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CURRICULA ISSUES FOR KEY STAGE 2 PUPILS WITH SPECIFIC LEARNING DIFFICULTIES IN LITERACY IN THE SETTING OF MAINSTREAM EDUCATION IN ENGLAND

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Declaration

I, Anna Moutra confirm that the work presented in this thesis is entirely my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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Abstract

This thesis on curriculum development within inclusive learning environments for pupils identified with specific learning difficulties details the development of the concept of inclusion worldwide and its implementation in England.

The research study documents inclusive and pedagogical practices within mainstream education, involving the relevant theories that underpin them, which influence considerably the learning processes of pupils who have been diagnosed either officially or by their teachers with specific learning difficulties, and especially with dyslexia at Key Stage 2 for literacy and reading. The principal focus of this study is the above pupils' learning experiences as they were shaped by their school curricula, inclusive measures and learning arrangements.

This study is further informed by moderate social constructivism and it incorporates grounded theory within three case studies. Ten pupils aged 9-10 identified with specific learning difficulties, and especially with dyslexia, their parents and staff members from three mainstream primary schools in London participated in the research. Data were collected through semi-structured interviews, naturalistic classroom observations and document analysis and they were thematically analysed.

A number of the schools' learning and inclusive practices, namely seating arrangements and special provision, was found to influence significantly the learning processes of the children who participated in the research and eventually their self-image as learners. Individual teacher perspectives and practices tended to be in tension with the above pupils' learning needs having

crucial effects on their self-awareness, motivation, self-confidence and learning progress.

The thesis recommends reconsideration of inclusive approaches, comprising pupils' labelling, diagnostic assessment, pedagogical and assessment methods applied within literacy and reading classrooms. It also supports the acknowledgement of learners' individuality in learning process through the reconstruction of learning environments. An alternative curriculum based on learning and curriculum theories as well as on those respondents' perspectives and experiences is suggested focusing on their equality in learning opportunities and on their well-being.

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Images, Figures and Tables

Abbreviations

EHC plan   Education, Health and Care plan

Ofsted   Office for Standards in Education

SATs   Standardized Attainment Targets

SEN   Special Educational Needs

SENCO   Special Educational Needs Co-ordinator

Acknowledgements

«Σαν βγεις στον πηγαιμό για την Ιθάκη,

να εύχεσαι να' ναι μακρύς ο δρόμος,

γεμάτος περιπέτειες, γεμάτος γνώσεις»

Κ. Π. Καβάφης, «Ιθάκη»

'As you set out for Ithaka,

hope your road is a long one,

full of adventure, full of discovery'

C. P. Cavafy, 'Ithaka' from *C. P. Cavafy: Collected Poems*.

Translated by Edmund Keely and Philip Sherrard.

Chapter 1: Introduction

This chapter examines the meanings and terminology of specific learning difficulties as they have been used in official policy documents and commentaries round the world. Specifically, the conceptualisation of specific learning difficulties and its implications for pupils in terms of labelling and social stigmatisation are placed under scrutiny. Furthermore, the concept of inclusive education in mainstream schools of children diagnosed with specific learning difficulties as it was introduced in the Salamanca Statement, and in its realization in the United Kingdom through its educational policies from 1978 until 2013 is analysed. Finally, outlines of the rest of the chapters in the thesis are provided.

Terminology of Specific Learning Difficulties: an ongoing debate

The term 'specific learning difficulties' refers to a range of pupils' learning difficulties in particular areas of the curriculum and tends to be used in official educational policy documents as a broad term to cover a range of variants, namely dyslexia, dyspraxia and dyscalculia. Furthermore, specific learning difficulties constitutes a sub-category of special educational needs and special intervention programmes are provided for pupils by local educational authorities and schools. Despite this, a lack of comprehensive understanding of the terminology and its content has resulted in the tendency of the public to shorten the actual term and to refer to it generally as 'dyslexia'. This problem emerged from the ongoing debate about the term's meaning starting from the late 1970s.

Earlier references to learners, who experienced difficulties in their learning, namely 'educationally subnormal' or 'mentally handicapped', emphasized individual biological causation and cognitive impairments (Howie, 2010, p. 758). This contributed to children's social and educational categorization and shaped social expectations about their progress. The negative stigmatization of children's abilities made necessary an immediate reformation of the relevant terminology. Consequently, the replacement of the above terms with the term 'learning difficulties', which was introduced in the 1978 Warnock Report, marked the beginning of a more positive approach to pupils with special educational needs, acknowledging their equal rights in learning (Howie, 2010; Wearmouth et al, 2003). Any kind of assumption about learners' abnormal cognitive function as the main cause of their difficulties in learning was avoided by using this terminology, permitting in this way other possible factors to be taken into account.

