implementation in the Cyprus school, were not included, since one of the aims of this phase was to explore how the CL model would be evolved in the two different settings. However, it was pointed out to the teacher, that there was a need for the children to be included in the action research process as much as possible, therefore the model was open to any amendments that would enable pupils to participate in its evolution and revision process. Moreover, it was clarified to the teacher that there was a need for the activities to be based on a 'work as a group' type of practices to favour interactions among peers. Figure 5.3 summarises the rounds of the action research process and the subjects of the lessons observed each time.
The participants of the English setting

Before presenting the rounds of the action research process in the English class, table 5.2 gives details about the participants of this phase for the English setting. Moreover, each round described below illustrates in pictures the layout of the class and the seating arrangements of each lesson.
Table 5.2: Introducing the English class participants of phase two

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Characteristics</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emma</td>
<td>7</td>
<td>Sociable girl, follows classroom rules. Uses a powered wheelchair that she operates herself</td>
<td>Cerebral palsy, verbal difficulties</td>
</tr>
<tr>
<td>Katelyn</td>
<td>9</td>
<td>Smiles a lot and obeys classrooms rules with a pleasant manner. Uses powered wheelchair, operated by staff. Uses eye pointing and Big Mac and communication board as main forms of communication</td>
<td>Cerebral palsy, severe verbal difficulties</td>
</tr>
<tr>
<td>Sandra</td>
<td>7</td>
<td>Sociable and smiley girl, follows classroom rules, uses a powered wheelchair that she operates herself</td>
<td>Cerebral palsy, verbal difficulties</td>
</tr>
<tr>
<td>Ruth</td>
<td>8</td>
<td>Smiley girl, uses BigMac and eye-pointing as means of communication, uses a powered wheelchair, operated by staff</td>
<td>Cerebral palsy, severe verbal difficulties</td>
</tr>
<tr>
<td>Alice</td>
<td>9</td>
<td>Sociable and talkative girl, obeys classroom rules, uses a powered wheelchair that she operates herself</td>
<td>Cerebral palsy, verbal difficulties</td>
</tr>
<tr>
<td>Tim</td>
<td>10</td>
<td>Sociable and talkative boy, obeys classroom rules. Uses a powered wheelchair that he operates himself. Apart from talking uses Makaton signs as a mean of communication</td>
<td>Cerebral palsy, verbal difficulties</td>
</tr>
<tr>
<td>Chris</td>
<td>10</td>
<td>Due to medication he is sleepy most of the time and this has an impact on his responsiveness to stimuli as well. Uses BigMac and arm moving as means of communication. Uses a powered wheelchair operated by staff</td>
<td>Identified as having profound and multiple learning difficulties and visual impairment</td>
</tr>
<tr>
<td>Gar</td>
<td>9</td>
<td>Sociable boy, follows classroom routines with a pleasant manner. Uses eye-pointing as a mean of communication. Uses a powered wheelchair operated by staff</td>
<td>Cerebral palsy, severe verbal difficulties</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linda (ET)</td>
<td>Teacher</td>
</tr>
<tr>
<td>Helen (ETA1)</td>
<td>Teaching Assistant</td>
</tr>
<tr>
<td>Tiffany (ETA2)</td>
<td>Teaching Assistant</td>
</tr>
</tbody>
</table>

7 Descriptions used as found in their Individual Educational Plans
8 Terms used as found in their Individual Educational Plans
**a) First round**

In the first round of the action research process the teacher delivered a music session in their classroom, which lasted approximately 45 minutes. The teacher started the lesson with an introduction song which welcomed all the children in the class, let them know that 'it was time for group work' and asked them if they were 'ready for some fun'. Katelyn and Ruth made vocalisations of excitement. Chris was very sleepy that day. Throughout the activity the teacher asked the pupils which songs they would like to sing by giving them choices and the children used their voice or communication talkers when they heard a song that they liked. During the variety of songs, pupils suggested movements that they would like to do and they also used their voice on specific parts of the songs when they were asked to do so to act out parts of the songs. The teacher encouraged the rest of the group to follow each other's lead and do the same. The activity placed emphasis in a variety of areas of skills. Motor skills, with the pupils shaking specific parts of their body, cognitive skills, by being aware which parts of the body they had to shake every time, and by using their voice or their Big Mac, when appropriate and social skills, by following each other's lead and by waiting their turns.

In general the activity drew upon most of the initial characteristics of the CL model. Rewards were given to the children on both an individual and group level. Pupils showed signs of satisfaction when receiving this positive feedback such as smiling, happy vocalisation and in Chris' case by lightly shaking his arm and head. The activity's design favoured interactions and assistance among peers, by following each other's lead. Each child was assigned to complete individual tasks (i.e., showing to each other which part of the body to shake, or using their voices) to achieve together the common goal (i.e., acting out a variety of songs). The two girls contributed equally to the achievement of their common goal, since they were very engaged in the activity. Moreover, the
activity was embedded within the daily routines of the classroom, as they used to perform similar tasks throughout the school year.

The only parameter that was not fully taken into consideration was the one dealing with delayed prompts. There were instances where the teacher used immediate prompts to encourage the children to follow each other's lead. During our discussion, the teacher suggested that next time she would use delayed prompts and only when necessary to explore whether this strategy would lead to initiations of interactions among peers, without encouragements from the teacher.

Some additional characteristics emerged during the first round that were discussed with the teacher. The first one dealt with the issue of competition. The teacher used the issue of competition only once during the activity, in combination with the positive interdependence element. By raising the issue of competition among the girls, in terms of who would shout out more loudly, she prompted them to do so, to encourage Chris to join the activity. This seemed to have a positive effect on pupils' engagement in the activity, since the girls made a big effort to shout out loud and Chris responded to their call. The teacher suggested that competition is not one of the vital aspects of CL, but sometimes can help the pupils engage in the activity, as it is more fun and exciting for them to compete against each other.

The second issue discussed with the teacher was relevant to the introductory song. The particular strategy increased the pupils' interest as the two girls giggled and smiled throughout the introductory song. The teacher pointed out that pupils having fun is a very important aspect affecting their engagement in the activity. While discussing ways to make the activities more meaningful to them, we decided to point out to the children not merely the CL rationale (i.e., to work together, assist each other and have fun) but the functional rationale of each activity as well. For example, in that particular case it could have been pointed out to the children that they would practise to use their voices or their BigMacs because that would help them to express their choices. Moreover, there were instances where the teacher used positive interdependence encouragements, instead of herself prompting the pupils directly. For example, she encouraged the girls several times throughout the activity to repeat their
movements or to use their voices one more time to encourage Chris to join them. This seemed to have positive effects on Chris' engagement, therefore this parameter was taken into consideration for further exploration.

b) Second round
The teacher delivered a gymnastics lesson in the assembly room. The activity was separated into three phases. In the first phase the children worked all together, in the second one they worked in pairs and in the last phase children assembled again all together to get individual feedback from the teacher. Each phase lasted approximately fifteen minutes.

In the first phase all the participants were sitting next to each other in a circle, apart from the two teaching assistants who were standing behind the children. The teacher played again the introduction song which encouraged pupils to work together and have some fun. She also pointed out the functional rationale of the activity, by explaining the importance of exercising to be healthy, and that by being able to hold and pass things to others, people can help both themselves and others. She also explained to them that before exercising in pairs it is good to have some warm-up exercises. After this introduction she played a song on the CD player which encouraged pupils to stretch or move different parts of their body. After some indications by the lyrics of the song regarding which parts of their body to move, the teacher encouraged them to decide what other stretching exercises they wanted to do and the pupils followed each other's suggestions. During this activity children initiated interactions with each other and followed each other's lead and the staff allowed enough wait time for the pupils to respond to each other, instead of prompting them directly.

In the second phase of the activity children were separated in pairs, based on their individual learning objectives. Gar and Katelyn worked together as a group by throwing a balloon to each other while lying on mattresses and Emma and Sandra worked together as a group, by throwing small sacks to each other's baskets while sitting on their chairs. At the end of the activity, Emma and Sandra with the help of Tiffany (ETA1) counted out loud all the sacks in each basket. Emma and Sandra's tasks apart from practising their motor skills, cognitive aspects were emphasised as well, by identifying the colours of the
sacks and practising their language skills by making simple requests to each other about which sack to throw to each other's basket. At the same time social skills were taken into consideration as well, since both pairs communicated and interacted with each other throughout the activity. Gar and Katelyn's activity placed emphasis on motor and social skills rather than cognitive, by throwing the balloon to each other. The children in this group chose which balloon they wanted to use every time, with the staff giving them a variety of choices and they had to use their voice when the staff mentioned the balloon they wanted to use.

As the data analysis revealed, the pupils initiated interactions with each other, with minimum assistance and encouragement by the staff. Katelyn and Gar moved their hands to catch each other's balloons without any guidance or prompts by the teacher or Helen (ETA1). Staff's encouragements were limited to instructions of how to raise their heads and arms and not of encouragements to interact with each other. Similarly, Emma and Sandra initiated interactions by asking sacks from each other, mostly without Tiffany (ETA2) prompting them. When discussing this with the teacher, she pointed out that the pupils worked together within existing routines. Moreover, the teacher highlighted the importance of children having fun during the activities, since this affects their engagement in their individual tasks. This was in accordance with the outcomes of the data analysis, as all the pupils laughed and giggled throughout the activity and were very engaged in it as well.

In the final phase of this activity the children were gathered together again in a circle. The teacher gave individual feedback to the pupils about their performances, explaining to them in detail how well they practised their individual tasks and in what aspects she would like them to work more next time. The discussion with the teacher was mainly about the issues of individual accountability and positive interdependence. We decided that next time group feedback would be given to the pupils along with the individual one, regarding
how they cooperated with their group members. Moreover, the teacher pointed out that sometimes she asked the children to give to her feedback about the activities, whether they liked it or not, or which parts they liked the most. Therefore, it was decided that pupils would give feedback about the activity as well as an internal aspect of the CL model.

c) Third round

In the third round the teacher delivered a literacy lesson, which took place in the classroom and lasted approximately 30 minutes. The pupils and the teacher were sitting in a circle and the teaching assistants were sitting behind them and approached the children when they needed assistance. The teacher read a story from a book and the pupils acted out different characters of the story or weather conditions such as wind or rain, by using their BigMacs, music instruments or their voices. The pupil participants for this round were Gar, Chris, Katelyn and Tim.

The activity took into consideration most of the characteristics of the model, apart from the one that dealt with the design of the activity. The activity's design did not favour direct interactions among peers, in terms of assisting each other. However, the teacher created opportunities for the pupils to encourage and praise each other. Apart from this aspect that was not fully taken into consideration the rest of the characteristics of the model were met. At the beginning of the activity the teacher explained to the pupils both the CL and functional rationale of the activity. She told them that they would work all together in order to perform as a group a story. She also explained to them that the activity would help them to practise their skills to be able to say things to others when they needed to. She pointed out that it is very important for them to know how and when to use their voices or the talking devices and that they should wait their turns and listen to others. Moreover, each child was assigned
to complete different individual tasks to achieve together the common goal, by contributing equally towards the achievement of the common goal. In addition the teacher allowed enough wait time for the pupils to respond. As the data analysis revealed, children acted out their parts most of the times without prompting. The teacher read the story and when the pupils had to act out their parts by using the necessary equipment or their voices, she looked at them without using prompts or instructions immediately. All pupils demonstrated signs of enjoyment throughout the activity (e.g., giggling, vocalisations of excitement, laughing) and were engaged in it.

At the end of the activity, the teacher gave them precise feedback about their performances individually and on a group level, praising them for the great performances and for encouraging each other. A group certificate was written for them, letting them know that they would receive it from the Head during assembly time. Then, the teacher asked the pupils one by one to choose which label represented their opinion about the activity, the 'thumbs up' one or the 'thumbs down'. Following their responses she encouraged them to specify which parts they liked the most and which ones they did not like. All the pupils choose the 'thumbs up' label, and each pupil chose a different aspect of the activity as their most favourite one, such as the maracas, or the lion and so on. Some children chose their own character and in other cases a group mate’s character.

As mentioned above the activity did not favour direct interactions among peers. While discussing this with the teacher, she pointed out that although there were not any direct interactions among peers, yet the pupils worked and achieved something together. She also pointed out that it is important for children to learn not only how to assist and help each other, but to respect others and wait for their turn. The teacher's remarks were taken into consideration. The outcomes of phase one revealed that social skills for the practitioners are, amongst others, pupils’ ability to demonstrate good manners, respect and listen to their classmates and wait for their turns. Therefore, the conclusion of this round was that, although the peer relations aspect was not met in terms of assisting each other, it was met, in terms of listening to each other and waiting for their turn.
d) Fourth round

In the fourth round the teacher delivered a numeracy lesson in their classroom and lasted approximately 45 minutes. At the beginning of the activity, the teacher used the introduction song, which explained to the pupils that it was time to work together and have fun. The children were sitting in a circle on their chairs, and in the middle of the circle, on the floor, there was displayed a big darts board. There were five homocentric circles on it and each circle was numbered from one to five. There was also a ball and a long board like a slide, where the children placed the ball on it and let it slide to the darts board. The ball and the darts board were made with such a fabric that when the ball fell on the board it stuck on it. The staff also placed in front of each child's individual table a label with the numbers from one to ten. The teacher told them that they would practise their counting skills and asked them if they wanted to play a fun game. The children with the help of the staff placed the ball on the slide and let it roll to the board. Every time a child scored a number, the pupils recognised it by pointing to the right number on their label, or Tim sometimes shouted it out loud. Following this, they counted up to that number out loud by pointing each time to the respective number on the label. Each child's score was noted on the classroom's board and at the end of the activity they added each pupil's scores. Every time a child threw the ball, the staff encouraged the rest of the pupils to praise him by using their voices or by clapping hands.

The activity took into account all of the aspects of the CL model. The teacher pointed out to the pupils the rationale of the activity which was to practise their counting and she also pointed out to the pupils that they would help each other to count. The activity also drew on aspects of positive interdependence, as the staff encouraged children to reward each other's efforts and to count all together their individual scores to assist each other. Moreover, children seemed to be interested in the activity as the data analysis revealed, since they were engaged in it and they used vocalisations of excitement and enjoyment.
throughout the activity. At the end of the activity the teacher gave them individual and group feedback of their performances and on how they helped and encouraged each other. She also asked the pupils one by one to give feedback about the activity, by using the same strategy with the previous round. Each child liked different aspects of the activity, such as the counting or clapping hands.

While discussing with the teacher the aspects of the activity that they enjoyed the most, the teacher pointed out that the counting and praising each other highlights that the children enjoyed working together and that affected their engagement in the activity. This concurred with the data analysis outcomes, since the children were on task most of the time either by praising their peers, or by counting or by throwing the ball, and there were only few instances that they looked distracted. The pupils initiated interactions among them by praising each other whenever a pupil threw the ball, with Tim clapping hands and with Gar and Katelyn using their voices. During our reflections with the teacher, she also highlighted again the aspect of familiarity of the pupils with such activities, since such an activity and similar ones took place before.

e) Fifth round

In the fifth round I observed two lessons, which took place in their classroom and lasted 30 minutes each. The first one was literacy and the other one craft. In the literacy session the teacher delivered a lesson that was similar to the one used as an example in our first meeting (see Appendix 13), which was based on an activity that I had observed in her class the previous year. Alice and Katelyn were sitting next to each other in front of a desk. The teacher was sitting next to Alice and Helen (ETA1) next to Katelyn. In front of their desk there was displayed a board with the body figure of a girl. Next to this board there were different types of clothes such as hats, t-shirts, skirts and so on. Alice asked
from Katelyn different types of clothes and Katelyn passed those to her, in order for Alice to display them on the board. In the craft lesson, the pupils had in front of them pieces of clothes in different shapes and colours. The pupils (Tim and Alice) identified them in terms of colour and shape and glued them on a paperboard which they had in front of them. Each child identified the colour and the shape of the piece of cloth that they chose and the other child said whether he agreed with his classmate’s answer.

Both activities complied with the aspects of the CL model. Both the activities were designed in such a way to give the opportunity to the children to assist and help each other and the pupils completed different tasks based on their individual learning objectives, by assisting and helping each other. All the pupils contributed equally to the achievement of their common goal. However, although interactions among peers took place, as the data analysis revealed, the staff prompted the pupils to communicate and assist each other several times throughout the activity. At the end of the activity the teacher asked the pupils to give their feedback. Tim chose ‘thumbs down’ and the rationale for his choice was that he did not like the shapes or the glue. The teacher asked him whether he found the activity difficult and Tim agreed. The other two girls said that they enjoyed the activities. The data analysis suggested that all three pupils, although they did not demonstrate any discomfort during the activities, they did not demonstrate many signs that they had fun either.

While discussing about this with the teacher, she pointed out that these two activities differed from the previous ones in that they demanded higher cognitive functions, and that might have challenged the pupils. Moreover, while discussing about the issue of immediate prompts the teacher indicated that in activities where the children work on higher cognitive levels prompts might be useful, since they serve as encouragements and reinforcement for the pupils to achieve their individual tasks. She pointed out that children might not be that responsive, because they are not sure about their responses to the requests of their pairs, therefore, prompting is needed to encourage them to express their opinion. A similar point of view was pointed out by the teacher of the Cyprus class as well. As both teachers suggested, in such cases, where children work on challenging cognitive functions while assisting each other, prompts are
necessary to reinforce them to complete their individual and common tasks. This point of view was taken into consideration for the revision of the CL model.

**f) Sixth round**

In the sixth round of the action research process the teacher delivered a gymnastics lesson in the assembly room and lasted 45 minutes. The activity was separated in three phases, like the previous time. In the first phase the teacher used an introduction song, encouraging the children to work together and have some fun. Then, they had a fun activity: The pupils were sitting in a circle and the staff covered them with a parachute and sang "Where are all the children hiding?" and then uncovered them, by repeating this procedure several times. The children enjoyed it very much since they giggled and made happy vocalisations. While discussing with the teacher the purpose of this activity she pointed out the importance of children having fun and feel welcomed, as this affect their willingness to cooperate with others.

Following this, the teacher explained to them the purposes and the procedures of the second phase of the activity. Emma lay down opposite to Sandra and Gar lay down opposite to Katelyn on mattresses. The teacher played on the CD player a song that encouraged pupils to do exercises and described to them which parts of their body to move every time. Then, the teacher encouraged the pupils to suggest which parts of their body they wanted to move and encouraged the pupils to following each other’s lead. Following this the pupils threw soft balls to their pair. In the third phase of the activity the children gathered again in a circle to give and receive feedback. The teacher gave them detailed individual feedback about how well they exercised and pointed out to some children on what aspects of their performances they had to work more the next time. She also gave them positive group feedback praising them about how well they worked with their partner. The teacher encouraged the pupils to choose which label represented their opinion about the activity (i.e., 'thumbs
down' or 'thumbs up'). All the children chose 'thumbs up'. Then she asked them one by one to say what aspects of the activity they liked the most. Most of the children said the ball game, whereas Emma suggested the song with the movements.

The activity complied with the aspects of the CL model. The design of the activity favoured pupils to work together and follow each other's lead and they were rewarded both on an individual and group level for working on their individual and common tasks. The staff allowed enough time for the pupils to respond to each other and the pupils initiated interactions with each other on several occasions. The children were engaged in the activity and enjoyed it, as the data analysis revealed. During our reflections and discussion with the teacher, the issue of the pupils working on tasks that they are familiar with came across again, regarding its positive effects on pupils' initiations of interactions between them. Moreover, as mentioned above, the issue of children having fun and feeling comfortable in their environment was another aspect of CL activities discussed and taken into consideration.

**g) Seventh round**

![Image](image.png)

In the seventh round of the action research process, the teacher delivered a numeracy lesson, which took place in their classroom and lasted approximately thirty minutes. There were two pupils in the class (Alice and Tim). The two children were sitting next to each other, in front of their desks. The teacher was sitting opposite to them and Helen (ETA1) next to Tim. The teacher displayed on their desks three different colours of clothes and several bricks which corresponded in colour to the ones of the clothes. The teacher asked them initially to put the bricks on top of the corresponding clothes. Then she asked them to count each group of bricks by counting out loud and then, by pointing on their individual labels with the numbers to the appropriate number. Following this the teacher asked them several questions about addition and deduction, by
asking them every time to remove specific number of bricks and to count the rest of them out loud. The teacher asked each child individually every time and then she asked their partner whether he agreed or not with the answer of his partner.

The activity did not comply with two of the characteristics of the CL model. The teacher although pointed out clearly the individual tasks of each child, did not point out their common goal. In addition, although at the end of the activity, the teacher gave them individual positive feedback about their performances and efforts and praised them for helping each other, she did not ask for their feedback. However, some other characteristics were taken into consideration, such as equal opportunities and participation, and teacher's rewards were given to each child individually and on a group level as well. Moreover, the design of the activity gave the opportunity to assist each other, by counting together and expressing to each other their opinions. However, as the data analysis revealed there were not any initiations of interactions among peers, as the teacher guided eventually the interactions with prompts and instructions.

While discussing with the teacher about the issue of initiation of interactions by pupils and the fact that a common goal was not pointed out clearly to the pupils, she explained that she had prepared a different activity, but since two of the pupils did not come to school that day, she had to change her plans and do something different. She also indicated the dynamic nature of a classroom—an outcome revealed in the first phase of this study—where the teachers sometimes have to improvise and be more flexible in the teaching approaches they had planned to use. This aspect was taken into consideration.

**h) Eighth round**

In the eighth round the teacher delivered a music session in their classroom and lasted 45 minutes. It was similar to the one observed in the first round of the action research process, with the pupils performing different parts of a variety of songs. The participants were the two teaching assistants, the teacher, Katelyn, Chris and Ruth.
The teacher started the lesson with the introduction song which let them know that it was time for group work and asking them if they were ready for some fun. Moreover, the teacher pointed out to them the functional rationale of the activity, by explaining to the pupils the importance of being able to use their voice or the communication devices when they want to ask or say something, and the importance when working together to wait for their turn and listen to others. The activity followed similar procedures. The pupils had the opportunity to choose the songs they would like to sing and choose whether they would like to use their voices, the talking devices, musical instruments or parts of their bodies to act out parts of the songs.

The data analysis revealed that pupil initiations of interactions took place several times and the children followed each other's lead without or with minimum prompting on some occasions. In Chris' case, the teacher had to describe to him the movements that their group mates chose to do, and encourage him on an individual basis to do so. Moreover, several times throughout the activity the teacher asked the girls to repeat their actions to give the chance and more time for Chris to do the same as well. In general, this activity complied with all the aspects of the CL. The activity was designed in such a way to favour interactions among peers by following each other's lead or by encouraging each other. At the end of the activity the teacher gave individual and group feedback to the children and encouraged them to give their feedback on the activity as well. The girls chose different songs, as their favourite parts of the activity. Chris after being encouraged by the teacher several times to give a response he chose 'thumbs up'. No further suggestions or revisions of the CL model were made in this round.
i) Ninth round

In the last round the teacher delivered a literacy lesson, which was similar to the one observed in the third round of the action research process and lasted 30 minutes. She read to the pupils a book and the children had to act out different characters of the story, by imitating their idiosyncratic characteristics in terms of animal's sounds and expressing their feelings such as anger, excitement, happiness and so on. The children were sitting in a circle along with the teacher; the two teaching assistants were sitting behind the children and helped them use their communication devices or their musical instruments when needed. The pupil participants were Tim, Alice, Katelyn, Ruth and Chris.

The activity took into consideration all the aspects of the CL model. The teacher at the beginning of the activity sang an introduction song to the children, which encouraged them to work together and have some fun. She also explained to them the functional rationale of the activity, which was the importance of expressing their feelings and what they need and think. Moreover each child contributed equally to the common goal, which was to perform a story together, by completing their individual tasks, which were based on their individual needs and learning objectives. For example, some children used their voices and/or made facial expressions, whereas others played the music instruments and used their communication devices. As the data analysis revealed, delayed prompts were used with the teacher giving enough time to the pupils to act out their parts and prompting them only when necessary. She also used positive interdependence encouragements by telling pupils when it was needed to act out their character, because the other children wanted to listen to them, and encouraged the other pupils to say whether they would like to listen to them. The teacher also gave the opportunity to the children to decide what character they wanted to be and whether they would like to use their voices or communication devices or music instruments.
Moreover, in contrast with the previous time, in the third round, the activity was designed in such a way to favour interactions among peers and the pupils had the opportunity to follow each other’s lead. Based on the data analysis initiation of interaction by pupils among peers did take place several times throughout the activity, either by assisting each other, or by smiling and giggling with each other on some occasions when their group members acted out their parts. For example, there were instances where the children made sad, happy or excited facial expressions and the other children had to follow their group mate's lead and do the same. In such cases, usually the children did their group mate’s facial expression without staff's prompts.