To supplement the Warnock Report, the 1981 Education Act was introduced and it mandated that a pupil was considered to have special educational needs when they experienced significantly greater difficulty in learning compared to their peers or when they had a disability which limited their access to educational facilities (Wearmouth, 2000). In this way, the previously used term of 'learning difficulties' was incorporated into the new term of 'special educational needs', ensuring equal opportunities in learning for pupils who presented the above learning attitudes. However, due to the contentious nature of 'disability', the preceding definition is a broad construction leaving unspecified the notion of disability and what constitutes significantly greater difficulty in learning. Its broadness, though, did not prevent it from becoming the basis for future definitions of special educational needs.

The Department for Education defined it in a more precise way. This eventually resulted in the 1994 Code of Practice which offered guidance on specific learning difficulties. This Code of Practice recommended that pupils should be supported by schools through a form of special educational provision which is designed to meet their learning needs (Frederickson and Reason, 1995; Smith et al., 2003). In particular, it was suggested that:

> Some children may have significant difficulties in reading, writing, spelling or manipulating number, which are not typical of their general level of performance. They may gain some skills in some subjects quickly and demonstrate a high level of ability orally, yet may encounter sustained difficulty in gaining literacy and numeracy skills. Such children can become severely frustrated and may also have emotional and/or behavioural difficulties (Department for Education, 1994, p. 67)

Based on the above, the notion of 'specific learning difficulties' is difficult to define exactly as it refers to pupils' skills with regards to particular learning objectives. For this reason, a description of their potential difficulties in specific learning areas is provided in accordance with standardized performance levels. Derived from standardized developmental stages, these levels, though, misinterpret children's differences in their learning processes, locating the problem within the individual. Used as the main criterion to identify pupils' atypical learning attitudes in literacy and numeracy, these performance levels disregard other possible external factors, namely conventional teaching approaches, curriculum content, the learning environment and pupils' backgrounds which appear to have an influence on children's learning processes

and outcomes. Additionally, focusing on pupils' skills in writing, spelling and reading, the importance of children's written expression is highlighted. Therefore, despite the acknowledgment of those learners' verbal skills and their achievements in other subjects, their difficulties in literacy and numeracy and the negative implications of these on pupils' emotional and/or behavioural states tend to be given prominence.

Such definitions, though, which attempt to identify specific learning difficulties based on explanations of what they are not instead of what they are, has the potentiality to result in problematic interpretations of learners' actual skills and abilities (Frederickson and Reason, 1995). For instance, a potentially misleading assumption that only those groups of pupils identified with special educational needs experience significant difficulties in their learning processes based on their outcomes in standardized assessments ignores the proposition that every child can have considerable difficulties in learning. Consequently, definitions, which tend to compare learners' attainments with standardized performance levels, seem to provide one-sided explanations, omitting essential factors that are involved in children's learning.

The official definition by the 2001 Special Educational Needs Code of Practice is further complicated by the construction of a wide array of learning characteristics consolidated into one concept. The preferred term became 'special educational needs', while specific learning difficulties was introduced as a sub-category without, though, an explicit definition being given (Department for Education, 2001; Department for Education and Skills, 2001a). Characteristically, it was argued that:

Children have special educational needs if they have a learning difficulty, which calls for special educational provision to be made for them. Children have a learning difficulty if they:

a) have a significantly greater difficulty in learning than the majority of children of the same age; or

(b) have a disability which prevents or hinders them from making use of educational facilities of a kind generally provided for children of the same age in schools within the area of the local education authority

(c) are under compulsory school age and fall within the definition at (a) or (b) above or would so do if special educational provision was not made for them.

Children must not be regarded as having a learning difficulty solely because the language or form of language of their home is different from the language in which they will be taught (Department for Education and Skills, 2001a, p. 6)

Although this definition involves an extensive range of learning difficulties, it fails to clarify precisely what a learning difficulty is. Additionally, children's learning difficulties continue to be identified through comparisons between pupils in terms of their age and relevant cognitive development. This may enhance the common belief that all children operate through the same type of cognitive development and accordingly they learn and perform in the same way and at the same pace. Despite, though, this endorsement of pupils' sameness in learning, individual learning profiles were understood in terms of difference, and in particular, differences in the level and characteristics of specific learning difficulties, namely short-term working memory and organizational difficulties (Smith et al., 2003). An immediate aftermath of the establishment of this definition was the empowerment

of standardized cognitive developmental stages within educational settings, which become a benchmark for pupils' identification through the process of comparison, overlooking actual individual differences in development and learning.

In education, though, the use of these terminologies presupposes relevant references to particular learning contents that are considered as significant and essential acquisitions by all pupils, causing unavoidable comparisons among children (Wilson, 2002). Consequently, the term 'learning difficulty' or 'disability' is given to children according to the importance of learning a particular skill, magnifying the existing problem with labelling learners. Nevertheless, this type of terminology creates a dilemma concerning which term is appropriate for describing children's learning attitudes, namely 'special educational needs' or 'pupils in need of special support' instead of the term 'special needs' (Brodin and Lindstrand, 2007), or the term 'barriers to learning and participation' instead of the term 'special educational needs' (Booth and Ainscow, 2002). This situation, though, prioritises the establishment of educational labels, although the reasons for their existence and their criteria are contestable.