At the end of the activity the teacher gave them a group certificate because they worked so well together and helped each other. She also asked the children to give feedback for the activity. The pupils chose the 'thumbs up' label and chose different aspects of the activity as their favourite ones. Some pupils chose some of their classmates' characters as the most favourite parts of the activity. While reflecting on the data analysis of this observation with the teacher, she pointed out again the importance of pupils having fun during an activity and the pupils working in routines that they are familiar with.

5.5 Data collection and analysis procedures for the interviews and cross-case analysis

After the completion of the implementation of the CL model, in-depth semi-structured interviews were conducted with each of the two teachers. Following their analysis, the cross-case analysis took place to bring together the themes from the two cases. Figure 5.4 illustrates the procedures used for data analysis for the second phase of the study.
5.5.1 Data collection and analysis procedures for the interviews

In-depth, semi-structured interviews were conducted with each of the teachers, after the completion of the implementation process of the CL model. The questions asked were mainly for their reflections on this model and their opinions about its viability and practicality. Both interviews were audio recorded with the teachers' permission. The interview with the Cyprus teacher took place in her classroom when it was empty. The interview lasted approximately half an hour. The interview of the English teacher took place in the conference room of the school and lasted approximately fifty minutes. The interview protocol was separated in main broad topics with open-ended questions in each (see appendix 2). These questions were used as a reminder of the key issues needed to be discussed. The questions were mainly about the CL model observed, its utility and practicality regarding the social skills of the children. The final characteristics of the CL model were presented to the teachers in bullet points to reflect on them. In appendices 15 and 16 these bullet points, as presented to the two teachers, are demonstrated. The one presented to the Cyprus teacher was written in Greek, and it was later translated to English for the purposes of this thesis.

The data analysis procedures used were similar to those used in the observation data analysis and involved three main levels. Each interview was analysed independently from the other, however, identical procedures for analysis were used in both cases. After transcribing the interviews, every line
was numbered and the right hand margins were extended to leave enough space for notes and were printed out. The first level of analysis involved coding the raw transcribed data, by marking by hand. The coding was again based on both an inductive and deductive approach, for the same reasons explained in section 5.2.2 dealing with the purposes of this phase. Keeping in mind the characteristics of the CL model and at the same time being open to any critical viewpoints that had not been addressed in the discussions with the teachers during the implementation process gave me the opportunity to further explore its utility, implementation and its challenges. I started coding a variety of distinct units of meanings such as key words, phrases or sentences about their impressions, personal thoughts and viewpoints.

All the aforementioned units of meaning became the building blocks of the second level of analysis. The second level involved the integration of the codes by comparing similarities and differences to be organised into broader categories. The categorisation of the codes took place by marking the right margins as well, by using chubbier pens to avoid confusion. After completing the second level of analysis (i.e., categorisation), the emerged categories were written in a word document, along with all the segments of the first level of analysis (i.e., codes) under the appropriate categories. Since every line of the transcribed data was numbered I could easily track it and revisit it to read it within the ‘wholeness’ of the text. I also kept reflective memos while categorising all the initial codes, under the relevant categories regarding my thoughts and reflections and how these categories link to each other.

The third level of analysis involved an interpretation of all these categories, exploring the relationships and connections between them in an effort to narrow them down to broader themes. At this level the labels used for each theme were usually borrowed from the theoretical propositions of the CL model as these appeared in figure 4.3, or from the theory explored in the literature review chapter. The themes were written in a new word document and under each theme I copied and pasted each category which emerged in the second level of analysis, along with the codes emerged in the first level of analysis.

By the completion of the analysis of the interview data, all the analysed data resulted to four groups of themes: one group of themes from the observation
analysis of the Cyprus setting, another one from the observation analysis of the English setting and two more groups of themes from the interviews with each of the two teachers. At this point the tenth cycle of the action research process took place (see figure 5.4), by incorporating the data analysis from the interviews in the previous rounds of the action research process of each case. The information of the analysed interview data were added to each case to clarify and extend participants' understandings about the CL model. By adding to the action research process, apart from observation data, other sources of analysis (i.e., interview data), I aimed to achieve a holistic and robust investigation of the issue under study (Stinger, 2007).

5.5.2 Cross-case analysis procedures
The last step of the action research process took the form of a cross-case analysis, which involved an exploration of the themes created from the data of each setting and the construction of a coherent theoretical proposition. This cross-case analysis was mainly a 'variable oriented' approach (Miles & Huberman, 1994) based on the analysis of the major themes. The main reason for choosing the variable oriented approach lies on the aims and purposes of this study. The aim of the study was not to provide a comparison of the implementation and evolution of the CL model in the two classes, rather to explore these issues in an attempt to provide a coherent theoretical and practical proposition. Therefore, a variable oriented approach seemed appropriate. However, any differences emerged during the evolution of the model in the two settings were taken into consideration during the cross-case analysis and are discussed in the following section. By bringing together the themes of each case, the intention was to give answers to the research questions of phase two. For that reason, after exploring and reflecting on the groups of themes, they were separated into four main dimensions, each one corresponding to a research question (see figure 5.4). Section 5.6 presents the holistic synthesis of the findings.

5.6 Holistic synthesis of the findings
As mentioned above all the themes were integrated and grouped in accordance to each research question. The presentation of the holistic synthesis of the findings further amplifies the aspects of the CL model addressed in sections 5.3 and 5.4. and provides answers to each of the research questions.
The four research questions are:
1) What are the characteristics of the CL model developed for the pupil participants of the study?
2) How do the CL model's activities help the pupil participants practise their social skills?
3) What types of peer interaction take place during the implementation of the CL activities?
4) What are the challenges that emerged during the implementation of the CL model's activities in regard to the social skills of the children?

Based on these research questions, four main topic areas were created, each one responding to the above questions. The main topic areas are:
- The characteristics of the CL model
- The utility of the CL model in regards to the social skills of the pupils
- Types of peer interactions during the implementation of the CL model
- The challenges of the CL model

In the following sections are presented the main themes of these topic areas accompanied with extracts from the observations and quotes from the teachers' own words during the interviews. At the end of each observations' extracts are included in brackets the country of each setting, the observation's number and the date. Similarly for the interviews, each teacher's pseudonym and country are mentioned, before presenting their own words.

5.6.1 The characteristics of the CL model
The action research process helped revise and evolve the initial characteristics of the CL model to be tailored to pupil participants' abilities and be adjusted in the daily routines of the two classrooms. After the holistic synthesis of the findings a clearer picture was built about this model. All the final characteristics of the CL model are interrelated with each other, and their implementation should be viewed in a dialectical mode. Figure 5.5 illustrates a holistic synthesis of the characteristics of the CL model and their dialectical notion.
Figure 5.5 Holistic synthesis of the characteristics of the CL model.

**a) Basic ideology and core elements**

The basic ideology and the core elements of the CL model evolved in the same way in the two settings. The basic ideology that underpins this model is that the activity should be designed in such a way to encourage pupils to work together and not individually. Moreover, activities should be interesting and meaningful to the children to be motivated to engage in their tasks; and individual and group rewards could be given to the pupils according to their individual and group performances. Based on these premises the core elements of this model emerged. The core elements of the CL model, as these derived from the data analysis are similar to the ones addressed in the literature about CL. These are: positive interdependence, individual accountability, equal participation/ opportunities based
on pupils' individual needs and learning objectives, face-to-face interactions and social/group skills.

All the elements were implemented in a dialectical manner in both settings. The teachers, by drawing on the individual accountability and equal participation aspects, monitored the pupils' behaviour to ensure that they all completed their individual tasks. At the same time, however, as the observation data analysis revealed, both teachers, made an extensive use of the positive interdependence and social/group skills elements, by designing activities that favoured pupils' assistance and interactions. During the interviews both teachers highlighted the importance of positive interdependence and social/group skills. Linda (ET) suggested that during the activities of the CL model "they (the pupils) bounce off each other and listen to each other (...) they work together by listening to each other (...) it's a peer interaction". Similarly, Sophia (CT) mentioned that "pupils helping each other, especially in my class, is very effective, because they have bonded as a group, they are friends and they like to help each other and work together."

An interesting differentiation between the evolution of this model in the two settings, is that the English teacher included in her practices an additional strategy regarding the social/group skills. As presented in section 5.4 the teacher included, at the beginning of the session, introductory activities to reinforce pupils' group/social skills and encouraged them to work together, help each other and have some fun. The rationale for such practices, as she suggested, was to make the pupils feel comfortable with their classmates, in order to be able to interact with each other during the CL activities.

Regarding the issues of individual accountability and equal participation, both teachers placed emphasis on these aspects as well as the observation data revealed. Sophia (CT) pointed out that "pupils should understand that within a group, although they have to work together, they have to work on different aspects of the activity, and I want them to be aware of that, that's why I believe that rewarding and encouraging pupils one by one is important." Linda (ET) also pointed out that for the pupils "it's important that they know how they did in each lesson and give them feedback about their performances"
b) Group composition

Two kinds of grouping arrangements were observed during the implementation of the CL model, and these were similar ability groups and mixed ability groups. Similar ability groups were observed in the English setting during Gymnastics where children were grouped into pairs. The pairs were constituted of pupils who were more or less at the same level regarding their physical abilities and performed similar individual tasks, based on their individual learning objectives. In the mixed ability groups the children practised a variety of aspects of skill areas by bringing together in one group pupils who were on different levels in terms of cognitive, motor and social skills. Usually during these activities pupils were separated in pairs, triads or the whole class together, and their individual tasks were based on their individual targets.

Linda (ET) highlighted the importance of using mixed ability groups in order for the pupils to assist each other. More specifically she suggested that:

"(...it's really good to have a varying group of children working together as well; not just having children with really complex needs working together and then children who are quite ambulant and can move working together. But to have that mixture so they can bounce off each other (...) I think that it's important that they (pupils) do get together and work together, otherwise the children who haven't got speech they are not going to develop it, they need that peer interaction, to be hearing it and develop their own speech."

Sophia (CT) emphasised the importance of meeting each child's learning objectives within a mixed ability group:

"It's important for me to plan the activity in advance to be sure that all the individual needs of the children will be met and based on their needs I will decide how I will arrange the pupils in groups. I usually include pupils who work on different levels in one group (...)depending on which pupils are in the classroom each time"

Competition, prizes and group certificates were not used in every round, however, both teachers used sometimes these aspects to reinforce both the individual accountability of the pupils to stay on task and the positive interdependence among the members of the group to assist each other.
Below is presented an extract of an observation illustrating how the teachers used this strategy by focusing on these two elements.

*The teacher tells them that it is like a competition and they have to shout as loud as they can. She approaches Chris and explains to him that the girls are waiting for him to join them. The teacher sings it one more time and both girls shout out loud. Chris moves his arms. The teacher rewards him and welcomes him to the group. She also rewards both girls for inviting him to the group.*

(...)(EN, OB1, 14th June, 2012).

Moreover, based on the initial propositions of the characteristics of the CL model (see section 4.5.6.b) there were two types of group activities suggested, i.e., 'working in a group' and 'working as a group'. The 'working in a group' type of activity was implemented once during the action research process (see section 5.3,d) and the data analysis suggested that these kind of activities do not favour interactions and assistance among peers. Therefore, during the implementation of the CL model, 'working as a group' type of activities were used to favour interactions among peers.

c) **Strategies for meaningful activities**

Another aspect regarding the characteristics of the CL model deals with the meaningfulness of the activity to motivate pupils to become active participants of the learning process. The first aspect dealing with the meaningfulness of the activity deals with pointing out to the children the *functional rationale* of the activity. Explaining to the pupils the reasons for engaging in individual and common tasks is vital so the activity is more meaningful to them. During the implementation of the action research process the aspect of explaining to the children the reason for doing an activity was added to its characteristics. Moreover, another aspect added to the characteristics of the CL model, was to explain to the pupils the *CL rationale* of the activity. The teachers explained to the pupils that they would work together, and help each other throughout the activity to achieve something together.

Moreover, another aspect regarding the meaningfulness of the CL model activities that emerged during the action research process in the English setting was relevant to the issue of children feel welcomed and relaxed before the learning process. For this reason the teacher sometimes used introductory *fun activities*
that made children relax and have fun. Regarding this issue Linda (ET) suggested "making them (the pupils) feel welcome is really important; not coming in the class and be rushed out into the classroom to join to an activity, because that's just not fair on them; to come in to make them feel valuable members of the classroom and then start the lesson." The children enjoyed these activities and had fun indeed, as the data analysis revealed, since they laughed and giggled throughout the implementation of such introductive activities. An extract from the observations of such activities is presented below, illustrating pupils' enjoyment during its implementation.

(...)

The pupils are all covered now. Linda (ET) wonders where they are and asks them to give a sign. Gar makes happy vocalisations and I can hear Emma and Sandra giggling. Katelyn makes happy vocalisations as well. (....) The staff uncovers them very suddenly and quickly and all the children are giggling. Emma leans towards Sandra and touches her hand. Linda (ET) asks them if they want to do it one more time. Sandra says "Yees!!" Gar moves his hand up and down with excitement and smiles. Katelyn smiles too and looks at the teacher. (....) (EN, OB6, 27th June, 2012)

A third aspect about making the activities more meaningful and interesting to the children is by giving them the chance to decide about some aspects of the activity. The children had the opportunity either to decide who would be their group members, or which instrument they would like to use during music sessions or which character they would like to be during story reading or what kind of equipment they would like to use during the implementation of a variety of activities. Moreover, in some instances pupils in both settings had the chance to decide about some movements or which parts of their bodies they would like to move during gymnastics, music or literacy lessons, so as the rest of the pupils would follow their lead. When such strategies took place, as the data analysis revealed, pupils were engaged in the activity and followed each other's lead by favouring interactions among peers.

However, the children deciding about some aspects of the activity can be considered as a practice that was embedded within the daily routines of the two classes. Therefore, they were familiar with this aspect. In those instances, the pupils initiated meaningful interactions by assisting and encouraging each other.
with minimum assistance by the staff. Below are presented two examples that illustrate aspects of the activity that were embedded in their daily routines relevant to pupil decision-making, resulting in following each other's lead.

(...) Kelly still raises her arms up and down although Melina moves them left and right. Kelly looks at Melina and moves them left and right too. (...) Andreas stands still and looks at Marcus. Marcus looks at Kelly, who makes vocalisations of excitement while Annie (CTA1) moves her wheelchair back and forth. Marcus starts moving back and forth too. Sophia (CT) rewards him. Andreas looks at his partner and moves back and forth too. (...) (CY, OB8, 23rd May, 2012).

(...) "Who has another idea" the teacher said by repeating the lyrics of the song. Sandra leaned over Emma and reached her hands. Linda (ET) rewards her for her great idea. Emma leaned over Sandra as well and they touch each other's hands and giggling. (...) (EN, OB2, 18th June, 2012).

When discussing with Sophia (CT), during the interview, the issue of embedding CL activities within the daily routines of the class she pointed out: "(...) And I think this (embedding CL activities within the daily routines of the class) is very important as well. The children like to work with their friends, but you cannot just ask them to do so, without them being familiar with how they are supposed to do it. We have discussed this before. When a group activity has some elements borrowed from their daily habits, their daily interactions, pupils are much more active, more communicative with each other (...)"

Moreover, both teachers seemed to interrelate the issue of planning CL activities that are embedded within the daily routines of the class, with the issue of consistency in terms of what they expect from the children during CL activities.

Linda (ET) suggested that: "It (embedding CL activities within the daily routines of the class) is about consistency. I use group work every day and pupils know what they have to do, they know how to work with others, because we do similar things every day."

The final strategy employed for making the activity meaningful and interesting to the pupils was the use of peer relations and positive interdependence as a
motivation for the pupils to stay on task. For example, the teachers asked the pupils to repeat a request again to their group members, or asked them to follow their group members' requests to encourage the pupils to assist each other and complete their tasks. As the data analysis revealed, this kind of strategy affected pupils' engagement in the activity. When encouragements to assist their group members took place, pupils did so most of the times. An extract from the observations illustrating this strategy is presented below.

(...) Tina looks outside of the window and moves her hands with her idiosyncratic way. "Sweetie, Vicky is waiting for you... Give her the doggie..." Tina keeps looking outside. "Come on sweetie! Don't you want to help Vicky take the doggie home?" Vicky touches Tina's hair and smells them. Tina tries to de-attach the dog. Teacher helps her and rewards her for being such a good girl. (...) (CY, OB3, 7th May, 2012)

Using the group members as a motivation, so as the activity was more meaningful to the pupils came across during the interviews as well and the teacher's views have already been illustrated in the section 5.6.1.a.

d) Pupils' role

The role of the pupils during the implementation of the CL model proved to be of vital importance since their opinions, actions and emotions during the observations guided the conversations with the teachers. Moreover, at the end of the activity in the Cyprus class, I or the teacher used to ask the pupils individually their opinions about the activity. In the English class, however, after the teacher's suggestion, asking the pupils' opinion and feedback on the activity was included as an internal characteristic of the CL model. Such a strategy assisted our revisions and discussions with the teachers. The pupils' feedback on the activities was mainly about specific practices during the implementation. Most of the time pupils chose, as their favourite aspects of the activity, practices that took place after their suggestions. For example, in the ninth round of the action research process of the English class Tim suggested the snake as his favourite part of the activity, since he chose which character he could perform. Similarly, in the fourth round of the action research process in the Cyprus class Vicky suggested that her favourite part of the activity was the mermaid, since she chose by herself which drawing to colour. Moreover, there were instances where pupils chose some of their classmates as
their favourite parts of the activity. This kind of feedback complies with the findings of interviews and observations, as discussed above, which suggest that peers can act as a motivation to each other to complete their individual and common tasks.

5.6.2 The utility of the CL model in regard to the social skills of the pupils

The outcomes of the first phase of the study suggested a definition for social skills that served as a guidance during the observations in the second phase. Data analysis was based on that definition regarding what constitutes social skills for children with SLD in these two specific settings. Although this definition can be also found in chapter 4, it is presented below as well for convenient reasons.

*Social skills describe the ability of the children to express their opinions and needs to others, to demonstrate a willingness and enjoyment when interacting with peers and adults, to stay engaged into those interactions in a meaningful way and finally, to generalise these abilities in different contexts.*

One of the intentions of this study was to explore whether a CL model especially developed for the pupil participants can favour and promote their social skills. Therefore, the data analysis procedures were relevant to the issue of pupils’ social skills. For this reason, the utility of this model in regard to the social skills of the pupils has been addressed throughout the findings section, by presenting a variety of findings in relation to the social skills of the pupils. In these subsections a summary of these outcomes is presented, by illustrating how the implementation of the CL model promoted the social skills of the children, as described in the above definition.

*a) Pupils expressing their opinions and preferences*

Pupils during the implementation of this model had the opportunity to decide on some aspects of the activity as discussed in section 5.6.1.c. Giving the chance to the pupils to express their opinion on various aspects of the activity encouraged them to be active members of the learning process. Moreover, at the end of every activity, the pupils were encouraged to give feedback on the activity and express which aspects they liked or did not like. As the data analysis revealed, children expressing their opinions was an ongoing process throughout the activities, as the children communicate their opinions and suggestions to their peers and adults to achieve their common goals. Moreover the children expressed their opinions on some occasions by initiating
interactions and in some others after being prompted by the teachers, either on a group or individual level. There were few instances where the children did not express their opinions; however, in those instances the children were in general quiet and sleepy during the whole activity. Below are presented two extracts from two different observations, illustrating pupils expressing their opinions regarding some of the aspects of the activity. The first example illustrates a pupil's initiation on expressing her opinion and the second one a pupil's response after being asked by the teacher.

(...) Melina touches the hand area of the plain figure of the body. The teacher looks at her very carefully. Melina looks at Kelly and says "Hand, please!" The teacher rewards her for asking it so kindly. Kelly looks at the different parts of the body and does not move her hands. Melina looks at her and giggles. The teacher tells Kelly "That's OK, sweetie, we are waiting for you. Take your time" Kelly tries to grab something. The teacher rewards her. Melina takes it and tries to adjust to the frame. (CY, OB9, 25th May, 2012)

(...) Linda (ET) asks Alice to request from Katelyn what kind of clothes she wants to put on the doll. Alice looks at the pile of clothes and smiles. The teacher asked her if she wants to dress the doll with brown trousers. Alice smiles and says "No!" and then she says "Skirt!" The teacher asks her to request from Katelyn what colour of skirts she wants "Red skirt, please" said Alice by looking at the red skirt (EN, OB5, 25th June, 2012)

The importance of children expressing their opinions came across during the interview with Linda (ET) which pointed out that pupils were more expressive and active during the CL model's implementations, since they were motivated by their peers' participation:

"I think what I find in this (the CL model) as very important is that children bounce off each other to communicate. For example, Chris, who has a lot of complex needs and he is very quiet sometimes and sleepy, he might bounce off when he listens to others saying something and makes lots of noise or presses his talker and I find that happens more in group work."
**b) Willingness and enjoyment to interact with peers and adults**

The issue of pupils demonstrating willingness and enjoyment when interacting with others has been presented and discussed in detail in section 5.6.1.c. As the data analysis revealed children demonstrated willingness and enjoyment to interact and work with their classmates most of the times during the implementation of the CL model. Several examples from the observations have already been given demonstrating pupils' positive emotions towards their peers during the implementation process. In addition, the fact that the teachers' reinforcements relevant to positive interdependence aspect appeared to have positive effects on pupils' willingness to interact and assist their classmates is another outcome that suggests that pupils demonstrated willingness and enjoyment to interact with their group members. One more extract from the observations illustrating pupils' willingness and enjoyment to work interact and assist their peers is presented below.

(...)

"Come on Vicky, Tina is waiting for you" the teacher said to Vicky. Vicky is chewing the shirt and looks at the pile of clothes. (...) "What clothes do you want Tina to hang?... Come on, Tina is looking at you and waiting" Tina looks at Vicky indeed. Vicky says "Tina" and points at Tina. The teacher says one more time that Tina is waiting for her. Vicky points at a jacket and says "Pink jacket, please" (...) (Cyprus, OB2, 4th May, 2012)

**c) Staying engaged in interactions in a meaningful way**

This aspect of social skills draws upon the main ideology of the CL model, which highlights the importance of children interacting with each other in a meaningful way to construct together knowledge by assisting and helping each other and emphasises the issues of group/social skills and positive interdependence. Moreover, this aspect of social skills highlights its academic dimension since children have to stay on task by interacting with each other to accomplish their common and individual tasks. The data analysis regarding the issue of positive interdependence and the use of peers as a motivation for the group members to stay on task have been addressed and discussed in the previous section. Below, one more example of such practices is presented, although more examples illustrating pupils' engagement in meaningful
interactions to complete their individual tasks and common goals can be found in section 5.6.1.c.

"Come on, Chris, your friends want to listen to the tiger. Don't you, Tim?" Tim was looking at Chris very carefully at that moment and he said "Yes!!" with excitement! (...) Chris presses his BigMac and the tiger's roaring went on. The teacher and the teaching assistants clap their hands and applaud Chris. Tim says "Yey!!" (...) (EN, OB9, 5th July, 2012).

d) Generalising social skills
This dimension of social skills has been partially explored in the second phase of this study. The issue of generalisability has been explored in terms of pupils generalising their social skills among a variety of activities and lessons. For example, both teachers used some similar practices in a variety of lessons, such as following each other’s lead, praising each other or requesting things from their group members. The outcomes of this study suggest that pupils were able to generalise these practices in a variety of lessons and subjects. Below are presented two examples, where the pupils initiated meaningful interactions among them without the teacher’s prompts, since they performed these kind of practices in other CL activities as well.

In this example the pupils encouraged each other through hi-five without the teacher’s prompts during numeracy lesson, as they had to perform these practices in gymnastics lessons as well.

(…)"Well done, Andreas! Who is next?" Marcus says "Marcus!" and comes forward. Andreas raises his hand for hi-five and Marcus responds.(…) Tina is smiling and raises her hand for hi-five to Melina. Melina hi-fives Tina and repeats Sophia’s (CT) words "Well done, Tina!!" (…) (CY, OB7, 21st May, 2012).

In the following example Ruth encouraged Chris without prompts by the teacher, as the teacher used to encourage them to do so throughout the CL activities.

(…) "Let’s see what the tiger said..." the teacher said. Chris is shaking his arm for a while and then he stops. Ruth looks at him and touches his arm. Linda
(ET) rewards her for being such a good friend to Chris (...) (EN, OB9, 5th July, 2012)

However, claims that these meaningful interactions among pupils could be performed outside the school context could not be made, since a systematic investigation was not undertaken relevant to this matter.

5.6.3 Types of peer interactions during the implementation of the CL model/ The teachers’ role

The peer-to-peer interactions can be categorised into two main groups. The first one deals with initiations of interactions by pupils among peers and the second one to interactions among peers guided and prompted by adults. In this section the outcomes regarding these two types of peer interactions are presented, in relation to the strategies that were employed by the teachers to promote these types of interactions.

a) Peer interactions initiated by pupils

Based on the data analysis, there were four common patterns regarding the meaningful interactions among peers initiated by pupils. The first pattern is that these initiations of interactions took place during the implementation of practices that were embedded within the daily routines of the two classes. The second one is that the children decided some aspects of the activity. The third aspect deals with the issue of the pupils having fun and demonstrating signs of enjoyment during these practices. The fourth pattern is that the activities were not cognitively challenging for the pupils. As the data analysis revealed, during such activities the use of delayed prompts and use them only when necessary to allow enough time for the pupils to respond to each other favoured initiation of interactions among peers, without or with limited adults' guidance. Below, is presented an extract form an observation illustrating pupils' initiation of meaningful interactions between them during activities that were fun, embedded in the routines of the class and were not cognitively challenging for them.

(...) Kelly takes some olives and places them in the tray. Vicky touches Kelly's hair and keeps saying "Olives." Kelly takes some olives and gives them to Vicky. Vicky says "No" (...) Marcus and Andreas are eating instead of filling the dough. Nikos (CTA2) explains to them what they have to do, but Marcus keeps eating cheese. Andreas tries to take the bowl with the cheese from Marcus'
hands and Marcus refuses and takes some cheese and gives it to Andreas. Andreas puts it in the tray. (CY, OB8 Cookery, 23rd May, 2012)

b) Peer interactions guided and prompted by adults
There were instances as the data analysis revealed that pupils were engaged in meaningful interactions with their peers, after, however, being prompted by the staff. Based on the data analysis, the common pattern, that affected these kind of interactions in both schools, deals with the cognitive demands of the activity. In instances where the activity was cognitively challenging for the pupils, although they interacted in a meaningful way and assisted each other, those interactions took place after adults' guidance. Several strategies were developed with the valuable help of the teachers to favour as much as possible pupils' meaningful interactions. The first strategy dealt with the teachers encouraging the pupils to repeat requests from their group members by themselves, instead of the teachers doing so on pupils' behalf. Below is presented an extract from the observations illustrating such a strategy.

(...) "What do you need now?", "This" Melina says. "What is this?" the teacher asks her. Melina stares at the frame for a while and she repeats "This". "What do we call this?" the teacher asks her and touches her nose. "Nose" Melina says and looks at the teacher. "Don't ask it from me. Ask it from Kelly" the teacher says. Melina says "The nose, my Kelly" and looks at Kelly. Kelly looks at the parts of the body and tries to grab the nose. (...) (CY,OB9, 25th May, 2012)

Another strategy used to favour meaningful interactions among peers was the fact that the teachers emphasised issues of positive interdependence by using peers as a motivation to encourage pupils to interact and assist each other. Below, it is presented an extract from an observation illustrating the implementation of this strategy.

(...) "Let me see your sad face, Mr Snake" Linda (ET) says. Tim plays the maraca. "Well done, Mrs Snake, but let me see your sad face" Tim looks at the teacher and smiles. Linda (ET) asks the pupils to help Mrs Snake to make a sad face. (...) Linda (ET) looks at Alice and rewards her by telling her that this is an excellent sad face. Tim looks at her and makes a sad face too. The teacher
rewards him too. Katelyn looks at Tim and makes happy vocalisations (...
(OB6, 5th July, 2012).

The issue of cognitively challenging activities in relation to pupil initiations of interactions came across during the interviews with the teachers as well.

Sophia (CT) pointed out:
"Sometimes I have to intervene and prompt the children not because they are not able to follow their partners' requests, but because they are not sure of how to respond to these requests. (...) For example, a couple of weeks ago when Tina had to work with Vicky with the animal patches. I had to prompt Vicky to request things from Tina because it is challenging for Vicky to use sentences, and I had to prompt Tina to choose the animals because she finds it difficult to identify them."

Similar distinctions were made by Linda (ET) as well regarding cognitive and other areas of skills. "When the group work is more like a game and the children are having fun, they need less assistance (...) but when it's about educational purposes, I have to encourage them (...), because they need my help."

5.6.4 The challenges of the CL model in regards to the social skills of the children
The main challenges of the CL model, as the data analysis revealed, deal with the issue of planning the activity and with the issue of equal participation. In this section the outcomes are mainly based on the interview data analysis. However, observation data are used as well, as supporting evidence.

a) Planning the activity
Both teachers seemed to concur with the view that planning and preparing a CL model activity for their pupils can be sometimes challenging. The main aspects that the teachers focused on when preparing a CL activity were the design of the activity to be conducive with the main ideology of the CL model, pupils' targets and learning objectives and the necessary equipment needed for the pupils to assist their communication, interactions and learning.

Linda (ET), referring to pupils' individual learning objectives and the equipment needed for them to communicate, pointed out that during the activities of the CL model: "You try obviously to meet the needs of all the children and getting them
to interact in the best way they can and communicate, because they all communicate in different ways: some children are using BigMacs to communicate, some children are just using their eyes, so eye-pointing, so I need to make sure I've got symbols ready, or talkers. (...) when you are working within a group it varies, you try to mix so many different targets, so many children working at different levels."

Similarly, Sophia (CT) pointed out that: "It needs caution when preparing a group activity, especially for my classroom, because every child has different needs (...) they all have their personal way to communicate, and you have to keep all that in mind when you are planning their individual tasks within a group activity."

Regarding the design of a CL model activity, Sophia (CT) pointed out that in a CL activity the teacher has to work on two levels, the one being to meet the individual learning objectives of the children and the other one to favour interactions among peers while delivering a lesson.

"In such a group activity the purpose is not just to meet the learning objectives of the pupils, but to encourage them to communicate with others as much as possible, so while they are practising their individual targets, they have to communicate and interact with others, so I have to be very well-prepared." (Sophia, CT)

Moreover, during the implementation of the CL model there were instances where the teachers had prepared a different group activity, but because some children were absent from the school that day, they had to improvise a different activity and change the composition of the groups or the concept of the activity. This did not always resulted in an implementation of a CL activity that complied with the main characteristics of the model. Such an incident took place during the seventh round of the action research process in the English school (see section 5.4.g). That activity did not favour direct interactions among peers, since the teacher instructed the pupils throughout the activity. This incidence concurs with teachers' aforementioned views that a CL model activity needs a careful and in advance co-ordination of a variety of aspects to meet each child's targets and at the same time to favour meaningful interactions among peers.
b) All the pupils communicating and interacting

As the data analysis revealed, both teachers agreed that pupils communicating with others during CL model's activities can sometimes be challenging. Linda (ET) pointed out that sometimes pupils might be forced to say something that is not what they actually want to express, due to verbal difficulties. Therefore, communication during CL activities can sometimes be a challenge.

"(...) if a child who is using a talker, unless we put those particular words or symbols or anything into a talker then they can't say it. It's like a lot of the children we've got communicatively they've got it all up here (pointing at her mouth), but they can't actually say it, so they can only say what we are actually putting into a talker and that might not be what they want to say (...) You have to pay attention to their reactions or emotions in order to make sure that they say what they actually want to say." (Linda, ET)

Incidences, where the teachers were not quite sure about their pupils' communication acts did take place. Usually, in such instances the teachers asked the pupils several times, by rephrasing the question to make sure that they understand what pupils actually wanted to communicate. Below is presented an example of such an incident, which took place in the third round of the action research process in the English school, during literacy.

(...) "What's the matter, Gar?" Gar is shaking his arms very intensively. "Are you OK? Yes or No" Gar eye-points to "Yes". Linda (ET) asks him again "Are you sure you are OK? Yes or No" Gar eye-points to "Yes". The teacher asks him again if he is excited about the story and Gar eye-points "Yes" (...) (EN, OB3, 20th June, 2012).

Linda (ET) also pointed out that sometimes communication and interaction with particular children can be very challenging during CL activities, especially for children with varying and complex needs. Linda (ET) gave a specific example of a pupil in her class, Chris, and she suggested that although sometimes during group activities he might 'bounce off' when he listens to other children say something, some other times "(...) he is very sleepy throughout the whole activity. (...) Usually I try to encourage him to join us, but I don't want to put too much pressure on him" (Linda, ET).
Similarly, Sophia (CT) suggested that encouraging all the pupils to communicate and interact can be challenging sometimes, due to the idiosyncratic nature and personality of the pupils. While discussing about our last reflections of the ninth round of the action research process she pointed out that "Kelly and Melina's group worked really good, because they follow classrooms rules pleasantly and they are both very sociable girls. As you saw, it did not work with Vicky that day. She returned to the class from the break so upset, that she could not work. She needed some time to calm down"

A similar incidence took place during the implementation of the sixth round of the action research process in the Cyprus setting as well, where the teacher eventually asked Tina to lie down on the sofa. When discussing about that incident with the teacher, she explained that Tina was sleepy and quiet throughout the whole day and she pointed out that sometimes teachers have to go along with a pupil's unwillingness to work, due to their personal needs. An extract from this observation, illustrating this incident is presented below.

(...)
"Come on, sweetie, Marcus is waiting for you". Tina looks at the floor and does not respond. "Which of these is the hair? Which is Ronald's hair?" The teacher (...) asks her again to choose which of these two the hair is. Tina looks down and has her eyes closed. "Are you sleepy today, sweetie?" Tina does not respond. (...) The teacher asks Tina if she wants to lay down. Tina does not respond. Sophia (CT) tells her that she can go to the sofa and lie down. Tina does so. (...) (CY, OB6, 17th May, 2012).

5.6.5 Conclusions

With the valuable help of the participants an operational CL model for the pupils of this study was developed. Its characteristics and suggestions, as well as its utility in regards to the social skills of the pupils have been discussed and presented in detail in the findings sections of this chapter. In the following chapter the most significant outcomes of this phase in relation to current literature and educational legislation are discussed.
Chapter 6
Discussion

6.1 Introduction
The data analysis sections of chapters 4 and 5 gave a detailed and in-depth presentation of the findings. The descriptive presentation of the findings was usually accompanied by an integrated discussion or critical commentary; therefore, some of the main findings of the research have already been discussed in detail. The aim of this chapter is to highlight the unique aspects of the research findings, relate them to relevant theory and research and by integrating them and highlighting inter-connections among them to provide a holistic theory for the CL model developed in this study.

6.2 The most important findings of phase one
The most unique aspects of the findings of phase one are presented below in relation to relevant theory and research-based evidence. These aspects are relevant to the notion of social skills, the variety of teaching approaches and strategies that were implemented in the two settings, and the way group activities were employed.

6.2.1 Social skills for children identified as having SLD
Phase one resulted in a change to established definitions of social skills in the field of SLD. The following definition emerged from the analysis of data collected during phase one of the project.

*Social skills describe the ability of the children to express their opinions and needs to others, to demonstrate a willingness and enjoyment when interacting with peers and adults, to stay engaged into those interactions in a meaningful way and finally to generalise these abilities in different contexts and contents.*

It is obvious, based on the above operational definition, that the notion of social skills, as perceived by the practitioner participants, consists of a variety of dimensions. The first dimension (i.e., *ability of the children to express their opinions and needs to others*), as discussed in section 4.5.3.3 shows a differentiation between the two settings. The staff from both schools, during the interviews and in their daily practices, highlighted the importance of encouraging pupils to express their needs and opinions. However, while in the English setting this aspect was relevant to issues of self-advocacy, highlighting
the importance of pupils communicating their opinions and feelings in order to be heard and taken into consideration, in the Cyprus setting this aspect was relevant to issues of functional/life skills, with the staff recognising the importance of pupils communicating those needs to be as self-reliant as possible.

This differentiation is reflected in the current educational legislations of the two countries, which consequently affect the schools’ ethos and classrooms’ pedagogical practices. More specifically, the current SEN Code of Practice in England (DfE, 2014) emphasises the importance of pupils expressing their opinions on issues concerning their lives. Self-advocacy issues for pupils with SLD have long been recognised in England. The Education Act (2002), for example, conveyed the importance of pupil participation in the decision-making. Based on this principle a large amount of literature and research discuss and suggest ways for eliciting pupil opinions on issues concerning their lives (for example, Lawson & Fergusson, 2001; Porter et al, 2001; Fergusson, 2002; Fergusson & Lawson, 2003; Ware, 2004; Byers et al, 2008; Lawson, 2010; Fergusson, 2013). Naturally this affects the specific school's ideology and ethos which highlight the importance of listening to children so their opinions could be taken into consideration as discussed in section 4.5.2. Consequently, the staff of the specific classroom during their daily practices encouraged pupils to express their opinions and views on issues concerning their feelings, lives and learning.

On the contrary, in Cyprus, the most recent Education and Training of Children with Special Needs Law (1999) highlights the importance of providing the appropriate education to pupils with SEN to function as independently as possible. The issue of pupil participation in the decision-making on issues concerning their lives has not been addressed in the current Cyprus educational agenda. Consequently, the particular school's ethos centres its attention on assisting their children to become self-reliant and independent as much as possible. For that reason, the staff in the specific classroom used activities, during their daily routines, that encouraged pupils to practise those functional/life skills and request assistance when necessary to fulfil their functional needs.
Another possible reason for this difference in the two settings might be the fact that the English school was designated for pupils experiencing significant physical difficulties, whereas the Cyprus school for pupils identified as having SLD. The fact that the Cyprus pupil participants, as discussed in section 4.5.2, were more ambulant than the English pupil participants might have affected the staff’s focus on the area of functional/life skills and self dependence. Since most of the pupil participants of the Cyprus setting did not face any significant physical difficulties, the staff focused on the aspect of self-dependence to encourage pupils to practise those skills that would enable them to fulfil their functional needs. Therefore, the dimension of social skills regarding pupils expressing their opinions and needs to others, as mentioned in the operational definition developed for the purposes of this study, describes different issues for the two settings.

The second dimension of social skills (i.e., demonstrate a willingness and enjoyment when interacting with peers and adults) was perceived in the same way in both settings. The practitioners of both schools highlighted the importance of pupils being able to enjoy the company and communicational intentions of others and demonstrating a willingness to interact with peers and adults, by using good manners. The third dimension of the operational definition (i.e. stay engaged into those interactions in a meaningful way) was addressed in both settings as well and refers to the academic dimension of social skills. The practitioners of both settings seemed to consider it of vital importance for their pupils to be able to stay on task and engage in an activity and to follow the classroom rules. The last part of the definition (i.e., generalise these abilities in different contexts and contents) was also perceived by the same way in both settings. The practitioners highlighted the importance of pupils being able to generalise their skills gained during structured learning in other situations within and outside the school context.

Practitioners' beliefs and practices towards the notion of social skills seem to comply with what constitutes social skills in the general literature. A widely known taxonomy of social skills by Caldarella and Merrell (1997), which continues to influence the literature and research regarding social skills (Whitcomb & Merrell, 2013), as illustrated in section 2.2.2, suggests similar dimensions. The dimensions of social skills as described by the practitioners...
can be directly related to Caldarella and Merrell's (1999) dimensions. The only dimensions pointed out by practitioners, that are not highlighted explicitly within Caldarella and Merrell's (1997) taxonomy are: firstly, the aspect of generalisability of pupils' social skills outside of the school context; and secondly, the aspect of autonomy and self-reliance, which emerged from the Cyprus setting data.

The findings of this phase regarding social skills, however, differ to what was found to constitute social skills in the recent literature and research specifically for children with SLD. Literature and research to date regarding pupils with SLD and social skills seem to sideline the dimension of peer relations. It places, instead, greater emphasis on approaches based on an adult-pupil interactions and indicate ways for practitioners to encourage pupils to express to the adults their needs and opinions on issues concerning their learning and lives. Although, general literature highlights the importance of positive peer relations for pupils' well being (Whitcomb & Merrell, 2013), the literature and research-base for pupils with SLD is at least limited in indicating ways of how positive peer relations can be promoted in special settings. However, although recent literature and research particularly for children with SLD seem to undervalue the notion of peer relations, the practitioner participants of the two settings seem to place great emphasis on this aspect. This was obvious during field work and data analysis, not merely based on practitioners' beliefs but based on their practices as well, as peer relations was an important dimension during the school day. Table 6.1 presents three different understandings of the notion of social skills as discussed above and highlights their differences and similarities. These three different understandings of social skills are based on the three different sources of evidence discussed above and these are: a) literature and research particularly for children with SLD, b) the findings of phase one of this study and, c) literature and research for social skills in general.
Table 6.1: The notion of social skills based on three different sources of evidence

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Peer relations</th>
<th>Self management</th>
<th>Academic Compliance &amp; Assertion</th>
<th>Generalisability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples based on the current literature and research for children with SLD (see section 2.3.1)</td>
<td>?</td>
<td>Life and self-advocacy skills: requesting what they need, expressing preferences, choices and aspirations</td>
<td>Staying on task, complying with teacher's instructions and with classroom and school's rules</td>
<td>Being able to generalise all these aspects within a variety of school practices and outside the school context</td>
</tr>
<tr>
<td>Examples based on the findings of phase one (see section 4.5.3)</td>
<td>Waiting their turns, working together, listening to their classmates, playing together</td>
<td>As described above</td>
<td>As described above</td>
<td>As described above</td>
</tr>
<tr>
<td>Examples based on Caldarella &amp; Merrell’s (1997) taxonomy (see section 2.2.2)</td>
<td>Complimenting others, offering help, inviting others to play</td>
<td>Social independence, accepting criticism</td>
<td>Completing tasks independently, formulating questions for assistance</td>
<td>As described above</td>
</tr>
</tbody>
</table>

This difference between literature and research's indications for pupils with SLD and practitioners' beliefs and daily practices was a very valuable aspect particularly for this study, as it gave me the chance in phase one to observe a variety of teaching approaches and strategies that encouraged positive peer relations. Based on those approaches and strategies an open-to-amendments CL model aiming to promote pupils' social skills was developed for the participants of this study. In the following section, the most important aspects of these teaching approaches and strategies used in the two settings are discussed.

6.2.2 Teaching approaches and strategies used in the two settings

Phase one aimed to investigate the teaching approaches that were utilised in the two settings not in the sense of what might be considered as best practices regarding their efficacy, but rather to explore what aspects of these approaches were employed and how they were implemented in the two settings.

As the data analysis revealed aspects of the behavioural approach were used in both settings, in terms of ‘social reinforcements’ (Slavin, 2012, p.120). Slavin (2012) makes an interesting distinction between reinforcements by categorising them into two types. The first type is the 'extrinsic reinforcements' which describes praise, prizes, hugs, smiles or attention given to the children in an attempt engage them in behaviours that they might not do otherwise. The efficacy of such reinforcements is subjectively based, since not all rewards can
be assumed to be reinforcement for every child under all conditions (Barnhill, 2005). This was indeed a pattern illustrated by the data analysis, as in the Cyprus setting the prizes did not have the same effect to all the pupils. For example, star sticker prizes had little value to some of the pupils, whereas for others such prizes acted as a motivation for them to stay on-task. However, immediate verbal rewards seemed to affect the pupils' engagement in the activity in both settings. The second type is termed 'intrinsic reinforcements', which describes behaviours that a person enjoys engaging in for their own sake and pleasure, simply because they consider them interesting, without any other reward (Slavin, 2012). This aspect of a behavioural approach concurs with an aspect of another approach also implemented in the two settings, a constructivist approach, as discussed below.

**The aspects of a constructivist approach** implemented in the two settings were based on the premise that pupils as active participants constructed knowledge in their own minds. The teachers in both settings facilitated this process by giving the pupils opportunities to discover and apply ideas themselves, by delivering lessons in ways that made information meaningful and relevant to the pupils. These strategies seem to be in accord with what literature and research suggest about the meaningfulness of the activities for children with SLD. It has been highlighted that in order to be effective the teaching approaches for pupils with SLD should be organised in such a way that the goals are meaningful and enjoyable to the children in their attempts to communicate, in order to be motivated to stay on task (Beveridge et al, 1989; Brown & Lehr, 1993). These types of arrangements made it easier for the children to socialise and interact with their peers and adults. In this respect, the 'intrinsic reinforcements' seem similar to this aspect of constructivist approach, since these reinforcements were given to the pupil participants through the use of enjoyable and meaningful activities and they were encouraged to construct knowledge on their own, through interactions with peers or the staff.

Aspects of a **communicative approach** were also used in the two settings with the teachers encouraging pupils to express their opinions and preferences through interactions and communication. However, there was an interesting differentiation between the two settings in relation to this approach. In both settings activities that favoured interaction and communication among the peers
and between the staff and the pupils were employed. In the Cyprus setting, however, this approach was not implemented during the daily routines of the class. Instead, during the daily routines, the pupils practised functional/life skills such as personal care. On the contrary, in the English setting, the teacher used aspects of communicative approach during the daily routines of the class by encouraging the pupils to interact and express their views to adults and peers. This is apparently rooted in and affected by the educational policy and consequently the schools' ethos of the two countries as discussed in section 6.2.1

Nevertheless, beyond this difference between the daily routines of the two classes, in both settings aspects of this approach were used and the teachers encouraged communication and interaction not merely between pupils and adults but amongst peers as well. This outcome is of particular interest in the sense that strategies that include interactions and communication have been found in the recent research-based literature as well. Such practices, however, included communication mainly between pupils and adults rather between peers. For example, in McMillan’s study (2000), which aimed to evaluate whether the communication acts of the pupils were increased, after their teachers received professional training on AAC technologies, only adult-pupil interactions were investigated. Similarly, in order to investigate whether the use of a passive approach can assess preferences of children with SLD and PMLD, Spevack et al (2006) used a micro-switch device to help the children give responses to adults, without investigating whether such a programme implementation may encourage pupils to assist each other. Likewise, Kreiner and Flexer (2009) used an especially designed AAC device to assist individuals with SLD to express their choices and preferences in leisure activities to the classroom staff.

Moreover, the teachers implemented this variety of teaching approaches by using a combination of these approaches, as strategies to support their daily lessons. Therefore pupils' learning occurred within their natural contexts and existing routines. This seems to be in accord with current views in the research and literature regarding pupils with SLD and social skills, which consider learning as a social process that is governed by social factors. Therefore, pedagogies for promoting positive social outcomes need to be in line
with the natural environment of the child (Shuell, 1996). In the current research-based evidence there is a tendency to encourage children to interact within the existing routines of the school day (see for example Chalaye & Male, 2011; McMillan, 2008; O’Neill et al, 2000; Kahng et al, 2000), since activities that are repeated each day create a sense of predictability that allows pupils to develop anticipation; thus creating opportunities to express intentional communication and interaction about the activity or routine (Bruce, 2002). The findings of this study concur with this view since pupils initiated interactions and intentional communication during practices that were embedded in the daily routines of their school day.

6.2.3 Group work in the two settings
All the aspects of group work observed during field work were presented and discussed in detail in the findings section of phase one (section 4.5.5). This section presents a discussion of the major findings about group activities observed in the first phase in relation to current literature and research.

6.2.3.1 The types of group work and their theoretical foundations
Three main types of group work were observed based on the data analysis, i.e., grouping, work in a group and work as group. Grouping as literature suggests is a system of arranging a class of children into smaller groups (Tann, 1988; Kutnick & Rogers, 1994; Slavin 2012). However, there is a real danger in assuming that when pupils are physically arranged in groups effective group work will take place (Sebba et al, 1998, Blatchford et al, 2007a; Kutnick & Rogers, 1994), since group activities are much more than simply sitting arrangements. In that respect there were instances during the daily routines of the class, where the teachers asked the pupils to sit next to each other (for example, during snack or lunch time). This, however, did not favour pupils working together in an effort to achieve a common goal.