The above lack of unanimity about the definition and terminology of specific learning difficulties in Great Britain led to the creation of various definitions by educational psychologists, which are characterised by deficiency as their principal elements and in how they are used (Frederickson and Reason, 1995). Characteristically, the term 'specific learning difficulties' is used by local education authorities to identify pupils whose attainment in a particular area of learning, namely reading, is lower than the expected level, and the term 'dyslexia' is used predominately by educators and organisations (Frederickson and

Reason, 1995; Riddick, 2010). On the other hand, the term 'learning difficulty' tends to be distinguished from specific learning difficulties as it refers to pupils' failure to acquire basic academic skills, resulting in enduring disabilities (Prior, 1996). Furthermore, aiming to fill the gap in a precise definition of specific learning difficulties, descriptions of pupils' difficulties in learning based on standardized general performances, namely low attainment and difficulties in sequencing, tend to be used (Smith, 2003; Frederickson and Reason, 1995; Solity, 1996). As a result, theories concerning the factors and the reasons which cause persistent difficulties in reading and writing for pupils (Elbeheri and Everatt, 2009) become established.

Associations, though, of pupils' difficulties in learning with their intelligence lead to misinterpretations of their capacities, resulting in the imposition of secondary labels, namely 'slow learners' (Frederickson and Reason, 1995). This problematic issue seems to have persisted as even the most recent definitions tend to emphasize pupils' cognitive development either comparing them to a norm or providing a medical causation of their difficulty (Snowling, 2000; Solity, 1996). Other factors, which have been mentioned above as affecting significantly pupils' learning, continue to remain of secondary importance.

There are two tendencies in the definitions of specific learning difficulties, either they summarize other definitions or they describe only some of these learning characteristics. An example of the former is the following:

> Specific learning difficulties are significant problems of synthesing; organisation; working memory. These problems which restrict the individual's proficiencies in information processing produce an intractable learning problem in some or all of the skills of reading;

spelling; written work; numeracy; which does not respond to normal classroom teaching. If unrecognised there may be instances of secondary emotional/behavioural problems (Smith, 2003, p.7)

The above definition points to problems in pupils' working memory, organisational and synthesising skills, which have the prospect of preventing their information processing influencing their capacities in literacy and numeracy. Accordingly, pupils identified with specific learning difficulties experience difficulties in their learning that cannot be overcome through conventional teaching approaches that are addressed to the majority of learners. Their delayed identification, also, appears to result in children having emotional and/or behavioural problems due to their low attainment. An individual's differences in various skills and learning pace appears to be viewed as a problem when they do not reflect the standardized image of learners as it has been constructed by society and culture. Additionally, the effectiveness of common teaching methods is taken for granted, locating in this way the problem being within the child. Personalised learning, therefore, tends to be considered as the ultimate measure of those pupils' progress, although it needs to be applied to all children.

A descriptive definition of specific learning difficulties considers them as 'particular processing functions that are significantly discrepant in relation to an individual's other processing abilities. Some of these discrepancies have a profile with a label, such as: "dyspraxia", "dysgraphia" and "dyscalculia"' (Reid, 2011, p. 153). Its focus is on differences within the learner without comparing them to their peers or to standardized levels, while any reference to intelligence and attainment is avoided. However, the absence of an official definition for specific learning difficulties led the Special Needs Assessment Profile to identify fifteen

specific learning difficulties, which comprises the broad groups of attention difficulties, motor difficulties, language difficulties and social difficulties. In particular, these specific learning difficulties include:

coordination difficulties; hyperlexia (low comprehension but good decoding skills); language and communication difficulties; dyslexia; auditory processing difficulties; hyperactivity; attention difficulties; dyscalculia; working-memory difficulties; information-processing difficulties; non-verbal difficulties; literacy difficulties; phonological processing difficulties; visual difficulties; social awareness difficulties (Reid, 2011, p. 153)

Many of these specific learning difficulties can be characterised on a continuum, while the existence of one specific learning difficulty does not exclude the existence of another one at the same time, for example, a pupil can be diagnosed with dyslexia and dyspraxia (ibid.). Additionally, specific learning difficulties have the potentiality to be identified in learners who have been diagnosed with special needs, namely Autistic Spectrum Disorder. In the context of the present study the focus is on dyslexia, which was the most commonly identified specific learning difficulty in the pupils who participated in the research either by official diagnosis or by their teachers. Definitions of dyslexia will be discussed below.

The definition of dyslexia, which became the basis for the majority of the recent definitions of dyslexia, was first presented in the World Federation of Neurology in 1968, and comprised the following:

Dyslexia is a disorder manifested by difficulty in learning to read despite conventional instruction, adequate intelligence and socio-

cultural opportunity. It is dependent upon fundamental cognitive disabilities which are frequently of constitutional origin (Critchley, 1970, p. 11)

This definition, which excludes a number of factors in order for a learner to be identified as dyslexic, provides a cognitive causation of dyslexia and especially points to pupils' cognition as the main cause of their learning disorder (Riddick, 2010; Smith, 2003). Furthermore, it emphasizes pupils' reading difficulties, while other categories of pupils which do not meet those criteria, namely socially disadvantaged pupils, are not characterised as dyslexic learners. Nevertheless, the socio-cultural standards that are set through the above point to the socio-economic foundations of the constructed notion of dyslexia. In other words, the concept of dyslexia was introduced so as to explain pupils' unexpected difficulties in learning coming from middle and higher social classes. This situation, though, tends to justify deficiencies of educational requirements and pedagogical approaches by attributing cognitive problems to children.

Since then, many definitions of dyslexia attempted to specify its cognitive impairments and its impact on pupils' skills. Characteristically, in the 1994 Code of Practice it was suggested in relation to dyslexia that 'there is clear, recorded evidence of clumsiness, significant difficulties of sequencing or visual perception; deficiencies in working memory; or significant delays in language functioning' (Department for Education, 1994, p. 68). However, the above criteria conceptualize dyslexia without clarity and coherence causing confusion for local educational authorities in terms of providing appropriate services to children who present signs of dyslexia (Frederickson and Reason, 1995). Aiming to shed light on dyslexia, the 2004 Framework for Understanding Dyslexia considered it as a

particular difficulty which can be characterised by an unusual balance of pupils' skills influencing learners' information processing and its speed, and other competences namely, writing, reading, calculating and using symbols (Department for Education and Skills, 2004). It was also suggested that children's intelligence is not indicative of dyslexia and learners appear to present differences in their learning profiles. Nevertheless, some yet to be clarified issues concerning the atypical balance of capacities in children remained.

Similar terminology and descriptions of dyslexia are observed among the definitions provided by the International Dyslexia Association (IDA) and by the British Dyslexia Association (BDA). In particular, the International Dyslexia Association (IDA) defines dyslexia as:

> a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge (Lyon et al., 2003, p.2)

The principal use of medical terms in explanations of dyslexia in this definition provides a scientific aetiology of its causation associating them with pupils' difficulties in learning. Its neurobiological origins and its underlying difficulties in

phonological processing which result in a range of difficulties, namely decoding and reading comprehension, are emphasised.

Similarly, the definition by the British Dyslexia Association (BDA, 2015) suggests that there is a neurological background to dyslexia and that:

> Dyslexia is a hidden disability […] It is the most common of the SpLDs […] A student with dyslexia may mix up letters within words and words within sentences while reading. They may also have difficulty with spelling words correctly while writing; letter reversals are common. However Dyslexia is not only about literacy, although weaknesses in literacy are often the most visible sign. Dyslexia affects the way information is processed, stored and retrieved, with problems of memory, speed of processing, time perception, organisation and sequencing. Some may also have difficulty navigating a route, left and right and compass directions (BDA, 2015, online source)

This definition also views dyslexia as a disability, which can have long-term effects on children's life. It causes language and literacy difficulties, namely spelling as well as other problems in cognitive capacities, such as difficulties in working memory and information processing. The stress on medical causation in both definitions prevails over other possible causes of dyslexia, namely educational structures and demands, pedagogical approaches, knowledge accumulation in a short-term period, preventing its deep understanding, and it also locates the problem within learners, making them responsible for it.

A question is, therefore, raised concerning whether the use of these definitions and terms can improve the children's education. Their existence aims to provide

a deeper understanding of pupils' difficulties in learning through the medical approach of diagnosing the disease first and then providing the appropriate treatment. Hence, explicit references to learners' impairments in cognitive areas attempt to demonstrate children's problematic cognition as the only explanation of their difficulties in learning. However, in education this kind of approach sets limits to pupils' opportunities, and has significant implications for their self-perception, self-esteem, motivation, socialization and learning. Consequently, pupils' educational labelling and differentiation based on their difficulties in learning has become the main topic of social debate.

More specifically, the practices of labelling and differentiation in educational settings are viewed either as an abnormal approach causing social stigma or as an appropriate way for ensuring equal opportunities in learning in the context of children's inclusion in mainstream education (Wearmouth et al, 2003). Terms, such as 'special needs' and 'learning disability' have been negatively criticised, because they tend to view disability as an illness emphasizing pupils' condition and enhancing further their categorization due to their failure to achieve 'this standard of normality' (Learning and Skills Council, 2002, p. 7). Additionally, the recommended inclusive measures for learners who experience difficulties in their learning attempt to adjust them to arrangements which are general and do not take into consideration their individual differences, needs and preferred ways of communication.

In contrast, parents of children with special educational needs, and especially dyslexia, seem to defend their rights to equal access in education by foregrounding their learning strengths and giving a prestige to dyslexia (Mittler, 2001). However, this is not the case for the rest of the categories of special

educational needs, namely moderate learning difficulties, which, though, constitute the majority of learners with special educational needs. This demonstrates that policy makers and the general public view special needs in terms of disability rather than disadvantage. As a result, inequalities among learners in terms of access to education are observed not only through the distinction into normal and special educational needs pupils, but also within the category of special educational needs.