The ‘work in a group’ type of activity took place in both settings as well. Pupils, by usually sitting next to each other, had to complete individual tasks based on their individual targets in order to produce a common product. This type of activities resemble the widely known CL model designed by Slavin (1994), which is the Student Team Learning (STL). Such an approach to CL places a great emphasis on the individual accountability of each pupil, as every child
within a group has to complete individual tasks, in order to together achieve a common goal. The issue of positive interdependence is also highlighted, since the common goals will not be achieved unless each child completes their individual tasks. This type of model places great emphasis on the rewards that pupils receive, as it has been suggested that individual accountability and positive interdependence can be reinforced through rewards and prizes (Slavin, et al, 2003). Following this line of thought the two teachers rewarded the pupils on an individual and group basis about their individual and group performances. As literature suggests, the teacher's role regarding the issue of individual accountability is very crucial. This is because the success in implementing individual accountability is based on teachers' ability to distribute individual tasks to each member of the group and identify the individual participation of each member of the group towards the completion of the common goal (Slavin, 1995). In this respect, both teachers allocated individual tasks to each child, in some cases different and in others similar, based on each group member's learning objectives, and monitored the pupils' behaviour to ensure that all the pupils completed their tasks.

In the 'work as a group' type of activities, the pupil participants worked cooperatively throughout the whole activity in order to achieve their common goals, since all the individual tasks were interrelated to each other. This type of activities resemble some widely known CL models suggested in the literature and research such as the 'jigsawing' (Aroson et al, 1978) and the 'learning together' (Johnson & Johnson 1999). In these models an activity is broken down into tasks which are interdependent. Such models place great emphasis on positive interdependence and social/group skills, as the individual tasks cannot be fulfilled unless the group members assist each other through meaningful interactions throughout the lesson. Complying with this line of thought, the two teachers allocated individual tasks to the pupils according to their learning objectives, which were interconnected. Therefore, by working and assisting each other throughout the activity, the pupils achieved a common goal. This type of group work draws upon aspects of a social constructivist theory of learning that suggests that learning can be gained through meaningful interactions among peers to construct knowledge together, as active
participants of the learning process. The extent to which pupils interacted and assisted each other during group work is discussed below.

6.2.3.2 Implementation of group activities in the two settings

In the two settings group activities were employed often. The two most consistent aspects during the implementation of the group activities in the two settings were: pupils expressing their preferences and choices on a variety of aspects during group work and the use of immediate reinforcements, prompts and instructions by the staff.

As discussed in section 4.5.5.3.d during the implementation of group work in the two settings, both teachers created opportunities to encourage pupils to express their choices on a variety of aspects of the activities. The issue of pupils expressing their preferences and choices during lessons has been highlighted by the current literature and research as a strategy that increases motivation and engagement in the tasks. Research for children with learning difficulties, including pupils with profound and severe difficulties, highlights the importance of pupils' involvement in the decision-making of an activity and of teaching in general, through the development of choice (Halle, 1995; Kreiner & Flexer, 2009). As Bambara et al (1995) suggest pupils expressing their choices and preferences motivate them to raise and focus their attention to the learning tasks. They point out that learning tasks that may initially be uninteresting to the children can be transformed to meaningful ones, if these are offered to them as a personal choice. Moreover, it has been suggested that by giving pupils the opportunity to make choices can improve their self-concept and quality of life in the long run (Williams & Dattilo, 1997; Kreiner & Flexer, 2009).

The second aspect, which deals with staff's reinforcements, prompts and instructions, is interconnected with the aspect of positive interdependence and aspects of constructivist theory. Data analysis showed that although there were instances that the teachers favoured meaningful interactions among peers, the staff's reinforcements were dominant and immediate prompts were used to encourage the pupils to assist and communicate with each other. Kutnick, Blatchford and Baines (2002), by providing a systematic description of grouping practices in mainstream classrooms, suggest similar results, as during group work, teachers focus on maintaining pupils' attention, and although they plan for
their interactions with their pupils they do not plan how to assist interactions among peers. A similar study by Baines et al (2003) points out that group practices in mainstream settings rarely serve their purpose in terms of a child-centred approach, that allows peer assistance and interaction; rather, the teachers lead the lesson with instructions and guidance. This outcome was of particular interest and guided the formation of a CL model that would favour meaningful interactions among peers with as little guidance as possible from adults.

6.2.3.3 Planning procedures
Both teachers agreed that their major concern while planning a group activity was to meet pupils' targets and learning objectives, by setting individual tasks for each child based on their targets and needs. This complies with current views in the literature and research-based evidence which suggest that teachers' major concern is to indeed meet all their pupils' individual needs and objectives in both mainstream and special settings. Blatchford et al (2007b) point out that teachers in mainstream settings have a strong belief in the value of addressing each pupil's individual needs and most practitioners believe that group work is not conducive to that respect. Similarly, Rayner (2011) points out similar arguments and suggests that practitioners of pupils with SLD and PMLD set as a priority for their teaching to meet their pupils' needs and objectives. Such a priority, however, as the outcomes of this study revealed, sidelines the issue of positive interdependence among the members of the group and the issue of pupils actively constructing knowledge with meaningful interactions with peers. This outcome was taken into consideration during the development and evolution of the CL through the action research processes in the second phase of the study.

6.2.3.4 Conclusions of the findings of phase one
Phase one of this current study gave me the opportunity to explore in depth the notion of social skills as this was perceived in the two settings, their daily practices, approaches and strategies used to promote pupils' social skills as well as how this variety of approaches and strategies were employed within group activities. By the completion of phase one and based on its findings in combination with suggestions by the literature, an open-to-amendments CL model for the pupil participants for promoting their social skills was developed.
This model was further evolved and redefined along with the valuable help of the participants in phase two, by following an action research approach.

6.3 Findings of phase two: The evolution of the CL
Through the completion of action research processes, the CL model was accepted in some aspects major and in some other minor amendments, in order to be tailored to the needs of both the pupil and practitioner participants of the current study. The basic characteristics of this model, in relation to current literature and research, are discussed in the following subsections.

6.3.1 The main ideology and the core elements of the CL model
The basic elements that underpin CL activities as described in the literature concur with both the basic principles of the initial CL (see figure 4.3) and with the evolution of this model in phase two (see figure 5.5). Therefore, there are not any major changes between the core elements of CL arrangements addressed in the literature with the ideology of the CL arrangements for the pupil participants suggested in this study. Kagan (1994) summarises the main ideology of CL through four basic elements: positive interdependence, individual accountability, equal participation, and simultaneous interaction.

Johnson et al (1998) concur with Kagan's views, suggesting, however, an additional element, i.e., social/group skills (see table 2.4). Moreover, Slavin (1995) points out the importance of positive interdependence, individual accountability and equal participation principles and considers them as the core elements on which the main ideology of CL is based (see table 2.4). Although, the aspect of social/group skills and simultaneous interactions have not been pointed out explicitly by Slavin (1995) and the aspect of social/group skills has not been pointed out by Kagan (1994), they are implicitly recommended by them. The aspects of individual accountability, positive interdependence and equal participation cannot take place unless pupils have face-to-face interactions with each other and the necessary group skills to assist and interact with each other.

There is large amount of literature about the theoretical frameworks that underpin CL, such as social cohesion, motivational and social constructivist views (Slavin et al, 2003), which have been discussed in detail in section 2.5.3. Each of these theoretical underpinnings places greater emphasis on different
theories of learning. For example, the motivational approach places emphasis of behavioural theory's aspects, suggesting that all the aforementioned elements of CL activities can be reinforced by the use of rewards and prizes on an individual and group level (Slavin et al, 2003). The social cohesion approach places great emphasis on the meaningfulness of the activity and suggests that pupils interact and assist each other in a productive way, if the activity is interesting and meaningful enough (Cohen, 1986). Lastly, the social constructivist approaches to CL emphasise the quality of interactions of the members of the groups in order to assist each other and discover solutions to the tasks' problems (Kutnick & Rogers, 1994). The current study suggests a theoretical framework of CL arrangements for the pupil participants, which places an equal emphasis on all three theoretical backgrounds. Consequently, based on the way that these five elements were implemented in the two settings, the current CL model suggests that its activities were based on three equally important premises. Firstly, the activities were designed in such a way to encourage pupils' positive interdependence with the members of their groups through meaningful interactions, by focusing on the social nature of learning and constructivist theories. Secondly, individual and group rewards by the teachers or by the members of the groups to each other were given on an ongoing basis during the activities drawing on aspects of motivational views; and thirdly, some additional strategies were developed to make the activities meaningful and interesting to the pupils, drawing on social cohesion views. These additional strategies are discussed in section 6.3.2.

As mentioned above, the current study's CL model does not focus merely on issues of individual accountability but on issues of positive interdependence as well. This is an interesting outcome, especially in the field of SLD and social skills, as the current literature and research-base focus mainly on issues of how to promote those social and communication skills that would enable pupils with SLD to be as independent as possible by communicating their aspirations and opinions to adults. Current literature and research does not suggest, however, ways for pupils to communicate and interact with their peers, in order to promote their social skills together by assisting and encouraging with each other.
For example, the SEN Code of practice in England (DfE, 2014) and the Education and Training of Children with Special Needs Law (1999) in Cyprus highlight the importance of providing to the pupils with SLD the necessary support that would maximise their level of independence and develop functional/life skills needed to participate in their full potential at home and in education. Consequently, there is a plethora of studies suggesting ways of how to facilitate this group of pupils to be as independent and autonomous as possible (see for example, Kreiner & Flexer, 2009; Berrong et al, 2007; Spevack et al, 2006; Kahng et al, 2000). All these studies suggest a variety of adult-pupil based strategies, indicating ways for practitioners to facilitate their pupils in expressing their opinions, aspirations and needs as independently as possible.

The current study, however, takes a step forward suggesting that CL arrangements in special settings can encourage pupils to promote their social skills by communicating, assisting and expressing their opinions and choices to each other. These kind of practices enable pupils not only to express their individual preferences as independently as possible, but also create a sense of interdependence among the pupils, since by interacting with each other they can fulfil each other's choices and needs by helping and responding to each other's communication acts. Therefore, the aspect of independence is being promoted through a positive interdependence approach, where pupils are encouraged to express their individual opinions to each other to achieve together a common goal.

The issue of interdependence among pupils with SLD is of vital importance. On one hand, research literature in the field of SLD recognises that children face difficulties in interacting with peers, since they have the tendency to respond more to adults than to peers (Yoder & Warren, 2004; Jackson et al, 2003; Gleason, 1989); and on the other hand, general literature regarding peer relations points out that peer interactions enable children to develop a sense of identity through social comparison (Barrett & Randall, 2004) and it provides opportunities for social development (Johnson & Johnson, 1999a). Despite the fact that literature highlights the importance of interdependence among the pupils and the difficulties that pupils with SLD face in this aspect, the current research-base in the field of SLD fails to indicate ways for practitioners of how to create the sense of interdependence among peers. Interdependence and
feelings of belonging are aspects of vital importance for all human beings. Promoting, therefore, a sense of interdependence among pupils with SLD may have a positive impact on their lives in the long run. By developing the necessary skills through relevant practices that would enable them to build positive peer relations and maintain friendships, pupils can feel validated and be more respectful towards others (Watson, 1999).

6.3.2 Additional strategies for increasing the pupils’ engagement and interactions

Although there is a plethora of studies suggesting the efficacy of CL arrangements in schools, researchers have little to say about strategies that can be employed to encourage pupils to work together (Nebesniak, 2007). As Slavin et al (2003) point out, after many decades of intensive research in CL, there is no accepted cohesive model on the relationships among the important elements involved in CL. In other words, although the empirical research-base of CL arrangements establishes the core elements necessary to promote positive academic and social outcomes, it fails to indicate to practitioners sufficient and effective ways of implementation that can be used in their daily practices. Moreover, Siegel (2005a, b) argues that in research that incorporates positivist design, the teachers do not have the opportunity to express their opinions on the CL arrangements, therefore, they just implement an intervention programme, which does not place the necessary emphasis on the teachers' decision-making during lessons. In such cases if a teacher modifies the CL activity during implementation, the studies will have limited generalisability in real classroom situations.

It is, therefore, left to the teachers to find ways and strategies to implement CL activities in their settings (Nebesniak, 2007). Blatchford et al (2007a) point out that there is a vital need for researchers to work closely with teachers so that their concerns are fully taken into account regarding the decision making during CL implementations. The current study, emphasised participants' perspectives and opinions and the teachers' decision-making during CL arrangements. Consequently, it indicates and explains in detail how CL strategies can be implemented to facilitate practitioners' teaching during implementation. These strategies are interconnected with the main principles and core elements of CL activities, as discussed in section 6.3.1. All these strategies aimed at increasing
pupils' active participation and meaningful interactions with their group members. Moreover, these strategies are a combination of those observed in the first phase of the study along with others indicated by current research literature. However, some additional strategies were developed during the action research process that had not been addressed in the literature, or in the previous phase of the study. As the outcomes of the second phase suggested, by combining and incorporating them to CL arrangements, the activities become meaningful and interesting to the pupils, therefore they are engaged in their individual tasks and in meaningful interactions among them. This study, however, cannot make any claims regarding which of the following strategies contributed the most to pupils' engagement and interactions during their implementation.

The first strategy is relevant to the issue of giving the chance to the pupils to decide about some aspects of the activity and express their choices and preferences during the CL model implementation. As discussed previously in section 6.2.3.2, the findings of this study along with evidence from the research literature suggest that such a strategy increases pupils' active participation and engagement in the activity. The second strategy has been addressed and discussed in section 6.2.2. It refers to the design of CL activities that are embedded within the natural contexts and existing routines. The outcomes of this study suggest that this kind of arrangement favour pupils' initiations of meaningful interactions between their peers, since they are familiar with these processes. Practices that are repeated every day create a sense of predictability that allows pupils to develop anticipation and to express intentional communication and interactions during these routines (Bruce, 2002).

During CL activities that were embedded in the daily routines of the class, the teachers employed another strategy, i.e., the use of delayed prompts. In instances where the pupils were familiar with the processes of the activities, the teachers allowed enough wait time to the pupils to respond to each other, instead of interfering immediately with prompts and encouragements. Such a strategy proved to be beneficial in terms of initiations of meaningful interactions by the pupils with their peers. The use of prompts which are delayed and/or employed only when necessary is a common pattern evident in recent research literature that encourages pupils' responses and initiation of interactions. For
example, in Argylopoulou and Papoudi’s (2011) study about the effects of intensive interaction with a child with autism, they followed the child's lead and used prompts only when necessary to allowed enough wait time for the child to initiate interactions. Moreover, in the study by Chalaye and Male (2011), which investigated the effects of collaboration during play and snack time of two pupils with SLD and PMLD, delayed prompts were used as well with the staff interfering only when necessary to encourage pupils' responses to each other. The strategy of delayed prompts concurs with the core elements of CL arrangements, as pupils are encouraged to complete their individual tasks and common goals by interacting and helping their group members, without the staff interfering immediately with guidance and instructional teaching (Baines et al, 2007).

In CL activities which were less embedded within the existing routines of the class and demanded higher cognitive functions both teachers used a different strategy. They used prompts and reinforcements based on a positive interdependence and positive peer relations approach, by encouraging pupils to stay on task and interact with their peers to assist and encourage each other in order to achieve their common goals. Such a strategy was meaningful to the pupils, since it was explained to them that the reason for interacting was because their group members needed their assistance to all reach their common goal. CL ideology concurs with this view, since it has been suggested that positive interdependence can act as a motivation to pupils to interact productively and meaningfully with each other (Johnson & Johnson, 1999b; Kagan, 2009). These two kinds of prompts and reinforcements are further discussed in section 6.3.4, which presents the types of peer interactions.

Another strategy used so that the activities were meaningful and interesting to the pupils is relevant to the issue of pupils having fun during group work. Giving the pupils opportunities to make choices about some aspects of the activity, or asking them to help and assist each other were some aspects that affected positively pupils' enjoyment of the activity. Thus they were interactive and engaged in it. Watson (1999), in a study investigating the effects of group work in a special classroom of children with moderate learning difficulties, points out similar outcomes. She suggests that pupils considered it more fun to work and assist their peers.
Another strategy, introduced by the English teacher, was the use, at the beginning of the lesson, of some introductory activities, that enabled pupils to feel welcomed and comfortable within the classroom environment and with their peers. During these activities the teacher explained to the pupils the importance of helping and assisting each other during group work. Such a strategy complies with indications made by the literature regarding CL about the importance of teaching the pupils how to work cooperatively (Cohen, 1994a; Kagan et al, 1995). Cohen (1994a) and Kagan et al (1995) suggest some training programmes for pupils that can be introduced at the beginning of a CL activity, that involve activities and games that teach pupils positive cooperative behaviours. The English teacher used such practices at the beginning of the activity to encourage the pupils to interact and help each other during group work.

Moreover, both teachers gave the pupils precise and clear explanations for the purposes of the CL activities. These explanations had a twofold basis. First, the functional rationale of the activity was given to them and second, the cooperative rationale and the importance of pupils helping and assisting each other. These kind of activities concur with suggestions by literature regarding classroom preparation for CL arrangements, as discussed above, and about the importance of teaching to the pupils the concept of cooperation, in order to interact and assist each other in a meaningful way (Nebesniak, 2007; Baines et al, 2007).

Concluding, all the aforementioned strategies developed during the action research process are based on the theoretical background of CL and its core elements. They can be considered as sufficient and detailed indications for practitioners of how to implement CL activities in their daily practices in order to increase pupil participation during the learning process, through meaningful interactions with each other. All these strategies proved to be valuable means through which CL activities promoted the pupils' social skills. Further research is needed, however, to investigate whether such strategies can be beneficial for the promotion of the social skills of the pupils in mainstream settings as well.
6.3.3 Types of grouping

Two different types of groups were used during the implementation of the CL model in this study, i.e., 'mixed ability groups' and 'similar ability groups'. In the **mixed ability groups** the teachers asked pupils of different levels in a variety of areas of skills such as cognitive, motor and social skills to work together. In the **similar ability groups** teachers grouped pupils together who were on similar level cognitively, socially and in terms of motor skills. The first type of groups concurs with suggestions made by the literature about grouping in CL arrangements. The majority of research suggests cooperative groups be heterogeneous, including pupils with high ability, medium ability, and low ability, boys and girls, and an ethnic and linguistically diverse representation of the class (Johnson & Johnson, 1999a; Kagan, 1994; Toumasis, 2004; Slavin, 2012). Moreover, a study conducted by Rose (1991) about CL arrangements in special settings for pupils with SLD, suggests the use of mixed ability groups, with the individual tasks being distributed accordingly to each child's individual targets. Similarly, Chalaye and Male's (2011), describe a mixed abilities pair (a girl with SLD and a boy with PMLD) assisting each other through the daily routines of the school day. Interestingly, the similar ability grouping in the current study has not been addressed in the literature. This type of grouping was mainly addressed in the English setting in gymnastics lessons, where the pupils were grouped together in pairs according to their abilities in motor skills, to practise similar physical movements and similar parts of their body.

The way that pupils worked and interacted in those two types of groups was similar. In both cases the teachers distributed the individual tasks to each child according to their individual learning objectives and targets. In similar ability groups the teacher allocated similar individual tasks to the children based on their learning objectives. In the mixed ability groups both teachers allocated different individual tasks to the children, again based on their individual targets. In both types of groups, by working on their interdependent individual tasks, the pupils interacted and assisted each other throughout the activity to achieve their common goals.

The data analysis suggests that during the implementation process of the CL model, both teachers placed great emphasis on the individual learning objectives of each child. Meeting the needs of every child is one of the major
concerns of teachers regarding group activities in both mainstream and special settings, as discussed in section 6.2.3.3. Watson (1999) suggests that one of the main reasons that there is a powerful tradition of individual rather than group learning within special settings is because teachers prioritise the meeting of the individual needs of every child. She continues by pointing out that one reason for this powerful tradition of individual rather group work within special education is because ‘small classes allow for the necessary individualised assessment, monitoring and matching of pupils’ abilities by an appropriately differentiated curriculum’ (Watson, 1999, p.87). However, group work does not necessarily prevent the addressing of the individual needs of each child (Sebba et al, 1993; Carpenter, 1997; Blatchford et al, 2007a; Nebesniak, 2007). Three studies in special settings (see Rose, 1991; Watson, 1999; Chalaye & Male, 2011) investigated the effects of pupils working together. In all three cases, pupils practised and completed their individual tasks relevant to their learning objectives, while interacting with each other. The current study suggests similar results. By working cooperatively, the pupil participants completed and practised their individual tasks, through interactions with, and assistance to, each other.

Regarding the mixed ability type of grouping, two opposing challenges have been pointed out by teachers (Baines et al, 2007). The first one suggests that high achievers cannot benefit equally during interactions with others, since they are the ones considered to be the ‘experts’. Therefore, although they provide assistance to their group members they cannot receive equal assistance from them. The second one suggests that high status pupils interact more within the group, therefore they learn more from the tasks, whereas low status pupils interact less and consequently they learn less. These views contrast with research findings from a variety of studies that suggest that all ability pupils gain equally form CL arrangements (Palincsar & Herrenkohl, 1999; Slavin, 1995; Slavin et al, 2003; Blatchford et al, 2007).

Specifically, whether the low status pupils interact less during CL arrangements, it has been suggested that this can be overcome by giving pupils feedback on their cooperative behaviours and by structuring positive interdependence and individual accountability into the lessons (Cohen, 1994a; Cohen, 1994b; Cohen & Lotan, 1997; Cohen et al, 1999; Johnson & Johnson, 1994). The current
study used these strategies, since individual and group feedback was an ongoing process throughout the activities. Moreover, the issues of positive interdependence and individual accountability were carefully coordinated by the two teachers. Although the pupils worked on different individual tasks according to their learning objectives, those tasks were interdependent with each other; therefore, only through meaningful interactions among the pupils the individual tasks of every pupil could be completed.

The concerns of whether the 'more advanced' pupils can benefit equally from CL arrangements draw attention to Vygotskian's accounts (1978) about the social nature of learning and the ZPD. Vygotsky (1978) used the ZPD as a metaphor, which can be calculated by the distance between the Actual Developmental Level (ADL) and the Level of Potential Development (LPD) of each child. The ADL symbolises tasks that the child is able to achieve on her own. The LPD symbolises tasks that the child cannot yet perform on her own, and through social interactions and assistance by more capable individuals she will eventually be able to perform them. A key principle derived from Vygotsky's notion of social learning is that of scaffolding (Wood, Bruner & Ross, 1976), i.e., the assistance provided by more competent peers or adults. Although Vygotsky did not refer to CL explicitly, CL literature makes an extensive use of his theories about peer interactions (Slavin, 2009; Webb, 2008). However, although Vygotsky's theory of the ZPD highlights the importance of social interactions among peers, this takes place in a unilateral way, where the more 'capable' peer assists the other. CL theory, however, suggests a much more dynamic and dialectical framework of interactions between peers. CL theory focuses on the interdependence among the members of the group to achieve their common goals through equal participation and opportunities. Therefore, CL does not base its theory on the premise that a more 'capable' peer provides guidance through interactions to another peer. It rather highlights the importance of practitioners allocating individual tasks to the pupils that are interdependent on each other and cannot be achieved without the one child assisting the other. Thus, pupils can only complete their common goals through equal participation and assistance to each other.

In this particular study, by taking into consideration the dialectical notion of all the core elements of CL, the pupil participants promoted their social skills
through equal participation in interactions with and assistance to each other. There were several instances during the implementation of this model in both settings where a pair of pupils who were at different ability levels, worked together. In those instances pupils had different tasks to complete. For example, one pupil worked on numeracy aspects, such as counting, whereas the other pupil worked on identifying different kinds of animals. Although the first child might have been considered more ‘advanced’ cognitively than the other, the pupils participated and contributed equally towards the achievement of the common goal, since their individual tasks were interdependent. The first child would not have been able to count the animals unless the other child had passed those to her. Similarly, the second child would not have been able to identify different kinds of animals unless the first child had asked her to pass specific animals to her. Therefore, by practising their social and communication skills, both pupils worked on their individual tasks, by participating equally in the CL activity.