As pupils' differences in learning cause social controversies between adults, in the classroom and at school this disagreement tends to be interpreted differently among peers, resulting in a rejection of difference or disability which is expressed through teasing and even bullying. In particular, learners with special educational needs experience bullying more often than their peers due to their peers' negative perspectives of disability or difference causing their isolation and social stigma (Department for Children, Schools and Families, 2008a). This can be enhanced and reproduced through an overemphasis on pupils' performance in literacy and numeracy based on standardized levels which are designed to represent normal developmental levels allowing comparisons among children. Accordingly, when pupils experience significant difficulties in their learning, this tendency has negative implications for their self-esteem and learning by making them feel 'stupid or different and/or not knowing as much as others' (Johnson, 2004, p. 12). However, this raises questions as to whether the role of education is to cause problems to children through defining their learning differences as disabilities and problems, or to offer them options to improve their lives regardless of their learning weaknesses.

The definitions and terminology of specific learning difficulties have resulted in a stalemate in terms of their effectiveness in meeting individual learning needs without causing negative implications for learners' education, feelings, socialization and equal opportunities. Their reconsideration is essential and crucial for the actual inclusion of learners identified with specific learning difficulties. At this point in the argument, the way that inclusion of pupils with special educational needs in mainstream education was encouraged through the influential statement of Salamanca is examined.

Salamanca Statement: an ambiguous document

Envisioned as a programme for the conceptualisation of inclusive education, the *Salamanca Statement and Framework for Action on Special Needs Education* (UNESCO, 1994) was the centrepiece of a new approach in special needs education. More specifically, in 1994 representatives of 92 national governments and 25 international organizations participated in the World Conference on Special Needs Education in Salamanca, Spain, which introduced worldwide the principle of inclusion in education (Kiuppis, 2013; UNESCO, 1994). The Salamanca Statement (UNESCO, 1994) endorsed the approach of inclusive educational institutions and supported the development of special needs education as an integral part of all educational programmes and policies. Furthermore, it strongly encouraged change in social perspectives as the problems of individuals with disabilities are compounded by society that emphasises their weaknesses and impairments instead of their potentials. For this reason, it inaugurated a new way of thinking about human differences

viewing them as normal, and eventually suggested that children's learning should be adjusted to their learning needs rather than children being 'fitted to preordained assumptions regarding the pace and nature of the learning process' (ibid., p. 7).

Highlighting the importance of education for all children without barriers, the document also recommended a number of improvements in schools' structures, educational policies and legislation to allow inclusive education to be realised. In particular, children's fundamental right to education was acknowledged underlining pupils' uniqueness in terms of their abilities, interests, learning needs and characteristics (Dyson, 1999; Lindsay, 2004; UNESCO, 1994). The principle of equality of opportunity for children with disabilities was recognised as a fundamental value to inform the relevant legislation and policies (UNESCO, 1994). In line with the above, the design and implementation of future educational programmes needs to take into account the broad diversity of learners' needs and characteristics. Characteristically, it was argued that 'curricula should be adapted to children's needs, not vice-versa' (ibid., p. 22), illustrating the importance of acknowledging individual interests and abilities. Educational support and relevant services offered to children with special educational needs as well as teachers' and schools' preparedness in relation to special education through training were officially introduced as appropriate measures in fostering inclusion.

The significant contribution of this document was also the establishment of pupils' access identified with special educational needs to:

> regular schools which should accommodate them within a child-
> centered pedagogy capable of meeting these needs […] regular

schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system (UNESCO, 1994, part 2, p. viii-ix)

The Salamanca Statement is a complex document guided by conflicting issues about the concept of inclusive education. Specifically, the absolutist language which is used aiming to emphasize moral imperatives and children's rights for education is acceptable in terms of values and principles, but in the empirical domain appears to cause contradictions (Dyson, 1999). Characteristically, regular schools were considered as more appropriate institutions to provide effective education for pupils with special educational needs and to minimize their discrimination, underestimating in this way the quality of special schools. Furthermore, the argument that effective education is provided to the majority of pupils within regular schools tends to divide pupils into minority and majority groups reproducing in such a way pupils' categorisation and stigmatisation (Dyson, 1999; Kiuppis, 2013; Lindsay, 2004). This also raises questions concerning who needs to be viewed as a minority and whether effective institutions can be regular schools for the minority of pupils.

Similarly, the necessity and appropriateness of child-centred pedagogy for the realization of inclusive purposes needs to be examined. For instance, there is a variety of pedagogical approaches that set children's individuality as their starting point acknowledging the uniqueness of their learning needs (Dyson, 1999;

Vehmas, 2009). However, in the Salamanca Statement the meaning of child-centred pedagogy and which pedagogical approaches were involved as well as the notion of inclusion are not defined precisely (Dyson, 1999). As a result, the document was criticised for being too vague and diffuse in its conceptualisation of inclusive education.