6.3.4 Types of peer interactions and the teachers’ role during these interactions

One of the main aims of the current study’s CL model was to investigate and explore ways and strategies that would enable pupils to interact in a meaningful way by assisting and encouraging each other to achieve their common goals. As discussed in sections 6.2.3.2 and 6.2.3.3, the results of phase one about group activities revealed that limited interactions were initiated by pupils and the interactions among peers were guided and dominated by the staff’s immediate prompts and guidance. Baines et al (2007) point out that there is a need for an appreciation and understanding of group work by the practitioners. They suggest that in order for this to happen the theories of classroom learning and the pedagogical ideology in general should be revised to give way to a social pedagogy and child-centre approaches. For this reason, I discussed with the two teachers the main theory that underpins this model, which emphasises peer interactions and interdependence, before the implementation of the CL model in phase two. Upon the completion of the action research process, a variety of strategies were developed for the teachers to encourage these meaningful interactions among pupils (see section 6.3.2). The types of peer interactions
can be grouped into two main categories: initiations of those interactions by pupils, and interactions between peers, guided by the staff.

a) Initiations of interactions by pupils between peers
Interactions among peers, initiated by pupils, took place in activities that were not cognitively challenging to the pupils. Additional common patterns of such activities were, first, that the children demonstrated signs of enjoyment during their implementation and, second, they were embedded in the daily routines of the class. Pupils under these circumstances initiated meaningful interactions among themselves and assisted and encouraged each other. Studies by Watson (1999) and Chalaye and Male (2011), about group work in special settings, suggest similar outcomes. Pupils were more engaged and participative and their interest was aroused when the group activity took place during the daily routines of the class and it was fun for the pupils. The strategy used by the two teachers during these activities was the employment of delayed prompts. By allowing sufficient time for pupils' responses to their peers and by prompting only when necessary, rather than using immediate prompts, the pupils initiated interactions among their peers.

b) Interactions between peers, guided by adults
Interactions between peers guided by adults took place during activities that were cognitively challenging for the pupils. During these activities meaningful interactions among the pupils did take place, since they assisted each other and achieved together their common goals, however these interactions were guided by the staff. In these activities, the teachers encouraged pupils to assist or repeat requests to each other instead of themselves doing these. Usually, the use of verbal reinforcements by the teachers were based on issues of positive interdependence and positive peer relations, as the teachers encouraged the pupils to interact with each other to help their group members and achieve together their common goals.

According to the outcomes of this phase, these kind of reinforcements had a positive effect on pupils' engagement in interactions with their peers. Literature on CL coincides with this outcome, as it has been suggested that positive interdependence can increase both pupils' engagement in the activity and generate positive and meaningful interactions among them (Johnson &
Johnson, 1994; Slavin, 1995; Slavin & Cooper, 1999; Johnson & Johnson, 2003), as encouragements and assistance by peers are more desirable and attractive than receiving from the teacher (Kagan, 2009).

As regards the issue of pupils' interactions with each other, rather than maintaining dependence on teacher-based assistance, the literature and research concurs that the main key in order to achieve that is to distribute tasks to the children that are interdependent and in a way that are conducive to working together and not independently. Therefore, it is important for the teacher to replace some direct teaching with time for monitoring pupils' behaviour towards peer assistance (Bossert et al, 1985; Kagan, 1994; Slavin, 1995; Johnson et al, 1998; Blatchford et al, 2007a; Baines et al, 2007).

Outcomes from qualitative studies' regarding teachers' role during CL arrangements, suggest that teachers acted as facilitators to monitor interactions and assistance among peers rather than directly teaching the pupils. Such outcomes can be found in Baines et al (2007); Nebesniak (2007); Siegel (2005a) and similar outcomes were also derived from this study. Both teachers, by monitoring pupil interactions, interjected when necessary to encourage pupils to assist each rather, rather to teach them directly.

6.3.5 Utility of the CL model regarding the social skills of the children

The notion of social skills as used in this phase was based on the operational definition derived from the findings of the first phase of the study (see section 6.2.1). This definition summarises the variety of aspects of social skills expressed and implemented by the practitioners.

The first part of this definition, i.e., 'Social skills describe the ability of the children to express their opinions and needs to others', refers to the self-management dimension of social skills as presented in table 6.1 and describes aspects of social skills, such as pupils expressing their needs, preferences and choices to others. This particular aspect of social skills is considered, by current literature and research, as one of the most vital ones. There is a large research-base suggesting ways to elicit the views of pupils with SLD, such as the use of AAC devices, information and communication technologies, videos and photographs (Nind, 2008; Ware, 2004; Germain, 2003; Gettings & Gladstone, 2003). However, the issue of pupils making choices and expressing opinions
leads to a crucial question: in what aspects do they express choices and opinions? These aspects, based on the current research and literature, can be grouped into two very broad categories. The first category refers to those choices and opinions on issues concerning their lives and second one refers to issues concerning their learning experiences. The current study focused on the second aspect. During the implementation of this model the pupils had the opportunity to decide about aspects and specific practices of the activity, to request things based on their own choices from their classmates, or to respond to these requests to achieve together their common goals. In addition, they had the opportunity to express their opinions about the quality of the activity and which aspects they liked or did not like. The pupil feedback about the activity was of vital concern during the action research process. Their opinions acted as guidance both to me and to the teachers for the revision of the model. Some differences arose regarding the issue of asking the pupil feedback in the two settings and are further amplified in section 6.3.8.

The issue of pupils expressing choices and opinions about the learning process during CL arrangements has been addressed in the literature and research about CL. However, this is mostly based on mainstream settings where pupils' choices and opinions are expressed through speech and language. As Slavin (2012) argues, CL makes pupils' inner speech available to others, so group members can gain insight into another's reasoning process; therefore, children benefit from hearing each other's 'thinking out loud' and they discover and comprehend difficult concepts more easily, if they talk to each other about the task's problems. What happens when pupils who have limited or no speech work cooperatively? This study takes a step forward in understanding CL arrangements in schools, by suggesting that pupils with SLD can assist, scaffold and challenge their group members to together discover solutions to the problems under study without or with limited use of speech. By using their personal and idiosyncratic way of communication and/or AAC devices, the pupil participants assisted their group members, formed requests to each other, responded to these requests and achieved together their individual and common tasks. The challenges that occurred during pupils' communication are discussed in section 6.3.7.b.
The second part of the definition, i.e., ‘to demonstrate willingness and enjoyment when interacting with peers and adults’ refers to the peer relations, compliance and assertion dimensions of social skills (see table 6.1). These dimensions deal with pupils' ability to respect and listen to their classmates and demonstrate willingness and enjoyment when interacting with peers and adults. These particular dimensions are interrelated with the positive interdependence and the group/social skills elements of the CL, highlighting the importance of building positive relations among the group members to demonstrate willingness and enjoyment to interact and assist each other during learning. The third part of the definition, i.e., ‘to stay engaged to those interactions in a meaningful way’ refers to the academic dimension of social skills, which describes pupils' ability to stay on task and engaged in an activity and follow the classroom rules. This dimension is interrelated to the dimensions mentioned above, as pupils are more likely to stay engaged in their tasks and follow activities' rules, when activities are enjoyable and meaningful to them (Slavin, 2012; Bruce, 2002; Beveridge, et. al., 1989; Cohen, 1986).

There is a large body of evidence which supports that CL activities in mainstream settings can have positive effects on peer relations and engagement in the activities. More specifically, Johnson and Johnson (1999a) suggest that CL arrangements have positive effects on peer relations, on establishing and maintaining friendships and on demonstrating on-task behaviour. Nebesniak's (2007) study suggest that during CL arrangements pupils listened to their group members, respect each other's ideas and waited for their turn within groups to express their opinions. In addition, Blatchford's et al (2007a) research was based on a longitudinal large scale study in UK mainstream schools and investigated the effectiveness of a CL programme. This programme was developed through collaboration between researchers and teachers and designed to provide teachers with strategies for enhancing pupil group work in classroom settings. The outcomes of this study suggest that the programme had positive effects in peer relations and engagement in the learning process. Pupils appeared to be more interactive with each other, demonstrated sustained engagement in group activities and the connectedness of the pupils within the groups was increased. Similarly, Watson's (1999) study, in a setting with pupils identified as having moderate learning difficulties and
who did not relate particularly well with each other, revealed that pupils demonstrated signs of enjoyment and excitement when working together and they were pleasantly involved in group interactions.

The current study suggests outcomes similar to the above studies. The children demonstrated willingness and enjoyment to interact and work together with their classmates. In addition, the fact that teachers' reinforcements which were based on positive peer relations had positive effects on pupils' willingness to interact and assist their classmates is an indication that pupils wanted and enjoyed interacting with their group members. Furthermore, several times the feedback that the pupils gave as their favourite part of the activity was relevant to practices where they worked cooperatively with their group members. Therefore, the pupils demonstrated on-task behaviour and willingness to interact with their peers and assist each other to together achieve their common goals.

The fourth part of the definition, i.e., *generalise these abilities in different contexts and contents*, deals with teachers concerns, whether pupils are able to generalise their skills gained during structured learning, in other situations within and outside the school context. Nowadays, there is a tendency towards naturalistic approaches that take place within the natural context and existing routines of the class (Porter, 2005, Owen et al, 2008a). Approaches embedded in the natural contexts and daily routines of the pupils can lead to generalisation of gained skills, as the pupils are familiar with these routines, thus they are more likely to express intentional communication (Bruce, 2002; Carter & Grunsell, 2001). The outcomes of this study, regarding the aspect of generalisability suggest that pupils generalised their social skills in CL activities in other lessons and subjects. Some of the activities of the CL model were based on practices that the pupils were familiar with. When teachers adjusted those cooperative practices in other subjects or lessons, pupils generalised their skills gained from those cooperative daily routines to new contents and activities, without teachers' guidance. However, the current study does not make claims that the social skills that pupils promoted during CL arrangements can be transferred outside the school context, since a systematic investigation outside the school context was not undertaken.
6.3.6 Teachers' assessment in relation to the action research methodology

Research literature about teaching approaches for children with SLD that promote their social skills points out that practitioners' assessment and development plays a crucial role for a successful programme implementation (Elmore, et. al., 1995; Bruce, 2002; Yoder & Warren, 2004; Chalaye & Male, 2011). Similarly, research literature in CL suggests that teachers' assessment during the employment of CL activities is a challenging area. When teachers use CL, their practices are influenced by their existing knowledge on teaching and instructional methods (Siegel, 2005a). Therefore, the effective implementation of CL requires teachers to accept that cooperation and meaningful interactions between pupils is a valid teaching aim in its own right (Sebba et al, 1993). Teachers must move away from sole reliance on an individualised pedagogy and should consider the role of social pedagogy within their class, in order for CL to be effective (Baines et al, 2007).

However, this is not a responsibility solely for the teachers, but for researchers as well. Through collaboration of these parties effective CL arrangements can be developed. A crucial aspect in practitioners' development for a successful programme implementation is the thorough explanation to them about the theoretical background that underpins an approach (Chalaye & Male, 2011; Baines et al, 2007; Bruce, 2002; Joyce & Showers, 1980). In addition, educational researchers in the area of CL should take into serious account the dynamic nature of the classroom context and employ strategies and alternatives that will enable practitioners to deal with any critical events that take place during their daily practices (Nebesniak, 2007; Siegel, 2005b). Thus, through collaboration between researchers and practitioners, effective strategies can be developed for CL arrangements.

Although practitioners' evaluation was not one of the aims of the current study, the action research process employed gave the opportunity to the teachers to reflect on their own practices. After discussing with the teachers the theory and core elements that underpin CL arrangements, together we developed and evolved strategies that took into consideration both, the main ideology of CL and the teachers' concerns and challenges faced during the implementation process. The teachers' strategies and performances were discussed with them in each round of the action research process, to together explore ways that
these could be improved. With myself and the teachers reflecting on these strategies and practices, in relation to the main ideology and core elements of CL, new ones were developed and the old ones evolved to favour pupils' meaningful interactions and promote their social skills.

Moreover, the current study raises issues about policy makers' responsibility regarding CL arrangements in schools. A research of a systematic analysis of grouping practices of more than 500 primary and secondary schools in England, by Baines et al (2003), showed that little genuine group work takes place. Several years later, Baines et al (2007) suggest that one of the main reasons for this is due to the fact that in the UK, group work does not figure significantly in the current educational policy. For this reason implementing CL arrangements of good quality it is not merely the responsibility of researchers and practitioners but of policy makers as well. Educational policy could include in its agenda suggestions for a social pedagogy where CL would have a more central role to support researchers' and practitioners' efforts towards good quality CL arrangements.

6.3.7 Challenges of the CL model
As the data analysis revealed, the teachers faced two major challenges during the implementation process of this CL model. These are discussed below.

a) Uniqueness of each child
The CL activities were carefully organised in advance by the two teachers, according to each child's targets. The two teachers also prepared in advance the necessary equipment needed to assist each child's communicational attempts. The individual tasks, the common goals, as well as the communication aids needed were different in every activity, according to each child's unique method of communication and their individual learning objectives. For all these reasons, the CL model requires strategic planning in advance, and the teachers have to co-ordinate a variety of aspects within an activity, since the content, the individual tasks, the common goals and the equipment are organised based on each child's uniqueness. The outcomes of this study suggest that this might sometimes challenge teachers, not merely because of the time and effort needed to plan a CL activity, but due to the fact that if a child is absent from the school, it is not always easy for the teachers to replace her
role and participation with someone else. A study by Rose (1991) about the effects of the Jigsaw CL model for pupils with SLD suggests similar challenges.

**b) Communication challenges**
The second challenge deals with the communication attempts of the children both among peers and with the teachers, as their communicational intentions were not always clearly expressed. As Lewis and Porter (2004) point out, difficulties in communication skills lead to ambiguity in the interpretation of the response, and difficulty with clarifying the meaning conveyed.

Regarding pupils' views, Lewis (2002) suggests that there are three principles underlying research which aims to access the views of children with learning disabilities: first, responses should be checked across contexts and strategies; second, the researchers should check that their interpretations of the views expressed are correct; and third, that the responses are typical of what the person believes. The current study sought pupils' views on a variety of lessons, subjects and contexts and used a variety of ways to elicit their views. For example the teachers used 'Yes' or 'No' questions with the pupils nodding or eye-pointing or simply saying 'Yes' or 'No'. They also rephrased questions several times to make sure that they correctly understood pupils' responses, or they used prompting questions to encourage them to respond. They also used pictures or talking devices. However, questions and answer formats and ways of prompting can sometimes distort responses (Lewis, 2002) and as Linda (ET) argues regarding the use of talking devices ‘*(the pupils) can only say what we are actually putting into a talker and that might not be what they want to say*'. Moreover, it is difficult for someone to verify whether has made the correct interpretations of pupils' communication acts, because pupils are more likely to acquiesce rather than to contradict (Sigelman et al, 1981). Therefore, although the pupils expressed their views on the CL activities to inform the staff about the way that the activities were employed, this study recognises that there is always a possibility that some of their responses were based merely on the teachers' and my interpretations and not on a common understanding between the adults and pupils.

Moreover, the core ideology of CL model activities focuses on a child-centre approach, where pupils are encouraged to actively construct knowledge through
interactions among them. As CL literature is based mainly on mainstream settings, pupils' interactions and opinions are expressed through speech. Although the outcomes of this study suggest that the pupils expressed intentional communication with each other and through peer assistance they completed their individual tasks and learning objectives, there were instances where the teachers were not sure exactly what their pupils wanted to communicate to their peers. Literature acknowledges the discrepancies in interpretations of pupils' behaviours and communication acts and points out the need for further research in order to explore ways that might help individuals to provide more concrete accounts of their views and communication acts (Harris, 2003). In instances where the pupils did not clearly provide their views, the teachers interfered and prompted the pupils to repeat their communication acts to make sure that they understood correctly what the pupils wanted to express.

6.3.8 Differences of the evolution of the CL model in the two settings
The main ideology, the core elements and the main strategies used to increase pupils' active participation to the learning process were similar in both settings. This might be due to the fact that before the action research rounds, I had a conversation with the two teachers and we discussed the main ideology of this model and its core elements. Therefore, they were aware of the theory that underpins this model.

The main difference revolves around the issue of pupils giving and receiving feedback about the CL arrangements. In the Cyprus setting, the teacher gave pupils feedback throughout the activity both on a group and individual level according to their performances. At the end of the sessions the teacher or I asked the pupils to tell us their opinion about the activity. However, in the English setting, after the teacher's suggestion, a strategy was introduced at the end of the lessons, where the teacher gave clear and precise feedback to the pupils about their individual and group performances and the pupils were asked to give their feedback about the activity as well, as an internal practice within the CL arrangements. Such practices reflect on each country's educational, school and classroom ideology and ethos. As discussed in section 6.2.1 each country's educational agenda, and consequently school and classroom ethos, has a different focus. It seems that in England, great emphasis has been given on self-advocacy aspects for pupils with SLD by current legislation, literature
and the specific school's aims, highlighting the importance of pupils communicating their opinions and feelings so that they are heard and taken into consideration. On the contrary, in Cyprus such aspects have not been pointed out neither by educational legislation, nor by the school's aims. Therefore, Cyprus teacher and I, coming from a cultural and educational background where issues of pupils' self-advocacy are not addressed and implemented, did not employ such a strategy. On the contrary, the English teacher suggested this strategy herself. She explained she used such strategies, especially at the end of a term or the school year to discuss with the pupils about the targets that they had achieved or would like to achieve in the following term or school year. It is apparent that the cultural, educational and school ethos of each country are reflected in the way this model evolved in the two settings, even though the differences were minimal.

6.3.9 Differences between the initial propositions of the CL model with the final ones

As mentioned already in the first chapter of the study, my personal professional understandings have been influenced by social constructivist approaches to learning. Therefore, while reviewing the literature about CL and teaching approaches for pupils with SLD that promote their social skills, I was interested in a CL approach that would focus mainly on social constructivist views and thus, place a great emphasis on the quality of interactions among pupils during learning that allowed them to solve their individual and common tasks by assisting each other (see figure 2.3).

However, the study aimed to construct a common understanding along with the participants about CL arrangements in their settings. Therefore, during the field work and data analysis of the first phase, the initial suggestions of CL arrangements in special settings were altered based on the common understanding constructed with the participants. The practitioners from both settings placed great emphasis on meeting the individual needs and learning objectives of their children during group work. As mentioned in section 4.5.5.3.c the group activities observed in the first phase of the study were dominated by the adults' prompts and instructions for interaction, either between pupils and practitioners or among peers. This resulted in minimum initiation of interactions among peers, as the teachers focused mostly on meeting each child's learning
objectives, rather creating a sense of interdependence among peers. For this reason, there was a need for a different approach to CL that would incorporate both pupils' individual accountability and positive interdependence. Guided and affected by the common understanding constructed in phase one, the open-to-amendments CL that was developed focused on meeting both the individual learning objectives of each child and the positive interdependence element among pupils. Therefore, the initial propositions suggested a CL model that included ‘working in a group’ types of activities, which suggests that each child has to complete individual tasks that later are combined to produce a common outcome (see figure 4.3).

In the second phase of the study, however, during the implementation process of this model, I realised with the teachers that these types of activities sidelined the aspect of positive interdependence among the pupils, since such activities did not favour pupil interactions and assistance throughout the activity. Therefore, by revising and re-evaluating its initial characteristics and by developing new ones, the operational CL model suggests, on one hand, different individual tasks to meet the learning objectives of all the group members, but on the other hand, emphasises the interdependent nature of these individual tasks to favour pupils' meaningful interactions and communication acts. The pupils by engaging sometimes in different and sometimes in similar individual tasks, according to their learning objectives, interacted and assisted each other to complete their individual and common tasks together, through a positive interdependence approach. Therefore, the operational propositions of this model draw upon three theoretical underpinnings as discussed in section 6.3.1. A social constructivist approach to CL was undertaken, that allowed the pupils to interact and communicate with each other to achieve together their common goals. At the same time aspects of the social cohesion approach were used as well and several strategies were developed for the activities to be meaningful and interesting to intrigue the pupils to interact and communicate in a productive way. Lastly, aspects of behavioural theory were used as well, with the two teachers using group and individual rewards to reinforce pupils to complete their individual and common tasks through interaction and assistance to each other. Consequently, by taking into consideration both aspects, i.e., pupils' positive interdependence and their
individual learning objectives, they interacted with and assisted each other to complete their individual and common tasks.

6.4 Conclusions
The current study made great efforts in illustrating a common understanding with participants of the phenomena under investigation. From the beginning of the field work until the discussion of the outcomes, the study aimed to present a shared understanding with all the people involved of how CL arrangements can be used in special settings, by suggesting specific strategies for a successful implementation. In the following chapter the unique contribution of this study, on a theoretical and practical level, its limitations and suggestions made for further research are discussed.
Chapter 7

Conclusions

7.1 Introduction
In this chapter a brief summary of the research journey is firstly presented. Following this, the unique contribution, as well as the practical implications of this study are pointed out and discussed. The chapter concludes with the limitations of the study and indications for further research and my personal reflections on this project.

7.2 Summary of the research journey
As mentioned in the first chapter of the thesis (see figure 1.1), the research journey started with a top-down approach (Fullan, 1994), searching in the current literature, research-base and legislation for indications and suggestions for pedagogies, approaches and strategies that promote the social skills of the children with SLD. The gaps in the literature and provision for children with SLD relevant to the notion of social skills (i.e. limited research on approaches and provision that promote peer relations and CL arrangements) were identified. The first phase of the study undertook an exploration, in two special primary settings for pupils with SLD, in England and Cyprus, to investigate in what ways teaching approaches and group activities are perceived and implemented in relation to the notion of social skills. A social constructionist approach was used that allowed the construction of understandings of these phenomena along with the participants. The outcomes of phase one suggested that both schools place great emphasis on the peer relations dimension of social skills, which contrasts with current literature and research in the field of SLD. Moreover, although the current research-base has not explored CL activities in special schools for pupils with SLD, the classes often employed group work during their daily practices. The outcomes of the first phase of the study shed light on the ways that a variety of aspects of teaching approaches and strategies that promote pupils’ social skills were employed during their daily practices. By relating these outcomes to current literature and research about teaching approaches for children with SLD that promote their social skills and CL arrangements in mainstream settings, an open-to-amendments CL model for children with SLD was developed.
By following a bottom-up approach (Fullan, 1994) this model was the basis on which the second phase of the study was carried out. By exploring, evolving and eventually re-developing the initial propositions of the CL model based on an action research approach, the outcomes of phase two demonstrated specific strategies and suggestions that enabled the pupil participants to promote their social skills during CL arrangements. In the Discussion chapter, by relating the outcomes of this study to current literature and provision for pupils with SLD, suggestions and indications were pointed out for research and educational provision to focus on exploring ways that would promote positive peer relations and CL arrangements in special schools. In the following sections of this chapter, a summary of all the aforementioned aspects is provided.

**7.3 Unique contribution of the study**

The outcomes of the first phase of the study provided a clear understanding of the notion of social skills for children identified as having SLD as perceived by the practitioner participants of the study. This understanding differs from established definitions about social skills in the area of SLD, since it emphasises, among other aspects, the importance of positive peer relations. While current literature and research, as well as educational legislation place great emphasis on those social skills that enable pupils to communicate their opinions and aspirations (Harris, 2003), the practitioners of the two schools suggested positive peer relations as an equally important aspect of pupils' social skills and included activities in their practices where the pupils interacted and communicated with each other during learning. This outcome is of significant importance and contributes to the notion of social skills for pupils with SLD. It enhances this notion and suggests the aspects of positive interdependence and peer relations as an internal dimension of social skills.

The notion of social skills, however, presents an interesting differentiation between the two settings as well. While the English setting placed emphasis on aspects of social skills that enable pupils to communicate their opinions and aspirations on issues concerning their learning, feelings and lives, the Cyprus class did not focus on these issues. It focused instead, during the daily routines of the class, on activities that enabled pupils to be as independent as possible, by practising life-functional skills. Apparently, this is rooted in the educational agendas of the two countries. Whilst the current SEN Code of Practice in
England (DfE, 2014) suggests encouraging pupils with SLD to develop those skills that would maximise their level of independence, it also emphasises the importance of encouraging pupils to develop skills that would enable them to participate in decision-making on issues concerning their lives. On the contrary, the current Education and Training of Children with Special Needs Law (1999) in Cyprus merely emphasises the importance of providing the appropriate education to pupils with SLD to function as independently as possible. This differentiation between the daily practices of the two settings provides a unique contribution to pedagogy and practice about the effects of the educational agendas of each country and indicates how each country's educational provision affects the schools' pedagogy and the daily practices of the schools.

Another significant contribution to pedagogical knowledge is the development of the CL model itself. Current literature and research-base fail to indicate ways for practitioners in special settings to implement CL arrangements in their classrooms. It can be claimed, therefore, that this study offers a unique contribution to current pedagogical practices in schools, since the outcomes of phase two provide a detailed account of how CL arrangements can be implemented in special settings for pupils identified as having SLD. This CL model can be considered as a unique tool, based on which practitioners in special settings can employ effective CL arrangements. Moreover, some strategies emerged during the action research process. These strategies made the CL activities meaningful and interesting to the pupils and this increased their interactions, participation and engagement in the CL activities. These strategies provide a significant pedagogical contribution to the fields of SLD, CL as well as mainstream education, since current literature and research fail to indicate sufficient ways for practitioners of how to implement CL activities in classroom settings (Siegel, 2005a,b), especially in special classrooms, where literature and research-base is at least limited about CL arrangements.

The CL model developed in this study does not merely address issues relevant to pupils expressing their opinions and views during learning, but creates a sense of interdependence among peers as well. This is an area that current literature and research base regarding pupils with SLD have not paid adequate attention. Exploring ways for eliciting the views of pupils with SLD and treating them as competent and independent individuals with personal opinions and
aspirations are issues of vital importance. Similarly, however, there is a need for interdependence and a sense of belonging. All human beings, apart from independence, need interdependence as well. The current study suggests that the model developed in phase two promotes the sense of interdependence among peers. This finding can be considered as a strong contribution to theoretical and pedagogical knowledge.

The main ideology of CL lies on the premise, that pupils, by assisting each other through meaningful interactions, can construct knowledge in their own minds. However, since literature and research-base about CL arrangements focuses mainly on mainstream settings, they provide a variety of ways to encourage pupils to interact in a meaningful way through the use of speech. The current study provides specific strategies for pupil interactions during learning and suggests that pupils with SLD by using their idiosyncratic way of communication and/or AAC equipment can interact in a meaningful way and assist each other during learning by promoting a variety of aspects of their social skills. Therefore, the model developed in this study provides a strong contribution to pedagogy and practice in special settings, as it indicates to practitioners in special settings how to promote peer communication and interaction in their classrooms.

Lastly, the study's methodology provides a unique contribution to both theoretical and practical knowledge of how practitioners and researchers can work together. This study employed an action research approach to investigate CL arrangements in special settings in relation to the social skills of the pupils. This required commitment and collaboration by both myself and the participants. By discussing and adjusting together the theory that underpins CL and by working together to explore and identify the appropriate teaching techniques for this approach a CL model for the pupil participants was generated. The study indicates in detail the procedures used during the action research approach and suggests clear and precise ways of how researchers and practitioners can work together to advance the theory and the practice of a teaching approach.
7.4 Practical implications and recommendations

Any contribution from this study's outcomes is difficult to be viewed separately from any possible practical implications, as the aim of the study itself is explicitly related with pedagogy and practice.

One of the significant outcomes of the study suggests that the current educational provision in Cyprus has not addressed issues concerned with pupils' participation and decision-making on issues concerning their lives and learning experiences. The outcomes of this study suggest that this affects the school's purposes and aims and consequently the classroom's practices, as in the Cyprus setting the daily routines of the class were relevant to pupils practising their functional/life skills. Thus, the current educational agenda in Cyprus could rethink and re-evaluate the current provision for pupils with SEN and include in its aims aspects relevant to pupils' right to participation in the decision-making on issues concerning their learning experiences and life. Such a revision could result in expanding the current practices in special schools to a direction that encourages pupils to express their opinions and aspirations to be heard and taken into account.

Moreover, in both countries the practitioners considered positive peer relations as an important aspect of social skills and included activities in their practices that enabled pupils to interact and assist each other's learning. However, as discussed in section 2.4.2.e, current literature and research-base about teaching approaches for pupils with SLD that promote their social skills focus mostly on adult-pupil approaches that encourage pupils to express their choices, opinions and preferences. The promotion of choice for individuals with learning disabilities has been a core objective for people who work with them (Harris, 2003) and this reflects in the current educational legislation as discussed in section 7.3. Although self-advocacy is of vital importance and a basic human right of every person, current literature and research-base in the area of SLD seem to sideline the aspect of peer relations. Very limited studies can be found that suggest ways for practitioners to promote positive peer relations among pupils with SLD. Thus the results of this study have practical pedagogical implications and suggest ways to practitioners in promoting positive interdependence and peer relations among pupils identified as having SLD.
However, effective implementation of CL arrangements in schools cannot be undertaken as a 'quick-fix' to special classrooms. The current study found that teachers have a strong belief in the value of meeting pupils' individual needs and, as Watson (1999) suggests, teachers' practices for pupils with learning disabilities depend on their implicit theories about education and its purposes. Therefore, practitioners' informal pedagogical views affect their daily practices, which might be based on a teacher-led learning. This has further practical implications. There is a need for educational provision to include suggestions for a social pedagogy of classroom learning, which incorporates CL as a way of encouraging pupils' to interact in a meaningful way and assist each other's learning. This might result to a deeper understanding by practitioners in special settings of what may constitute CL and include it in their daily practices.

7.5 Limitations of the current project and suggestions for further research
The current study suggests that CL arrangements for pupil participants can be an effective approach regarding the promotion of their social skills. From a methodological point of view, however, the current study is a small-scale project. Although, two cases of special classrooms constitute an adequate sample for qualitative research any claims for generalisation cannot be made. However, the context of each setting has been discussed and outlined in detail, therefore, readers can make their own judgements whether this study can be relevant to other settings. Nevertheless, further research is warranted to further explore the effects of CL arrangements in special settings based either on a small or larger scale project.

The fact that the two schools were designated to accommodate different groups of pupils can be considered as another limitation, as the pupil participants of the two settings had different needs and abilities. The English setting was a school for pupils experiencing significant physical disabilities, whereas the Cyprus school was for pupils identified as having SLD. However, the pupil participants of the English school were identified as having SLD, in addition to significant physical disabilities. Moreover, the fact that the study's results suggest that CL arrangements can have positive effects on the social skills of pupils experiencing both severe physical and learning difficulties can be considered a strength for this study. The CL model can be viewed as a useful tool for pupils who experience significant physical difficulties, in addition to SLD,
Another limitation relates to the content of the CL model and deals with the challenges faced during its implementation. As pointed out in the Discussion chapter the design of the activities was based on the uniqueness of each child. Therefore, every individual task designed for each activity was eligible and appropriate for a specific child in the class based on her unique abilities and learning objectives. In one instance that a child was absent from the school the teacher arranged a different activity and it was difficult considering the time limitation to meet all the aspects of the CL. Nevertheless, a classroom is a dynamic context and such and similar challenges are faced by teachers on a daily basis. Using the words of Marina (CH), "Teachers in special schools have to be flexible according to the different needs, to the problems that our children face every day." Therefore, such a limitation might be applicable not merely to CL arrangements in special schools, but to any kind of teaching approach employed in a classroom.

Moreover, there were instances where, both the teachers and I found that interpreting pupils' communication acts was not a straightforward procedure. Although the ethnographic nature of phase one allowed me to spend an extended period of time in each school, which enabled me to get to know the children and familiarise myself with their idiosyncratic ways of communication, there were occasions where both the teachers and I were not sure what pupils wanted to express. However, similar to the previous limitation, such instances take place under any circumstances in a special setting and not just during CL arrangements. Literature has pointed out the discrepancies in staff's interpretations of their pupils' behaviours and communicational intentions and the difficulty in verifying whether they have made the correct interpretations (Ware, 2004). The vital need for further research to develop ways that will enable individuals with SLD to more clearly provide their views (Harris, 2003) has already been pointed out.

A variety of strategies were developed to make CL activities meaningful and interesting to the pupils. However, the interconnected nature of these strategies makes it difficult to establish whether some of these were more important than others, whether all these strategies contributed more or less equally or whether it was the actual combination of all of them that resulted in positive effects
regarding the promotion of the pupils' social skills. Further research, thus, is required to examine these aspects in more detail. Moreover, further research is needed to investigate whether these strategies can be useful in mainstream settings as well among pupils with or without SEN.

Another limitation is relevant to the focus of the study itself, which was on CL arrangements in relation to the social skills of the children. The aspect of academic outcomes, in terms of progress was not systematically examined. However, the academic aspect was considered and systematically investigated by this study as a dimension of social skills. Therefore, the academic dimension, although not addressed in the sense of pre- and post-implementation academic progress, was met in terms of engagement in the activity and completion of individual and common tasks. As the outcomes suggest, CL arrangements in special settings can result in positive effects in terms of engagement and completion of academic tasks. Further research, however, is needed to examine the area of academic outcomes in relation to CL arrangements in special settings.

Regarding practical and policy limitations, CL arrangements in special settings cannot be implemented effectively unless educational and schools' policy as well as teachers' pedagogical ideology turn towards a social pedagogy of learning that would allow CL a much more central role in teaching. As Fullan (1994) suggests improvement in educational practices requires a coordination and cooperation between both practitioners and policy-makers. As long as educational policy does not include suggestions for CL arrangements in special settings, little change will occur in practice. Similarly, if practitioners do not consider positive peer relations and a sense of interdependence among peers vital aspects of their practices, little change will occur to their teaching and in the educational agenda. The current study suggests that teachers in special schools could help themselves and their pupils by using CL as a way of promoting pupils’ social skills and interdependence among them. However, in order for this to happen the current ethos of educational provision and special schools for pupils with SLD should accept that a social pedagogy and CL activities by themselves are valid and effective ways of teaching.
One of the aspects of the unique contribution to theoretical and practical knowledge of this project suggests that the notion of social skills for pupils identified as having SLD has been enhanced and extended, as it takes into consideration the aspect of positive peer relations and positive interdependence among the pupils. Further research is, therefore, needed around the area of social skills to investigate ways and teaching approaches that could potentially promote a sense of interdependence and positive peer relations among the members of a class, since current research base on the social skills of pupils with SLD is currently focused mostly on self-advocacy aspects and communication on an adult-pupil basis.

The results of the current study suggest that the practitioners of the two classes have a strong belief in meeting the individual needs of their pupils. This finding concurs with the findings from the literature review chapter, that suggest that there is a powerful tradition in special settings for an individual rather group learning. Similarly, for mainstream settings, CL arrangements and social pedagogy do not appear significantly in the educational agenda (Blatchford, 2007a). This results in teacher-led pedagogy, in both mainstream and special settings, where pupils' active involvement does not have a central role. For that reason, there is a need for further research in this area, where practitioners in collaboration with researchers and policy makers can investigate and identify ways to promote a pupil-led learning and a social pedagogical approach in schools, where pupils are to be viewed as active participants of the learning process.

7.6 Concluding comments
The experiences I have gained from this process are extremely valuable for my future career either as a teacher or academic. Given the opportunity to spend more than one school year in two primary special classes and work, interact and collaborate so closely with the participants of the study was an invaluable experience that has given me confidence both as a teacher and as researcher. Having the opportunity to explore these issues not only in my country, but in a different cultural setting as well, enabled me to enhance my own understanding about the education of pupils with SLD and CL arrangements.
The general conclusion of this project suggests that it would be beneficial if
teachers in special schools, researchers and stakeholders consider the issue of
social skills in terms of peer relations and CL arrangements in special settings.
The implementation of CL arrangements in the two special schools appear to
encourage positive interdependence and interactions among peers and may,
therefore, be an effective tool that would seem to benefit and promote pupils' 
social skills. In order for this to happen, however, there is a need for a change in
the educational and schools' agendas that would favour a social pedagogy,
where teacher-led learning would be replaced by pupils' active involvement.
References


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**APPENDICES**

**APPENDIX 1: Interview Protocol /Phase one**

<table>
<thead>
<tr>
<th>Warm-up Questions</th>
<th>Social skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Years of experience as a teacher</td>
<td>Social validity approach to social skills, so different people have different</td>
</tr>
<tr>
<td>• Years of working in the specific school</td>
<td>expectations.</td>
</tr>
<tr>
<td>• Why choosing this specific profession</td>
<td>• Personal perceptions and understandings</td>
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<tr>
<td></td>
<td>• Examples of social skills in general</td>
</tr>
<tr>
<td></td>
<td>• Examples of social skills in particular for their pupils</td>
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<tr>
<td></td>
<td>• Mention aspects of social skills for 2-3 of their pupils</td>
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<td></td>
<td>• Have they been developed over time?</td>
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<td></td>
<td>• How?</td>
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<tr>
<td></td>
<td>• What factors contributed the most for their development?</td>
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<tr>
<td></td>
<td>• What approaches contributed the most for their development?</td>
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<tr>
<th>Probes</th>
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<tbody>
<tr>
<td>• Anything more?</td>
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<tr>
<td>• Could you go over that again?</td>
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<tr>
<td>• If an answer is too general: What is your personal</td>
<td></td>
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<tr>
<td>views on that?</td>
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<tr>
<td>• Ask for specific examples observed during field work</td>
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<table>
<thead>
<tr>
<th>Teaching approaches/ Strategies/ Tools</th>
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<tbody>
<tr>
<td>• a)Cognitive/Academic aspects, b)Motor/sensory skills, c)Social skills</td>
<td></td>
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<tr>
<td>For each of the three categories: what kind of</td>
<td></td>
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<tr>
<td>approaches, strategies, tools/equipment they</td>
<td></td>
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<tr>
<td>consider the most important for their development</td>
<td></td>
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<tr>
<td>• Examples of questions:</td>
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<tr>
<td>• What approaches do you use for the promotion of</td>
<td></td>
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<tr>
<td>the social skills of your pupils?</td>
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<tr>
<td>• What strategies would you say have been the most</td>
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<td>effective for the development of pupils' social</td>
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<td>skills?</td>
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<td>• Of all the strategies that you have mentioned which</td>
<td></td>
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<td>ones do you employ more often?</td>
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<tr>
<td>• Why?</td>
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<table>
<thead>
<tr>
<th>Group Work</th>
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<tbody>
<tr>
<td>• Perceptions/ understandings</td>
<td></td>
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<tr>
<td>• When they use it?</td>
<td></td>
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<tr>
<td>• Why they use it?</td>
<td></td>
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<tr>
<td>• How they implement it?/ Give examples observed</td>
<td></td>
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<tr>
<td>during field work</td>
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<tr>
<td>• How they plan it/ Describe the procedures</td>
<td></td>
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<tr>
<td>• What aspects are the most important when they plan</td>
<td></td>
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<tr>
<td>it</td>
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<tr>
<td>• Group work and social, cognitive &amp; motor skills</td>
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<tr>
<td>Effective for the promotion of the above skills?</td>
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<tr>
<td>Ask for examples observed during filed work to justify</td>
<td></td>
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<tr>
<td>their answers</td>
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### APPENDIX 2: Interview Protocol/Phase 2

#### Probes
- Ask for specific examples observed during implementation to support their views throughout the interview

#### Aspects of social skills: How and to what extent they were met

**Expressing opinions through interactions**
- among peers?
- between pupils and adults?
- Initiations?
- Any interactions more challenging than others?

**Engagement to the activity/Academic aspects**
- complete tasks and common goals through interactions
- on-task/off-task behaviour

**Good manners/Compliance, peer relations aspects**
- wait turns, listen to others, help others
- willingness/enjoyment to do so

**Applying all the aforementioned aspects throughout the lessons and subjects**

- Aspects that were challenging to be met
- Aspects that were easy to be met

#### Discussion of the characteristics of the CL model
- Present to them in bullet points its characteristics and ask them to go over them one by one and reflect on them

**Examples of questions during reflections**
- Agreements/disagreements with the characteristics?
- Missing something?
- Most important ones? Why?
- Most challenging to be applied? Why?
- Most easy to be applied? Why?

#### Types of peer to peer interactions
- initiations?
- guided by adults?
- grouping?
- meaningful/productive towards the individual tasks and common goals?
- help/assistance?
- How the subject of the lesson can affect these interactions?
- How the needs of the pupils can affect these interactions?
- How the abilities of the pupils can affect these interactions?
- Any types of interactions more challenging than others?

#### Planning and implementation
- How do you plan the activities?
- Most important aspects when planning them?
- Most important aspects when implementing them?
- Challenges during planning?
- Challenges during implementation?
- Different lessons/subjects: How do they affect planning and implementation?
### APPENDIX 3: Timeframe of the two phases of the study

<table>
<thead>
<tr>
<th>PHASE ONE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pilot in the Cyprus School</strong></td>
<td></td>
</tr>
<tr>
<td>Beginning of February, 2011 till the mid of February, 2011</td>
<td>(2 weeks, every day)</td>
</tr>
<tr>
<td><strong>Data Collection in the Cyprus Class</strong></td>
<td></td>
</tr>
<tr>
<td>Mid of February, 2011 till the mid of April, 2011</td>
<td>(9 weeks: 3 days a week for the whole school day)</td>
</tr>
<tr>
<td><strong>Data Collection in the English Class</strong></td>
<td></td>
</tr>
<tr>
<td>Beginning of May, 2011 till the mid of July, 2011</td>
<td>(10 weeks: 3 days a week for the whole school day)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHASE TWO</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Collection in the Cyprus School</strong></td>
<td></td>
</tr>
<tr>
<td>End of April, 2012 till the end of May, 2012</td>
<td>(5 weeks: 2 or 3 times a week for 1 or 2 lessons)</td>
</tr>
<tr>
<td><strong>Data Collection in the English school</strong></td>
<td></td>
</tr>
<tr>
<td>Middle of June, 2012 till the middle of July, 2012</td>
<td>(5 weeks: 2 or 3 times a week for 1 or 2 lessons)</td>
</tr>
</tbody>
</table>
APPENDIX 4: Ethical approval form for phase one

STUDENT HIGHER-LEVEL RESEARCH

UNIVERSITY OF EXETER
Graduate School of Education

Certificate of ethical research approval

STUDENT RESEARCH/FIELDWORK/CASEWORK AND DISSERTATION/THESIS
You will need to complete this certificate when you undertake a piece of higher-level research (e.g. Masters, PhD, EdD level).

To activate this certificate you need to first sign it yourself, and then have it signed by your supervisor and finally by the Chair of the School’s Ethics Committee.

For further information on ethical educational research access the guidelines on the BERA web site: http://www.bera.ac.uk/publications/guidelines/ and view the School’s statement on the GSE student access on-line documents.

READ THIS FORM CAREFULLY AND THEN COMPLETE IT ON YOUR COMPUTER (the form will expand to contain the text you enter). DO NOT COMPLETE BY HAND

________________________________________________________
Your name: Maria Eleni Socratous

Your student no: 560023180

Return address for this certificate:

Degree/Programme of Study: Doctorate in Educational Research

Project Supervisor(s): Dr Hazel Lawson and Shirley Larkin

Your email address: mes207@exeter.ac.uk

Tel:

I hereby certify that I will abide by the details given overleaf and that I undertake in my thesis to respect the dignity and privacy of those participating in this research.

I confirm that if my research should change radically, I will complete a further form.

Signed: .................................................. date: 22/11/2010

NB For Masters dissertations, which are marked blind, this first page must not be included in your work. It can be kept for your records.

Chair of the School’s Ethics Committee
updated: July 2010
Certificate of ethical research approval

Your student no: 560023180

Title of your project: The Effects of Group Activities on the Social Skills of Pupils with Severe Learning Difficulties, Attending Special Primary Schools

Brief description of your research project:
Cooperation among children in classrooms forms the basis of many interventions designed to improve, among others, pupils' social relations in schools. Therefore, nowadays group activities are used as a very popular teaching technique in mainstream settings. However, research and literature to date regarding group activities focuses mostly on pupils without and with learning difficulties of a mild to moderate nature, who attend mainstream settings. Research and literature are missing or at best are scanty as regards the use of group activities to pupils with Severe Learning Difficulties (SLD), who attend special schools. Moreover taking into account that few teaching strategies are promoted specifically for these children (Porter, 2005), it seems that research focusing on pedagogies and teaching strategies for children with SLD is prudent. For these reasons, this study aims to investigate the effects of group activities on the social skills of pupils with SLD, who attend special primary schools.

This research is based on a multiple case study design. It will take place in two different special schools, one in the UK and the other in Cyprus and it is separated in two different phases. Phase one is an exploratory study and aims to investigate the historical and socio cultural background of each school, the policies and aims of the schools, the pedagogies that are utilized in each setting and the teaching staff's views on the education of their children as well as their perceptions and attitudes towards teaching approaches in general and group activities in particular. In this phase qualitative methods will be used, collecting data through semi structured interviews of the professionals' views on group activities, teaching approaches that are currently utilized as well as collecting information regarding the aims and policies of their schools. Moreover, naturalistic observations of a variety of teaching methods during class practices will be conducted. For triangulation purposes data from the schools' official documents will be collected so as to get a clear idea of each school's background, policies and aims. I intend to spend approximately two months in each school setting, starting from January 2011.

In phase two, with the help of the professionals of the schools, adjustments will be introduced to the traditional approach of group activities, so as to develop an especially designed scheme that will meet the needs and abilities of children with SLD. An exploration of this scheme will be then undertaken in both settings, in order to investigate what happens when this approach is used in regards to the social skills of the pupils. Further details regarding this phase will be available after phase one will be completed. Therefore, details regarding data collection methods and participants are not available yet. After the completion of phase one a second ethical approval form will be completed, in which will be mentioned all the necessary information and details of phase two.

Give details of the participants in this research (giving ages of any children and/or young people involved):
A purposeful sample will be used for phase one of this research:

Chair of the School's Ethics Committee
updated: July 2010
- **Semi-structured interviews:** A number of professionals working in the two schools will be offered the opportunity to participate in this part of the research. Professionals will include headmasters, teachers and teaching assistants. Every member of the school staff will be provided an outline of the research (a research information leaflet), the opportunity to seek further information and be given a summary of the findings.

- **Naturalistic observations:** Approximately 10-12 pupils (aged 6-12) and their teachers and teaching assistants from the two schools to participate in this research will be observed during a variety of classroom practices. In regards to the pupils participating in the study, both their own and parental consent will be obtained prior to the involvement to the observations.

Give details (with special reference to any children or those with special needs) regarding the ethical issues of:

a) **informed consent:** Where children in schools are involved this includes both headteachers and parents. An example of the consent form(s) must accompany this document. A blank consent form can be downloaded from the GSE student access on-line documents.

Informed consent from parents of pupil participants will be obtained. Records of when, how and from whom the consent was obtained, will be recorded. Informed consent will be also sought from the pupils themselves. This is a very sensitive area of research as it deals with children whose age and intellectual capability may limit the extent to which they can agree voluntarily to participate to the research process. For this reason a research information leaflet will be especially designed for the pupil participants. More specifically this leaflet will be based on a symbol system including clear and precise pictorial cues, which will describe to them their role in the research process. In general participants will be made aware of how the research findings will be used. Informed consent will be an ongoing process throughout the research. Participants will be reminded that they have the right to withdraw from the research at any given time and that data related to them will be destroyed.

b) **anonymity and confidentiality**

Records of the data collected (including transcripts and any audio recordings) will be stored in a secure and safe place. Electronic information will only be accessed by the researcher with her username and password. This information will be stored on a secure system with recognized virus protection. In addition, information will be coded to ensure anonymity. This will remain anonymous in the write up of the research. Collected written information will be destroyed when it is no longer required. Any audio recording will be disposed of digitally.

Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress:

**Qualitative Data**

Three different data collection methods will be conducted during this phase. All these sources of evidence are interconnected and highly complementary to each other. The main aim of this phase is to explore what happens in action in each school in terms of pedagogies, the nature of education and learning that each teacher thinks that is the most suitable for their children and their aims and purposes as institutions for children with SLD.

**Semi-structured interviews:** Professionals' views on group activities, teaching approaches that they currently use as well as collecting information regarding the aims and policies of their schools will be collected through a series of semi structured interviews. With the consent of participants, interviews will be recorded and transcribed. This will then be coded thematically.

Chair of the School's Ethics Committee
updated: July 2010
Naturalistic observations: Naturalistic observations in each school setting of a variety of teaching methods during class practices will be conducted. The time span of each observation will vary according to the planned activity. During the observations I shall focus my attention on the nature of pedagogies and where the emphasis is mostly placed on, i.e., the focus will centre on developing academic skills, social skills or both. Furthermore, I shall observe students’ interaction with their peers and with the teaching staff and who initiates most of the times the interactions. Some additional information will be documented such as how desks are settled, how many children are in the classroom and how many TAs. During the observations I shall take field notes and any critical events will be noted. This information will be then coded thematically.

Documentation: For triangulation purposes data from the schools’ official documents will be also collected (i.e. schools’ guidebooks and leaflets, annual reports, pupils’ IEPs, targets and their statements). Moreover, any documents that are relevant to the school’s policies and aims, facilities, teaching and learning, Ofsted’s reports, attitudes towards inclusion will be investigated as well.

Data Analysis of Phase One:

Similar analysis procedures of all the qualitative data will be used. Qualitative information will be transcribed and uploaded to the NVivo program for thematic coding and further analysis. Differences among views of participants will be explored and cross comparisons will be made in regard to the country of each school.