This situation led to the emergence of various definitions of inclusion which aimed to make it more comprehensible. Nevertheless, despite these efforts a possible social exclusion of pupils with disabilities was not avoided and there are negative implications for their educational progress (Armstrong et al., 2011) due to different standpoints of theorists, educators, parents and disabled people concerning inclusion. According to Roger Slee, the concept of inclusion has a political background: 'for many, inclusion connotes a linguistic adjustment to present a politically correct façade to a changing world' (Slee, 1998b, p. 131), whilst Gary Thomas considers that 'inclusion must be at the heart of any society which cherishes […] a liberal political system and a pluralistic culture: one that celebrates diversity and promotes fraternity and equality of opportunity' (Thomas, 1997, p. 106). The Centre for Studies on Inclusive Education suggests that 'an inclusive school is a democracy' which can promote its principles of equality and equity among pupils regardless of their disabilities (Wilson, 2000, p. 298). As a result, the inclusive school appears to be considered as a community which endorses and supports learners' differences and diversity in learning by being accessible to all children and by adjusting its physical environment to their needs and learning processes. The principles of collaboration and equality are embraced and encouraged among pupils and schools rather than through competitiveness within educational institutions.

From a linguistic perspective the term 'inclusion', which replaced the earlier term 'integration', describes this concept in a less appropriate way, underlining the importance of using suitable wording in the expression of concepts (Bossaert et al., 2011; Koster et al., 2009; Nilholm, 2006; Wilson, 2000). In the debate concerning the terminology of inclusion, proponents of the term 'social integration' argue that this term illustrates the sense of pupils' belonging, their social acceptance and their equal participation in activities (Bossaert et al., 2011; Koster et al., 2009). In addition, it is associated with their membership of peer groups, mutual friendships and their self-perception through their acceptance by their peers. On the other hand, the term 'social inclusion' refers to pupils' interactions, peer acceptance and participation in social activities as well as friendship, social relationships and social competence. The third recommended term of 'social participation' points to the nature and frequency of peers' interactions and contact, pupils' involvement in activities and friendships. Although, the three terms have similarities with regards to their characteristics, their absence may result in negative consequences for pupils, namely social isolation, exclusion and even bullying, which reflects the importance and influence of terminology on children's lives (Booth and Ainscow, 2002; Bossaert et al., 2011; Koster et al., 2009; Macqueen, 2012; Nilholm, 2006; Wilson, 2000). This also suggests that the accurate use of words in conceptualisations of social and educational projects influences their implementation.

As the concept of inclusion is framed in a complicated way in terms of definition, terminology and deeper notions of inclusive practices through the Salamanca Statement, the following discussion of how educational policies in England have conceptualized specific learning difficulties and especially dyslexia, as well as

the inclusion of pupils identified with specific learning difficulties, can shed light on how this concept has been interpreted at a national level.

Educational policies in England concerning specific learning difficulties during 1978-2016

In England the first significant educational changes for the accommodation of pupils with special educational needs in mainstream education commenced with the Warnock Report in 1978, which promoted a more positive approach to learners diagnosed with special educational needs in contrast to their previous categorization (Howie, 2010; Wearmouth et al., 2003). Its important contribution was the recommendation that the term 'learning difficulties' described as 'mild', 'moderate' and 'severe' facilitating pupils' inclusion and minimizing their social stigmatization should be used (Warnock, 1978, p.43). In the same report the term 'specific learning difficulties' was coined for the first time for pupils who experience major difficulties in particular areas of learning, namely reading (ibid., p. 43).

Warnock aligned herself with the elimination of pupils' stigmatisation and distinction which are perpetuated through children's categorisation into two groups, the non-handicapped and the handicapped. The recommendation of the above terms was intended to indicate and describe the nature of pupils' difficulties in a less intimidating and stigmatising way. In addition, in replacing the previous system of recording pupils as demanding special educational provision which was based on children's sharp distinctions and categorisations, a multi-

professional team was recommended to prepare a detailed profile of pupils' needs and local educational authorities were mandated to judge and decide its provision. Following these suggestions, the old system of diagnostic assessment was replaced by the recommended alternative process, without though overcoming all the practical difficulties that emerged from its realisation.

This report also acknowledged social or familial deficiencies as a potential cause of children's educational difficulties. It was argued that education has long-term goals which include first, the enlargement of children's knowledge, imaginative understanding and experience, and second, their active participation in society as active, independent and responsible agents. Therefore, the quality of educational provision offered to pupils with learning difficulties is evaluated according to whether it meets successfully the above two educational targets. Furthermore, this report adopts an approach to education that emphasises the idea that learning should not be realised merely within educational institutions, but also at pupils' homes and throughout their adult lives. Setting the foundations for the new approach to special needs education, the Warnock Report marked the beginning of a new era in inclusive education.

The significance with which the government regarded the 1978 Warnock Report is clear from these formalisations, such that pupils who experienced learning difficulties were officially considered as having special educational needs, and local educational authorities as having the responsibility to provide them with special educational provision so as to meet their learning needs, established by the 1981 Education Act (HMG (UK), 1981). In that period, the loose use of the term 'dyslexia' and the importance of meeting pupils' needs were prominent,

instead of focusing on the causes or the nature of dyslexia (Wearmouth et al., 2003), foreseeing future controversies concerning its definition and terminology.

Despite the lack of an agreed terminology of specific learning difficulties in the 1981 Education Act which caused disagreements about labelling, teaching strategies and assessments for pupils identified with specific learning difficulties, it is viewed as a starting point for shifting the focus of English education from what pupils have to how pupils can be educated regardless of what they have. The following 1993 Education Act and the 1994 Code of Practice take the preceding document further, emphasizing the significance of pupils' early identification and schools' provision for meeting their learning needs (Department for Education, 1994; HMG (UK), 1993). Both terms 'specific learning difficulties' and 'dyslexia' were introduced clarifying that dyslexia was included in specific learning difficulties in terms of its criteria for statutory assessment, highlighting the schools' responsibility for pupils' identification, assessment and learning support (Department for Education, 1994). Since then, a focused, targeted, highly-structured and specified teaching programme based on pupils' previous performances and the nature of their difficulties was considered as a suitable way of meeting learners' learning needs, enhancing their self-confidence and their academic success by using learning strategies to compensate for their difficulties (Ofsted, 1999).

However, the long process of pupils' early identification which derived from parents' difficulties in convincing schools or local educational authorities of their children's difficulties resulted in a loss of valuable time for effective interventions for pupils who experienced difficulties in their learning, and had the effect of influencing negatively their progress, self-esteem and confidence, and

highlighting the central importance of SEN statements for special provision. Acknowledging these weaknesses in the diagnostic process, a series of measures was recommended including schools' early intervention with well-structured assistance as well as guidance being offered on the nature and implications of specific learning difficulties in the training of Special Educational Needs Coordinators (SENCO) for designing effective intervention programmes. Furthermore, differentiation in the teaching and assessment of pupils with specific learning difficulties was foregrounded as they 'should not be expected to complete the same reading and writing tasks as other pupils of similar ability in the class, but should be provided with modified assignments which make allowances for their particular learning difficulties' (ibid., p. 7). In practice, though, pupils identified with specific learning difficulties were examined with exactly the same assessment papers and the same assessment criteria as their peers, which raises questions as to whether this differentiation needs to be applied also in their assessment apart from their teaching and learning programmes.

Equality of opportunities in terms of effective learning to all learners was considered as one of the main purposes and values of the school curriculum by the 2000 National Curriculum enabling in such a way their inclusion (Department for Education and Employment, 1999). Schools' responsibility for developing a curriculum suitable for all pupils' identified with special educational needs and based on the guidelines of the National Curriculum concerning the content of knowledge was also emphasized. The learning programmes of the National Curriculum were allowed to be modified in order to take into account pupils' abilities and to set learning challenges appropriate to their needs. Within that context, schools' interventions are allowed to rely on differentiation of materials,

tasks, pupils' foundation stages and their individual learning characteristics, namely low concentration and/or slow pace of learning.

Similarly, the 2001 SEN Code of Practice underlined the importance of early identification of pupils' learning difficulties and early intervention for their successful inclusion and full participation in broad education allowing equal opportunities and high achievement for all learners (Department for Education and Skills, 2001b). As individuality in learning is acknowledged through the essentiality of differentiation in teaching and learning according to pupils' learning profiles, schools were exhorted to set standards for all pupils, including those with special educational needs, with reasonable expectations about their achievement. This made the assumption that all learners progress at the same rate and this notion has been disputed. Furthermore, pupils' active participation in setting their own learning targets was valued because they have 'a unique knowledge of their own needs and circumstances and their own views about what sort of help they would like to help them make the most of their education' (ibid., p. 27). This in combination with the acknowledgement that assessment needs to focus on 'the child's learning characteristics, the learning environment that the school is providing for the child, the task and the teaching style' (ibid. p. 44) constitute remarkable steps forward to personalize learning, leading to the adoption of pupils' eventual independent learning programmes.

In practice, though, some essential issues create barriers to the implementation of the above measures. For example, the amount of children in classrooms which may accommodate thirty pupils or more with the assistance of one qualified teacher has the prospect of preventing individualised teaching, learning and assessment due to teachers' limited time to differentiate their teaching for all

their pupils. In addition, schools' accountability for pupils' high achievements in external examinations and for the effectiveness of their policies according to the 2001 SEN Code of Practice monitored by Ofsted places great pressure on them to follow the standards agenda, the expected levels and the developmental norms as they were promoted through the guidelines of the National Curriculum. Schools also need to invest considerable efforts in collaborating with local educational authorities in order to ensure pupils' diagnostic assessments.

Aiming to ameliorate the above situation, general guidance and performance level descriptors were made available to teachers in order to support them in planning their curriculum according to their pupils' needs. In addition, a wide range of learning experiences for children at each key stage appropriate to their age was suggested acknowledging that some pupils might 'follow the same developmental pattern as their fellow pupils, but not necessarily at the same age or rate' (Qualifications and Curriculum Authority (QCA), 2009d, p. 28). Moreover, it was emphasised that pupils progress in a lateral way apart from the normal hierarchical way.