During the exploration of the data I shall be considering ways to reduce it to a manageable size. Therefore, memos will be written in the margins of the interviews’ transcripts, the observations’ fieldnotes and the documents. These memos will be short phrases, ideas or key concepts that will emerge while reading the data. After ‘memoing’, the reduction phase will follow, that is selecting parts of the data for coding. During coding I shall label those parts of the data that conceptually go together. After coding a small number of themes will be identified. During the data analysis a detailed description of each case and its context will be given.

After the end of each observation or interview session, and throughout the data analysis process in general I plan to discuss with the participants my interpretations, to check whether we have similar understandings and to verify the accuracy of the collected data.

Give details of any other ethical issues which may arise from this project (e.g. secure storage of videos/recorded interviews/photos/completed questionnaires or special arrangements made for participants with special needs etc.):

During the data collection, data analysis and write up, data (audio recordings, observation records, interview data and individual data) will be securely stored. As previously mentioned, electronic information will only be accessed by the researcher via the use of her username and password and will be stored on a secure system with recognized virus protection, within a locked building.

Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):

This is a particularly sensitive area of research since it deals with a vulnerable group whose age and intellectual capability may limit the extent to which they can be expected to agree voluntarily to partake in the research. For this reason, as it has been already mentioned, an especially designed research information leaflet will be provided to the children so as to be simple and understandable to them. Moreover, informed consent and right to withdraw must be strictly adhered to and reminded throughout the research process. Moreover, it will be made clear to the professionals involved in the research that in case they realise that the presence of the researcher in the classroom during the observations causes distress or discomfort to the pupils it should be reported.

Chair of the School’s Ethics Committee
updated: July 2010
immediately. Parents will be fully informed and be offered clear channels of communication to the researcher throughout the case study period.

This form should now be printed out, signed by you on the first page and sent to your supervisor to sign. Your supervisor will forward this document to the School's Research Support Office for the Chair of the School's Ethics Committee to countersign. A unique approval reference will be added and this certificate will be returned to you to be included at the back of your dissertation/thesis.

N.B. You should not start the fieldwork part of the project until you have the signature of your supervisor.

This project has been approved for the period: January 2011 until: July 2011

By (above mentioned supervisor's signature): date: 2-12-10

N.B. To Supervisor: Please ensure that ethical issues are addressed annually in your report and if any changes in the research occur a further form is completed.

GSE unique approval reference: D.10/11/18

Signed: date: 8-12-2010
Chair of the School's Ethics Committee

This form is available from http://education.exeter.ac.uk/students/
APPENDIX 5: Ethical approval form for phase two

STUDENT HIGHER-LEVEL RESEARCH

UNIVERSITY OF

EXETER

Graduate School of Education

Certificate of ethical research approval

STUDENT RESEARCH/FIELDWORK/CASEWORK AND DISSERTATION/THESIS
You will need to complete this certificate when you undertake a piece of higher-level research (e.g. Masters, PhD, EdD level).

To activate this certificate you need to first sign it yourself, and then have it signed by your supervisor and finally by the Chair of the School’s Ethics Committee.

For further information on ethical educational research access the guidelines on the BERA web site: http://www.bera.ac.uk/publications/guidelines/ and view the School’s statement on the GSE student access on-line documents.

READ THIS FORM CAREFULLY AND THEN COMPLETE IT ON YOUR COMPUTER (the form will expand to contain the text you enter). DO NOT COMPLETE BY HAND

Your name: Maria Eleni Socratous
Your student no: 560023180
Return address for this certificate:
Degree/Programme of Study: PhD Education
Project Supervisor(s): Dr Hazel Lawson and Dr Shirley Larkin
Your email address: mes207@exeter.ac.uk
Tel:

I hereby certify that I will abide by the details given overleaf and that I undertake in my thesis to respect the dignity and privacy of those participating in this research.

I confirm that, if my research should change radically, I will complete a further form.

Signed: .................................................. date: 9-3-2012

NB For Masters dissertations, which are marked blind, this first page must not be included in your work. It can be kept for your records.

Chair of the School’s Ethics Committee
updated: July 2010
Certificate of ethical research approval

Your student no:  560023180

Title of your project:  The Effects of Cooperative Learning on the Social Skills of Pupils with Severe Learning Difficulties, Attending Special Primary Schools

Brief description of your research project:
Cooperation among children in classrooms forms the basis of many interventions designed to improve, among others, pupils' social relations in schools. Therefore, nowadays cooperative learning (CL) is used as a very popular teaching technique in mainstream settings. However, research and literature to date regarding CL focuses mostly on pupils without and with learning difficulties of a mild to moderate nature, who attend mainstream settings. Research and literature are missing or at best are scanty as regards the use of CL with pupils with Severe Learning Difficulties (SLD), who attend special schools. Moreover taking into account that few teaching strategies are promoted specifically for these children (Porter, 2005), it seems that research focusing on pedagogies and teaching strategies for children with SLD is prudent. For these reasons, this study aims to investigate the effects of CL on the social skills of pupils with SLD, who attend special primary schools.

This research is based on a multiple case study design. It will take place in two different special schools, one in the UK and the other in Cyprus and it is separated in two different phases. Phase one was undertaken the previous academic year. An ethical form for phase one was completed and approved the previous year. This ethical form refers to the second phase of the study. In brief, phase one was an exploratory study that aimed to investigate the teaching strategies that were utilized in each setting and the teaching staff's views on the education of their children as well as their perceptions and attitudes towards teaching approaches in general and CL in particular.

Based on the findings of phase one, a specifically designed scheme regarding CL has been developed so as to meet the needs and abilities of children with SLD. Therefore, phase two aims to undertake an exploration of this scheme in both settings (UK and Cyprus) in order to investigate what happens when it is used with regard to the social skills of the pupils. The basic characteristics of this scheme are not pre-defined and are open to amendments, since the exploration and effects of this scheme will occur with the help and collaboration of the teachers of the two settings. Hence, phase two will comply with the characteristics of an action research methodology, following a cyclical procedure; the initial characteristics of the scheme will continuously evolve and develop on the basis of data interpretations along with discussions with the teachers. By planning, acting, observing, reflecting and then planning again, the effects of this scheme on the social skills of the children will be investigated in both schools. In this phase qualitative methods will be used, collecting data through naturalistic observations during the implementation of this scheme. Moreover, for triangulation purposes semi structured interviews of the professionals' views regarding this scheme will be conducted. I intend to spend approximately one month in each school, starting from April 2012.

Give details of the participants in this research (giving ages of any children and/or young people involved):
A purposeful sample will be used for phase two of this research:

Chair of the School's Ethics Committee
updated:  July 2010
• **Semi-structured interviews:** A number of professionals working in the two schools will be offered the opportunity to participate in this part of the research. Professionals will include teachers and teaching assistants. Every member of the school staff will be provided with an outline of the research (a research information leaflet), the opportunity to seek further information and they will be given a summary of the findings.

• **Naturalistic observations:** Approximately 10-12 pupils (aged 6-12) and their teachers and teaching assistants from the two schools will be invited to participate in this research and will be observed during the implementation of the cooperative learning scheme. In regards to the pupils participating in the study, both their own and parental consent will be obtained prior to the involvement in the observations.

**Give details (with special reference to any children or those with special needs) regarding the ethical issues of:**

a) **informed consent:** Where children in schools are involved this includes both headteachers and parents. An example of the consent form(s) must accompany this document. A blank consent form can be downloaded from the GSE student access on-line documents.

Informed consent from parents of pupil participants will be obtained. Records of when, how and from whom the consent was obtained, will be recorded. Informed consent will be also sought from the pupils themselves. This is a very sensitive area of research as it deals with children whose age and intellectual capability may limit the extent to which they can agree voluntarily to participate to the research process. For this reason a research information leaflet may be especially designed for the pupil participants, if the teachers of the school agree. More specifically this leaflet will be based on a symbol system including clear and precise pictorial cues, which will describe to them their role in the research process. In general participants will be made aware of how the research findings will be used. Informed consent will be an ongoing process throughout the research. Participants will be reminded that they have the right to withdraw from the research at any given time and that data will only be used for this PhD research and any related publications.

b) **anonymity and confidentiality**

Records of the data collected (including transcripts and any audio recordings) will be stored in a secure and safe place. Electronic information will only be accessed by the researcher with her username and password. This information will be stored on a secure system. In addition, information will be coded to ensure anonymity. This will remain anonymous in the write up of the research. Collected written information will be destroyed when it is no longer required. Any audio recording will be disposed of digitally.

**Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress:**

Semi-structured interviews: Professionals’ views on the cooperative learning scheme will be collected through a series of semi structured interviews. With the consent of the participants, interviews will be recorded. These will be transcribed and then coded thematically.

Naturalistic observations: Naturalistic observations in each school setting during the implementation of the scheme will be conducted. The time span of each observation will vary according to the planned activity. During the observations I shall observe students’ interaction with their peers and with the teaching staff. Some additional information will be documented such as how desks are arranged, how many children are in the classroom and how many TAs. During the observations I shall take field notes and any critical events will be noted. This information will be then coded thematically.

---

Chair of the School’s Ethics Committee
updated: July 2010
Data Analysis of Phase Two:

Similar analysis procedures of all the qualitative data will be used. Qualitative information will be transcribed for thematic coding and further analysis.

During the exploration of the data I shall be considering ways to reduce it to a manageable size. Therefore, memos will be written in the margins of the interviews’ transcripts and the observations’ fieldnotes. These memos will be short phrases, ideas or key concepts that will emerge while reading the data. After ‘memoing’, the reduction phase will follow, that is selecting parts of the data for coding. During coding I shall label those parts of the data that conceptually go together. After coding a small number of themes will be identified. During the data analysis a detailed description of each case and its context will be given.

After the end of each observation or interview session, and throughout the data analysis process in general I plan to discuss with the participants my interpretations, to check whether we have similar understandings and to verify the accuracy of the collected data.

Give details of any other ethical issues which may arise from this project (e.g. secure storage of videos/recorded interviews/photos/completed questionnaires or special arrangements made for participants with special needs etc.):

During the data collection, data analysis and write up, data (audio recordings, observation records and interview data) will be securely stored. As previously mentioned, electronic information will only be accessed by the researcher via the use of her username and password and will be stored on a secure system.

Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):

This is a particularly sensitive area of research since it deals with a vulnerable group whose age and intellectual capability may limit the extent to which they can be expected to agree voluntarily to partake in the research. For this reason, as it has been already mentioned, an especially designed research information leaflet may be provided to the children, if the teachers agree, so as to be simple and understandable to them. Moreover, informed consent and right to withdraw must be strictly adhered to and participants will be reminded of this throughout the research process. Moreover, it will be made clear to the professionals involved in the research that in the case that they feel that the presence of the researcher in the classroom during the observations causes distress or discomfort to the pupils it should be reported immediately. Parents will be fully informed and be offered clear channels of communication to the researcher throughout the case study period (i.e. my e-mail and phone number).

---

This form should now be printed out, signed by you on the first page and sent to your supervisor to sign. Your supervisor will forward this document to the School’s Research Support Office for the Chair of the School’s Ethics Committee to countersign. A unique approval reference will be added and this certificate will be returned to you to be included at the back of your dissertation/thesis.

N.B. You should not start the fieldwork part of the project until you have the signature of your supervisor.

This project has been approved for the period: March 2012 until: December 2012

By (above mentioned supervisor’s signature): 

Chair of the School’s Ethics Committee
updated: July 2010
N.B. To Supervisor: Please ensure that ethical issues are addressed annually in your report and if any changes in the research occur a further form is completed.

GSE unique approval reference: .................................................. D. 11 12 38

Signed: ................................................................. date: 13/3/2012
Chair of the School's Ethics Committee

This form is available from http://education.exeter.ac.uk/students/

Chair of the School's Ethics Committee
updated: July 2010
APPENDIX 6: The consent forms for the practitioners and parents of phase one and two

GRADUATE SCHOOL OF EDUCATION

CONSENT FORM

This informed consent form is for parents of children attending Class xxx of the xxx school, who will potentially participate in the research titled: “The effects of group activities on the social skills of pupils who attend special primary schools”

Part I: Information Sheet
I am Maria Socratous and I am a PhD student at the Graduate School of Education of the University of Exeter. I am doing some research about group activities, which might help us to understand more about their effects on pupils’ social skills. In this study I would like to observe some of the lessons and activities (including group activities) that are taking place in special schools’ classrooms. The research will take place in two different special schools, one in England and the other in Cyprus. I would like to spend approximately two months in each school. The research project has been cleared by the University of Exeter, Graduate School of Education research ethics committee. The research also conforms to the ethical standards for educational research set out by British Educational Research Association.

I will be visiting Class ... three times a week for approximately two months and will observe all the members of the classroom during a variety of classroom activities, including group activities. More specifically during the observations I will collect handwritten notes of conversations, responses, and activities among the pupils and the staff. If you agree, I would like to participate in the routines and activities of the class. If it is OK with you, I would also like to see your child’s Individual Educational Plan.

If you agree, then the next thing I will do is ask your child for her/his agreement as well. With teacher’s advice and guidance, I will seek the most appropriate way so as to gain her/his personal consent. Informed consent from the pupils will be an ongoing process throughout the research and they will be reminded that they have the right to withdraw from the research at any time. You can also withdraw your child from the research project at any time. In this case your child will continue with the normal class activities but no data will be collected for the research project. The data will be treated as confidential and I will preserve your child’s anonymity. However, some of the data gathered (i.e., observations data and your child’s targets and statement of special educational needs) may be discussed with the school staff and my university supervisors. Yet, anything mentioned in my PhD thesis and in any further publications will be anonymous. The results of this research can be communicated to you if you so wish.

If you have any questions, you may ask them now or later, even after the study has started. You may contact me in any of the following ways:
Tel: 07xxxxxxxxx
E-mail: mes207@exeter.ac.uk
Title of the project:
“The effects of group activities on the social skills of pupils who attend special primary schools”

Student’s Name: Maria Socratous

Part II: Certificate of consent

I understand that:

there is no compulsion for me to let my child participate in this research project and, if I do give permission to participate, I may at any stage withdraw his/her participation

I have the right to refuse permission for the publication of any information about my child

any information which my child gives will be used solely for the purposes of this research project, which may include publications

all information my child gives will be treated as confidential

the researcher will make every effort to preserve my child’s anonymity

.................................................. ..................................................
(Signature of the parent) (Date)

........................................
(Printed name of the parent)

One copy of this form will be kept by the parent; a second copy will be kept by the researcher

If you have any concerns about the project that you would like to discuss, please contact:

07xxxxxxxx
OR
mes207@exeter.ac.uk

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University’s registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.
GRADUATE SCHOOL OF EDUCATION

CONSENT FORM

This informed consent form is for the staff of the xxx School, who will potentially participate in the research titled: “The effects of group activities on the social skills of pupils who attend special primary schools”

Part I: Information Sheet
I am Maria Socratous and I am a PhD student at the Graduate School of Education of the University of Exeter. I am doing some research about group activities, which might help us to understand more about their effects on pupils’ social skills. The research will take place in two different special schools, one in England and the other in Cyprus. I would like to spend approximately two months in each school. The research project has been cleared by the University of Exeter, Graduate School of Education research ethics committee. The research also conforms to the ethical standards for educational research set out by British Educational Research Association.

I would like to visit Class xxx of your school for approximately two months, three times a week, in order to observe all the members of the classroom during a variety of classroom activities, including group activities. Observations will involve the collection of handwritten narrative records of conversations, responses, and activities among pupils and the staff. If you agree, I would like to participate in the routines and activities of the class. Moreover, the study will include interviews, so as to collect information regarding your views on social skills, group activities and teaching approaches that are currently utilised in your classroom. Lastly, I would like to explore some of your school’s documents about the purposes and aims of your schools.

The data will be treated as confidential and I will preserve your anonymity. However, some of the data gathered (i.e., observations and interview data and children’s Individual Educational Plans) may be discussed with you and my university’s supervisors. Yet, anything mentioned in my PhD thesis and in any further publications will be anonymous. The results of this research can be communicated to you if you so wish.

If both you and the parents of the pupils agree, then the next thing I will do is ask the pupils for their agreement as well. With your advice and guidance, I will seek the most appropriate ways so as to gain their personal consent. Informed consent from pupils will be an ongoing process throughout the research and they will be reminded that they have the right to withdraw from the research at any time.

If you have any questions, you may ask them now or later, even after the study has started. You may contact me in any of the following ways:

Tel: 07xxxxxxxxx
E-mail: mes207@exeter.ac.uk
GRADUATE SCHOOL OF EDUCATION

Project’s title:
“The effects of group activities on the social skills of pupils who attend special primary schools”

Student’s Name: Maria Socratous

Part II: Certificate of consent
I have been fully informed about the aims and purposes of the project.

I understand that:

there is no compulsion for me to participate in this research project and, if I do choose to participate, I may at any stage withdraw my participation

I have the right to refuse permission for the publication of any information about me

any information which I give will be used solely for the purposes of this research project, which may include publications

all information I give will be treated as confidential

the researcher will make every effort to preserve my anonymity

.......................................................... ..........................................................
(Signature of participant )
(Date)

..............................
(Printed name of participant)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher

If you have any concerns about the project that you would like to discuss, please contact:

07xxxxxxxx
OR
mes207@exeter.ac.uk

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University’s registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.
Consent Form

This informed consent form is for parents of children attending Class xxx, of the xxx school who will potentially participate in the research titled: “The effects of group activities on the social skills of pupils who attend special primary schools”

Part I: Information Sheet

I am Maria Socratous and I am a PhD student at the Graduate School of Education of the University of Exeter. I am doing some research about group activities, which might help us understand more about their effects on pupils’ social skills. In this study I would like to observe some of the lessons of the class during group activities. The research will take place in two different special schools, one in England and the other in Cyprus. I would like to visit Class xxx twice or three times a week for approximately a month. The research project has been cleared by the University of Exeter, Graduate School of Education research ethics committee. The research also conforms to the ethical standards for educational research set out by British Educational Research Association.

As a result of the previous year of my research some basic characteristics for group activities have came up and I would like to explore what happens when they are implemented in the classroom. These characteristics are not definite and are open to amendments and suggestions by the teacher of the class. After each group activity observed, I would like to discuss with the teacher about its characteristics and to decide together possible amendments regarding its implementation. Observations will involve the collection of handwritten narrative records of conversations, responses, and activities among the pupils and the staff. I would also like to see your child’s Individual Educational Plan.

I would like to mention that allowing your child to participate in this research is not compulsory. If you agree to let your child participate in the research project, you can withdraw him/her at any time. In this case all data about your child will be destroyed and no data regarding your child will be collected for the research project. The data will be treated as confidential and I will preserve your child’s and the school’s anonymity. However, some of the data gathered (i.e., observations data) may be discussed with the school staff and my university supervisors. Yet, anything mentioned in my PhD thesis and in any further publications will be anonymous. The results of this research can be communicated to you if you so wish.

If you have any questions, you may ask them now or later, even after the study has started. You may contact me in any of the following ways:

Tel: 07xxxxxxxx
E-mail: mes207@exeter.ac.uk
Title of the project:  
“The effects of group activities on the social skills of pupils who attend special primary schools”

Student’s Name: Maria Socratous

Part II: Certificate of consent

I understand that:

there is no compulsion for me to let my child participate in this research project and, if I do give permission to participate, I may at any stage withdraw his/her participation

I have the right to refuse permission for the publication of any information about my child

any information which my child gives will be used solely for the purposes of this research project, which may include publications

all information my child gives will be treated as confidential

the researcher will make every effort to preserve my child’s anonymity

......................................................... .........................................................
(Signature of the parent) (Date)

........................................
(Printed name of the parent)

One copy of this form will be kept by the parent; a second copy will be kept by the researcher

If you have any concerns about the project that you would like to discuss, please contact:

07xxxxxxxx
OR
mes207@exeter.ac.uk

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University’s registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.
GRADUATE SCHOOL OF EDUCATION

CONSENT FORM

This informed consent form is for the staff of Class xxx of the xxx school, who will potentially participate in the research titled: “The effects of group activities on the social skills of pupils who attend special primary schools”

Part I: Information Sheet
I am Maria Socratous and I am a PhD student at the Graduate School of Education of the University of Exeter. I am doing some research about group activities, which might help us understand more about their effects on pupils’ social skills. The research will take place in two different special schools, one in England and the other in Cyprus. I would like to spend approximately a month in each school. The research project has been cleared by the University of Exeter, Graduate School of Education research ethics committee. The research also conforms to the ethical standards for educational research set out by British Educational Research Association.

I would like to visit Class xxx of your school twice to three times a week for approximately a month, in order to observe all the members of the classroom during group activities. As a result of the previous year of my research some basic characteristics for group activities have came up and I would like to explore what happens when they are implemented in the classroom. These characteristics are not definite and are open to amendments and suggestions by the teacher of the class. After each group activity observed, I would like to discuss with the teacher about its characteristics and to decide together possible amendments regarding its implementation. Observations will involve the collection of handwritten narrative records of conversations, responses, and activities among the pupils and the staff. Moreover, the study will include interviews with the teacher of the class about the group activities observed.

I would like to mention that participating in this research is not compulsory. If you agree to participate, you can withdraw your participation at any time. In this case all data about you will be destroyed. The data will be treated as confidential and I will preserve your anonymity. However, some of the data gathered (i.e., observations and interview data) may be discussed with you and my university supervisors. Yet, anything mentioned in my PhD thesis and in any further publications will be anonymous. The results of this research can be communicated to you if you so wish.

If you have any questions, you may ask them now or later, even after the study has started. You may contact me in any of the following ways:

Tel: 07xxxxxxxxx
E-mail: mes207@exeter.ac.uk
Project’s name:
“The effects of group activities on the social skills of pupils who attend special primary schools”

Student’s Name: Maria Socratous

Part II: Certificate of consent
I have been fully informed about the aims and purposes of the project.

I understand that:

there is no compulsion for me to participate in this research project and, if I do choose to participate, I may at any stage withdraw my participation

I have the right to refuse permission for the publication of any information about me

any information which I give will be used solely for the purposes of this research project, which may include publications

all information I give will be treated as confidential

the researcher will make every effort to preserve my anonymity

.......................................................... .......................................................... 
(Signature of participant) (Date)

............................. 
(Printed name of participant)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher

If you have any concerns about the project that you would like to discuss, please contact:

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15/6/11 Wed (OB-L)

Circle Time.

T raises a card. Car raises a card. 

Car: 10

10.31

T passes the card to Car and sings the song.

All the ch. look at the T. T smiles.

R: “Well done, Max!”  →

Me: “Good girl” in our shared 노래 노래. Car smiles.

Car looks at the T carefully. T finishes the song.

Car shouts with excitement G-M.

R: “Well done, Max!”

T: “Well done, Max!”

Car looks at the T carefully. Car raises a card. Car speaks:

T taps me on the back. T smiles. Car speaks:

T: “I can see you are trying, Cang.”

9.35

Til: "Amun, Thank you, Can!"

Linda gives it to Tiffany and says to her. "Kim" giggles.
Rachel and Kelly do vocalizations of excitement.

"So does Can."

Tiffany says "Oh, to everyone you nice!" She is so excited, "Kim" and Kelly.

"Har she 2 years I have 5 to give.

Kelly, please!"

Rachel laughs out loud.

9.37

Linda explains to her. "It's not..."

Til: "No, I have to write down the CM song."

Linda says: "Linda, I have to write down the CM song."

Kelly, please!"

She looks at him, "Kim" giggles.

and says, "Yes, please!"

Linda: "No, I have to write down the CM song."

She looks at him, "Kim" giggles.

Kelly, please!"

Linda explains to her, "It's not..."

Til: "No, I have to write down the CM song."

She looks at him, "Kim" giggles.

Kelly, please!"

Richard looks at her and says, "Kim".
Me to you. If you didn’t see D. and R. o Chris smiles his arm.

If A. saw you then B. was no surprise to how much a A. GM.

If not too dear “Be ready. Chris! I’ll come to you now!”

Rachel points at Chris and makes nods.

“Do you want to sing to Chris?”

R. nods “Yes”

“Do you want to sing to you?”

A. nods “Yes” as well.

A. on previous it. It is playing some music and play Chris

K. it is no. W. D. o Chris knows its music.

D. looks at R. and Katelyn and K. was moving Try to fasten

C. I(At look around)

B. is no. Katelyn misses happy interactions.

941

Me to you a good news. A Rachel sits so close immediately

D. is Chris God surprised to how you?” H. A. in reward now

that such a good friend!” I write it in the note GM.

D. Rachel signs “Thank you” instead in A. We

haven’t heard that on “GM.”

Want to 6 how sign u

B. and I. rewards how. If you then C. Chris. Touches

on for Infinite u Rachel. H. Rachel is cheating

her her heart with enough Chris need encouragement.

While I is singing silently and him know you very

carefully as well. Richard evers + Tim looks around.

T. rushing to 2 ways. While T. was singing Chris moved

his arms 3 times. The song ends now Chris is

not standing away Arms
APPENDIX 8: Initial categorisation of the data (Phase one)
APPENDIX 9: Second and third level of analysis (Phase one)

Participants: Vicky, Tina, Marcus and Andreas, the two TAs (Lea, teacher (Sophia))

(Aris is absent from the school and Melina is in speech therapy)

Purpose of the activity: Children walk on a route by passing through obstacles. While each does that the other watches.

Emphasis placed on: Motor skills

Layout of the class:

8.00

1. All the children are in class. The teacher asks who wants to start first. Marcus says...

2. 'Me!' with excitement. Vicky stares her reflection in the mirror and makes noises.

3. Andreas is looking at the teacher. Tina moves her hand with her idiosyncratic way

4. and giggles. 'Ok, you go first then!!', the teacher says...

5. He goes first. The girls seem abstracted. Tina looks around and moves her hands in

6. her stereotype way. Vicky walks around the big mattress area and watches and

7. touches her reflection in the mirror. Sometimes she approaches Tina. She touches...

8. her shoulder or her feet. Tina responds. She smiles and tries to touch her back but...

9. Vicky leaves. Vicky approaches me and says “Good morning”. I say “Good

10. morning” to her and smile. She leaves and goes to the TAs and she says “Good
11. morning* to them too. They reply her back and ask her to sit next to Tina.

12. She leaves and stands next to Tina, but she does not sit. She looks around. "She is happy." [Not that clear]

13. Andreas is sitting next to Tina and watches Marcus who does his exercise. Tina

14. is very active today. She touches Vicky every time she approaches her. 

15. touches Andreas as well. Andreas tries to escape when ever Tina touches him by

16. moving a bit further and he keeps watching Marcus doing his exercise. When

17. Marcus jumps into the ball "pool", Andreas screams with excitement and smiles.

8.07

18. Marcus has finished his exercise. The teacher tells him to give high five to Vicky

19. Vicky does not seem interested in doing her activity. Marcus is staring at her with

20. his hand ready to 'high five' but Vicky does not respond. She looks at him with no response.

21. The teacher approaches her and prompts her to 'high five' Marcus.

22. Vicky is not responding. She is standing in front of the mirror and stares her reflection. 

23. Teacher prompts her on more time. She tells her that she will have the chance to jump in the ball 'pool' at the end of the exercise. After the second

24. prompt, she follows the teacher's instructions and 'high fives' Marcus. Marcus

25. lies in the big mattress next to Andreas. The teacher has to prompt Vicky after prompting and rewards

26. repeatedly to start doing her exercise. She keeps saying 'Come on, come on.

27. Vicky, the 'pool' is waiting for you'. Marcus sits in the big mattress pillow.

28. He asks me 'My Aris?' I tell him that he is poorly today, so he stayed at

29. home. He asks me if he is going to come tomorrow and I tell me that if he feels

30. better he will come. Tina now, holds Andreas feet and Andreas tries to escape.

31. not responsive

32. Pupil not responding to peers

33. Pupil not responding to peers

34. Communication acts

35. Functional Instructions
APPENDIX 10: Concept map for group activities created in the 4th level of analysis (Phase one)
APPENDIX 11: Meta-concept map for group activities created in the 5th level of analysis (phase one)
APPENDIX 12: Initial characteristics of the CL model as presented to the two teachers

Main Ideology

- The design of the activity could favour interactions among peers. By assisting each other, they can achieve their individual tasks and common goals.
- Rewards and affective support feedback could be given to the pupils on an individual and group level as an ongoing process throughout the activity.

Characteristics

- Pointing out to each pupil their individual tasks and common goals throughout the activity.
- Each child can contribute equally to the common goal.
- Allowing enough wait time so as to give the chance to the pupils to interact and respond to each other.
- Activities can be embedded within the daily routines of the class.
- Planning meaningful and interesting activities:
  a) by giving opportunities to the pupils to decide about some aspects of the activity.
  b) by encouraging them to assist and help each other.

Coordination of the following aspects

- Preparing in advance communication and other equipment needed for each child.
- Sitting arrangements favouring the proximity among the pupils and allowing them to have physical or eye-contact.
- The composition of the groups could be relevant to the individual learning objectives of each child.
APPENDIX 13: Example of a CL activity as presented to the teachers

**Staff:** Teacher

**Pupils:** Sam and Georgia

**Activity/Problem:** Helping a 'girl' to get dressed for school

**Sam's Learning objective:** identify different kinds of clothes and colours

**Georgia's Learning objective:** form simple requests

It can be designed a meaningful and interesting activity for the children, so as to practice their individual learning objectives. The activity will be constituted of individual tasks for each pupil, based on their individual learning objectives and by a common goal. The design of the activity will favour interactions and assistance between the two pupils. By interacting and helping each other, they can complete both their individual tasks and their common goal.

The story (problem) of the activity is that a pupil is late for school so they have to help her/him get dressed, since he/she cannot do it by him/herself. A brief introduction about the problem can be made in order the children to understand the background of the story and that they have to work together by helping each other. The children can decide whether the pupil who needs their help is a girl or a boy and his/her name. A plain figure of a doll on a bulletin board is displayed in front of them. They also have in front of them three skirts and three blouses in different colours. The individual instructions given to each child are based on their learning objectives. Georgia should request from Sam the clothes of her choice (practising language skills) and Sam should pick those (identifying clothes and colours) and pass them to Georgia, so as Georgia to place the clothes on the right parts of the body figure on the bulletin board.

The teacher can use individual feedback, rewards and encouragements based on each pupil's performances and group ones as well, based on their group performances (i.e., how well they assist each other). Moreover, the teacher can use delayed prompts, so as to give enough time to the pupils to respond to each other. Whenever the children get distracted the teacher can prompt them to continue, by encouraging them to assist each other, using peer positive relations as a motivation for them to stay on task.

Moreover, if Sam picks the wrong colour or cloth, Georgia can be encouraged to help him and if Georgia places the clothes at the wrong part of the body, Sam can be encouraged to help her as well, instead of the teacher correcting them.
APPENDIX 14: The four levels of analysis of the action research process (Phase 2)

Round One
Monday, 2nd May, 2012
Subject: Gymnastics
Pupils: Melina, Tina, Marcus and Andreas
Staff: Sophia, Nikos and Annie
Layout: Gymnastics room. At the beginning the teacher asked the pupils to sit in a circle on the floor. Then they were separated in two teams.
Time duration: 30 minutes.
11.45-11.51

The teacher asks the children to sit in a circle on the floor. She sits first down and Melina sits next to her. Nikos and Annie tell to the rest of the children to sit down one by one. The teacher makes an introduction about the lesson. She asks the children what’s the weather like today. Tina looks down. Marcus and Andreas look around. Melina looks at the teacher. The teacher asks them again what the weather is like today. Melina says “Not good”. The teacher asks “Why do you think that the weather is not good today?” Nobody replies. Apart from Melina, who’s looking at the teacher, the rest of the pupils look around.

The teacher asks “Do you think that the weather is not good because is too cold or too hot?” The teacher asks again Marcus personally whether he thinks that the weather is cold or hot. Marcus says “Too hot, too too hot!” The teacher rewards him verbally for giving the right answer and says that she has an idea. She asks the children if they want to transform the classroom into a beach. Melina shouts with excitement “Yes!!!” Tina is smiling and moving her hands in the stereotype way, showing that she agrees. Andreas looks around and Marcus repeats "sea-sea".

11:50-11:57
Sophia asks the pupils to close their eyes and imagine that they are at the beach. Marcus and Andreas have their eyes open. The teacher rewards Melina
and Tina and asks them to do the same. Marcus asks Nikos if he has a watch, Nikos tells him to close his eyes and listen to the teacher. The teacher asks the children to close their eyes, Marcus and Andreas do so too. The teacher asks them to open their eyes and tell her what they see.

The teacher puts two long pieces of blue tulle in the middle of the circle. She asks the children to touch them. Melina, Marcus and Andreas touch it. Andreas smells it and chews it. Annie helps Tina to touch it as well. The teacher tells them that these are the waves of the sea and asks them if they want to play a game with the waves. Marcus and Melina say “Yes!” and Tina is smiling. Andreas makes happy vocalisations. They all seem very interested.

The teacher tells them that they should separate into two groups. She asks Melina to choose the pupil that she wants to be in her group. Melina says “Tina” and touches her shoulder. Tina is smiling and touches her hand. The teacher asks Marcus and Andreas if it is OK with them to be in the same team. Marcus says “Andreas” and points at him. Andreas touches Marcus’ hair. The teacher tells them “Good boy!” and Marcus keeps repeating “Good boys-Good boys.”

11.57-12.05

The teacher asks them to stand up opposite to their partner. The teaching assistants help them to wear two yellow bracelets and to take the right positions. They also help them to hold the edges of the blue tulle. The teacher gives instructions to the children of how to make waves and both teaching assistants move around to help the pupils with the movements. She first asks them to raise their hands up and then as soon as they hear her say “Down,” to put their hands down.

The teachers say “Up,” Melina and Andreas raise their hands up. Annie approaches Tina and asks her to raise her hands up. She does so, Marcus raises now his hands as well. All the children have their hands up. The teachers say very suddenly “Down!” and all the children raise their hands down. Melina giggles. Andreas makes vocalisations of excitement and Tina and Marcus smiles. The teachers say “Up” again. Melina is giggling and Tina smiles. The teacher rewards them verbally sometimes as a team and sometimes individually. And sometimes when the children are a bit abstracted she encourages them to continue. They do that several times and the pupils seem to
enjoy it; they are smiling or giggling or Andreas is making vocalisations of excitement.

12:05 - 12:13 **group instructions by staff**

The teacher asks them to move just the hand with the bracelet. Melina starts raising it up and down. Tina looks at Melina and does so too. Nikos approaches Andreas and Marcus and asks them to do what their girls are doing. They do it. The teacher rewards them verbally in a group level and asks them to do it as fast as they can. She keeps prompting them to shake their hands quicker. The children seem very engaged to the activity again and they are smiling and giggling. Marcus drops his tulle down, but he looks at the girls. Melina watches and keeps shaking his arm. Nikos gives it to him. The teacher rewards them verbally all of them. The teacher asks them to do the same with the other hand. Again she prompts them to shake their hands as fast as they can. Melina shakes her hand very quickly and the teachers tells her that she is doing excellent. She prompts the other pupils to shake their hands as fast as they can too. Marcus does not move his hand. He looks at Andreas. Nikos asks him to shake his hand too. Marcus says that he is tired. The teachers rewards Tina and Andreas too and tells them that they are going to do something different now.

Then she asks them to do something different i.e. to hold the tulle with both hands again and approach and draw away from their partner. Whenever the teacher says “In” they approach their partner and whenever says “Out”, they draw away. Tina and Marcus are a bit passive in this exercise and they don’t walk in and out. The teacher encourages them verbally to move in and out and Nikos helps them to do the movements. Annie approaches Tina too and helps her to do the movements. Tina makes very small steps in and out. Nikos prompts Marcus to do so too but he just makes makes some small steps too. Melina and Andreas follow the teacher’s instructions without any second prompts.

Then the teacher asks as if we want to “swim” and Melina shouts “Yes!” with excitement and Marcus repeats “Swim-swim.” She asks Andreas and Marcus to move the tulle up and down again and asks Tina and Melina to hold hands and pass under the tulle. Melina giggles and takes Tina’s hand and pass under the tulle several times. Melina is giggling and Tina is smiling. Marcus and Andreas are very engaged to the activity and whenever the teacher tells them to raise their hands they do so. Then the teacher asks Tina and Melina to make the waves and Andreas and Marcus to pass under the tulle. She asks them to hold hands again. Andreas takes Marcus hand and pass under the tulle. They are all smiling or giggling and Andreas makes vocalisations of excitement. The teacher asks the boys to pass under the tulle quickly, otherwise the girls will...
trap them. Both boys rush to pass under the tulle quickly and Melina is giggling.

12.13- 12.15
Then the teacher congratulates both groups and asks them if they enjoyed the activity. Melina and Marcus said yes. The teacher asks Andreas and he nods "Yes" as well. Then she asks Tina and Tina smiles and moves her hands in an idiosyncratic way. The teaching assistants help the children to take off the bracelets.
A) Acts of communication among peers (after adults’ guidance)

- She asks Melina to choose the pupil that she will call “Tina” and touches her shoulder.
- She asks Tina and Melina to hold hands and pass under the tulle several times.
- She asks them to hold hands again. Andreas takes Marcus hand and pass under the tulle.

Acts of communication among peers (without adults’ guidance)

- Tina is smiling and touches her hand.
- Marcus says “Andreas” and points at him. Andreas touches Marcus hair.
- Tina looks at Melina and does so too.

B) Instructions by staff and immediate prompts by the staff after instructions

- The teacher asks the children to sit in a circle on the floor. She sits down and Melina sits next to her. Nikos and Annie tell to the rest of the children to sit down one by one.
- The teacher asks them to stand up opposite to their partner. The teaching assistants help them to wear four yellow bracelets and to take the right positions.
- She first asks them to raise their hands up and then as soon as they hear her say “Down”, to put their hands down. (...) The teachers says “Up”. Melina and Andreas raise their hands up. Annie approaches Tina and asks her to raise her hands up.
- The she asks them to move just the hand with the bracelet. Melina starts raising it up and down. Tina looks at Melina and does so too. Nikos approaches Andreas and Marcus and asks them to do what their girls are doing. They do it.
- The she asks them to do the same with the other hand. Again she prompts them to shake their hands as fast as they can. Melina shakes her hand very quickly and the teachers tells her that she is doing excellent. She prompts the other pupils to shake their hands as fast as they can too. Marcus does not move his hand. He looks at Andreas. Nikos asks him to shake his hand too.
- Then she asks them to do something different i.e., to hold the tulle with both hands again and approach and draw away from their partner. Whenever the teacher says “In” they approach their partner and whenever says “Out” they draw away. (...) Nikos helps them to do the movements. Annie approaches Tina too and helps her to do the
movements. Tina makes very small steps in and out. Nikos prompts Marcus to do so too but he just moves makes some small steps too.

- Then the teacher asks them if they want to “swim” (...) She asks Andreas and Marcus to move the tulle up and down again and asks Tina and Melina to hold hands and pass under the tulle.

- Then the teacher asks Tina and Melina to make the waves and Andreas and Marcus to pass under the tulle. She asks them to hold hands again. Andreas takes Marcus hand and pass under the tulle.

C) On task behaviour relevant with signs of enjoyment

- All the children have their hands up. The teacher says very suddenly “Down!” and all the children raise their hands down. Melina giggles. Andreas makes vocalisations of excitement and Tina and Marcus smiles. The teachers says ”Up” again. Melina is giggling and Tina smiles. (...)They do that several times and the pupils seem to enjoy it; they are smiling or giggling or Andreas is making vocalisations of excitement.

- She keeps prompting them to shake their hands quicker. The children seem very engaged to the activity again and they are smiling and giggling.

- Then the teacher asks them if they want to “swim” and Melina shouts “Yes!” with excitement and Marcus repeats ”Swim-swim”. She asks Andreas and Marcus to move the tulle up and down again and asks Tina and Melina to hold hands and pass under the tulle. Melina giggles and takes Tina’s hand and pass under the tulle several times. Melina is giggling and Tina is smiling. Marcus and Andreas are very engaged to the activity and whenever the teacher tells them to raise their hands they do so.

- Then the teacher asks Tina and Melina to make the waves and Andreas and Marcus to pass under the tulle. She asks them to hold hands again. Andreas takes Marcus hand and pass under the tulle. They are all smiling or giggling and Andreas makes vocalisations of excitement. The teacher asks the boys to pass under the tulle quickly, otherwise the girls will trap them. Both boys rush to pass under the tulle quickly and Melina is giggling.

Off task behaviour/ No signs of enjoyment:

- Marcus does not move his hand. He looks at Andreas. Nikos asks him to shake his hand too. Marcus says that he is tired.

- Tina and Marcus are a bit passive in this exercise and they don’t walk in and out. The teacher encourages them verbally to move in and out and Nikos helps them to do the
movements. Annie approaches Tina too and helps her to do the movements. Tina makes very small steps in and out. Nikos prompts Marcus to do so too but he just moves makes some small steps too. Melina and Andreas follow the teacher’s instructions without any second prompts.

D) Rewards and affective support feedback on an individual and group basis
The teacher rewards Melina and Tina and asks form Andreas and Marcus to do so too.

The teacher tells them "Good boys" and Marcus keeps repeating "Good boys-Good boys"

The teacher rewards them verbally sometimes as a team and sometimes individually.

The teacher rewards them verbally all of them.

The teachers rewards Tina and Andreas too

Then the teacher congratulates both groups

Melina shakes her hand very quickly and the teachers tells her that she is doing excellent.

E) Meaningfulness of the activity

Ei) Activity's meaningful content

- The teacher makes an introduction about the lesson. (...) She asks the children if they want to transform the classroom into a beach. Melina shouts with excitement “Yes!!!” Tina is smiling and moving her hands in the stereotype way, showing that she agrees. Andreas looks around and Marcus repeats "sea-sea".

E2) Children deciding about some aspects of the activity

- Teacher tells them that they should separate into two groups. She asks Melina to choose the pupil that she wants to be in her group. Melina says “Tina” and touches her shoulder. Tina is smiling and touches her hand. The teacher asks Marcus and Andreas if it is OK with them to be in the same team. Marcus says "Andreas" and points at him. Andreas touches Marcus hair. The teacher tells them "Good boys" and Marcus keeps repeating "Good boys-Good boys"

F) Peers willingness and enjoyment to work together

- Melina says “Tina” and touches her shoulder. Tina is smiling and touches her hand.
• The teacher asks Marcus and Andreas if it is OK with them to be in the same team. Marcus says "Andreas" and points at him. Andreas touches Marcus hair.

• Melina starts raising it up and down. Tina looks at Melina and does so too.

• (The teacher) asks Tina and Melina to hold hands and pass under the tulle. Melina giggles and takes Tina’s hand and pass under the tulle several times.

• She asks them to hold hands (...) Andreas takes Marcus hand and pass under the tulle.
Reflections relevant to CL model characteristics

1) Design of the activity

- Adult-centred: the activity was designed in such a way that the individual tasks and common goals could be achieved through instructions and directions by the staff.
- Maybe there is a need for child-centred approach, so as to give the opportunity to the children to interact by assisting each other.
- Maybe give them the chance to decide about some aspects of the activity (e.g., physical movements), so as to be able to follow each other's lead.
- Maybe we can also try to use delayed prompts, so as to give them enough wait time to interact and respond to each other.
- Both: direct pupils to decide physical movements and delayed prompts to good ideas for the next lesson.
- Individual and group rewards was an ongoing process throughout the activity

- But rewards were relevant with the physical exercises and not with the purpose of the group goal (i.e., to transform class to a beach).
- Maybe rewards can be more relevant with the concept/purpose of the activity, e.g., what a huge wave that you are running!
- Maybe more fun to keep it in mind and see what will happen next time...

2) Activity must be comprehensible and meaningful to the children

The whole group decided that since it was too hot, they could play a game that would make them all cool down. Children seemed to find this idea interesting.

Similar thoughts with Red: feedback & rewards relevant with the concept of the activity
- Give them the chance to decide about some aspects of the activity
- Also Theme(E) suggests that pupils liked the fact that they had to work together.
- So, design activities that will favour more interactions and assistance among them => more interesting & meaningful?

Include individual tasks that are inter-dependent with each other, so as to encourage pupils to work together.

3) Individual tasks, common goals, and equal participation

Every child contributed equally towards the common goal (i.e., transform the class to a cool place), by completing their individual tasks (i.e., similar physical movements). Pointing out the individual tasks and the common goal was an ongoing process throughout the activity.

Next time: less instructions and immediate prompts by the staff
- Instructions more relevant with the concept of the activity
- Pupils decide aspects of the activity (e.g., movements) and explore whether pupils can follow each other's lead without immediate prompts by the staff.
4) Coordination of: a) Group composition, b) individual learning objectives, c) individual tasks, d) physical layout
It was an activity designed to exercise and practice existing knowledge (i.e. the concepts up and down, in and out) and all children had the same objectives/tasks. The physical layout favour indeed the proximity among pupils and they could have physical and eye-contact. However, I am not sure whether the learning objectives included working co-operatively???

- It’s was one of the aims. They helped, they cooperated indeed with each other by raising together waves.
- Because they had to practice similar tasks the groups composition was not that strict. The motor skills of these 4 pupils are more or less in the same level. That’s why to let them to decide about their pair.
- If it was a more cognitive activity ➔ more specific group composition.

**Suggestions for the 2nd Round**

- Allowing enough wait time to the pupils to interact with each other, rather than the staff using immediate prompts.
- Design activities that can favour pupils’ interactions and assistance to each other. ➔ Giving them the opportunity to decide about some aspects of the activity. It’s a good start.
- Feedback/rewards/encouragements ➔ relevant to the concept of the activity.
Main Ideology

- The design of the activity should favour interactions among peers. By assisting each other, they can achieve their individual tasks and common goals.
- The individual tasks should be interdependent, so as to encourage pupils to interact and communicate.
- Rewards and affective support feedback could be given to the pupils on an individual and group level as an ongoing process throughout the activity.

Strategies to increase pupils' engagement and active participation

- Pointing out to each pupil their individual tasks and common goals.
- Each child should contribute equally to the common goal by completing sometimes different and sometimes similar individual tasks according to their targets.
- Allowing enough wait time so as to give the chance to the pupils to interact and respond to each other.
- Activities could be embedded within the daily routines of the class, so as the children to be familiar with the processes.
- Planning meaningful and interesting activities:
  a) by giving opportunities to the pupils to decide about some aspects of the activity.
  b) by encouraging them to assist and help each other.
  c) by explaining the rationale of the activity so as to be aware of the reasons for engaging in an activity.
- Using sometimes the issue of competition and prizes as a reinforcement.
- Using positive peer relation encouragements, such as pupils to repeat requests to each other, or help each other complete their individual tasks, instead of the staff doing so on their behalf.

Coordination of the following aspects

- Preparing in advance communication and other equipment needed for each child.
- Sitting arrangements favouring the proximity among the pupils and allowing them to have physical and/or eye-contact.
- The composition of the groups could be relevant to the individual needs, abilities and learning objectives of each child, by using sometimes similar ability groups and sometimes different abilities groups.
APPENDIX 16: Final characteristics of the CL model in the English class

Main Ideology

- The design of the activity should favour interactions among peers. By assisting each other, they can achieve their individual tasks and common goals
- The individual tasks should be interdependent, so as to encourage pupils to interact and communicate
- Rewards and affective support feedback could be given to the pupils on an individual and group level as an ongoing process throughout the activity

Strategies to increase pupils’ engagement and active participation

- Pointing out to each pupil their individual tasks and common goals throughout the activity
- Each child should contribute equally to the common goal by completing sometimes different and sometimes similar individual tasks according to their targets
- Allowing enough wait time so as to give the chance to the pupils to interact and respond to each other
- Activities could be embedded within the daily routines of the class, so as the children to be familiar with the processes
- Planning meaningful and interesting activities
  a) by giving opportunities to the pupils to decide about some aspects of the activity
  b) by encouraging them to assist and help each other
  c) by explaining both the CL and functional rationale of the activity so as to be aware of the reasons for engaging in an activity
- Using fun introductory activities, so for the pupils to feel relaxed and comfortable with the members of their groups
- Using sometimes the issue of competition as a reinforcement
- Using positive peer relation encouragements, such as pupils to repeat requests to each other, or help each other complete their individual tasks, instead of the staff doing so on their behalf
- Pupils giving and receiving feedback about the activity relevant to their individual tasks and cooperative performances

Coordination of the following aspects

- Preparing in advance communication and other equipment needed for each child
- Sitting arrangements favouring the proximity among the pupils and allowing them to have physical and/or eye-contact
- The composition of the groups could be relevant to the individual needs, abilities and learning objectives of each child, by using sometimes similar ability groups and sometimes different abilities groups