Adjustments of teachers' teaching styles to their pupils' learning needs were also encouraged through a detailed list of level descriptors which represented the types of general performance of pupils with learning difficulties based on learning norms (Qualifications and Curriculum Authority (QCA), 2009a). For instance, for level P3 (ii) it was recommended that learners 'can remember learned responses over increasing periods of time and may anticipate known events, for example, pre-empting sounds or actions in familiar poems' (Qualifications and Curriculum Authority (QCA), 2009c, p. 8), whereas some of the suggested skills that they need to develop include the development of their attention and concentration

skills enabling them to switch their attention among different tasks (Qualifications and Curriculum Authority (QCA), 2009b). Nevertheless, this kind of measure tends to reproduce developmental norms in learning enhancing the focus on pupils' standardized performances and causing problems to learners' actual inclusion programmes.

The negative consequences of the level descriptors resulted in confusion for parents affecting significantly children's self-image and learning as well as making comparisons between pupils, and allowing a linear rather than contextual perspective on knowledge, and a narrowing of the curriculum (Department for Education, 2011e). Furthermore, some of the implications of the accountability regime that schools were subject to included use of teaching approaches, namely, teaching to the tests, as their performance in national examinations was published in the national league tables, while the school curriculum tended to be highly examination-orientated (Department for Education, 2011b, 2011d, 2011e). Misuses of SEN statements by some schools were also noted, as they were required to justify their level of performance nationally. Some schools were discouraged from accommodating pupils with special educational needs due to their possible detrimental impact on their general result. In addition, pupils' progress, including those with special educational needs, regardless of their starting point was provided prominently in the Performance Tables, which increases further the pressure on schools and pupils. The choice of the government to maintain Key Stage 2 external examinations, as the only solution to all the above problematic issues worsens the situation in inclusive education and raises questions about whether standards-driven curricula improve the quality of education.

The above actions, though, illustrate the government's strong endorsement of an external accountability system and a competitive standards agenda instead of an inclusive agenda, causing more stress and anxiety to teachers, pupils and parents. Additionally, these measures contradict earlier recommendations for reasonable expectations of children's attainment, identified with special educational needs, based on their needs and difficulties, for differentiation, for more available time and funding for their support (Department for Education, 2011e). Having confidence in the accuracy of standardized testing that reflects pupils' actual progress regardless of their starting point, current educational policies demonstrate a restricted view of education and inclusion. Tests provide a limited image of children's knowledge, skills and understanding because many factors play an important role in performance. As a result these tests may not be indicative of their capacities (Koretz, 2008; Richmond, 2001). Consequently, pupils' learning difficulties/disabilities are highlighted more than their abilities through their assessment against standardized average levels resulting in misinterpretations of their potentials (Richmond, 2001).

Despite the awareness of those crucial issues about pupils' inclusion, the drafts of Key Stage 1 and 2 programmes considered that it was the schools' responsibility to ensure appropriate provision for children with special educational needs, who constitute a 'minority', and to set high expectations to all of them taking into account the legislation of equal opportunities (Department for Education, 2012, p. 4). Viewing pupils with special educational needs as a minority locates them in an inferior position. Based on this perspective, developmental norms tend to determine mass education contradicting former declarations about individual learning.

Indeed, the new arrangements for English Key Stage 2 assessment focusing more than before on spelling, grammar and punctuation in the evaluation of writing concerned all pupils. They are also addressed to children with specific learning difficulties who work under the required level and may not complete fully the Key Stage 2 programme of study (Standards and Testing Agency, 2012). An emphasis on literacy areas, where pupils with specific learning difficulties experience the greatest challenges, illustrates that previous stipulations for their assessment according to their individual needs, learning profile and starting point have not been realized. For instance, some access issues, namely additional time for children identified with specific learning difficulties in examinations, might not be needed in the examination of the English grammar and spelling as it was not strictly timed.

Drawing heavily on the requirements of the Drafts 2012-2013, the new framework for the national curriculum in England, which started to operate from September 2015, underlines the importance of the school curriculum in encouraging pupils' development and preparation for adulthood (Department for Education, 2014a). In the programmes of study in Key Stage 2 English, it emphasises the skill of word reading, which is defined as a speedy recognition of familiar and unfamiliar printed words. Speed is also highlighted in spelling and handwriting, so pupils can write their ideas fluently that can lead to an effective transcription and composition. Furthermore, joined-up handwriting is viewed as the norm and pupils need to use it adeptly so as to keep pace with their thoughts. Memorising poetry in Key Stage 2 is also included in the programme of study for reading, which can cause problems for children with difficulties in their memorisation skills.

The recent policy of 'The Children and Families Act 2014' introduces a series of measures concerning the responsibilities and the role of local authorities and schools for children with special educational needs (Department for Education, 2014b). In particular, it highlights the importance of the feelings, views and wishes of the children and their parents. Furthermore, it argues that the full participation of the children and their parents is desirable in decisions that concern the educational support that is provided to children by local authorities. It also suggests that local authorities undertake the responsibility for the early identification of children with special educational needs and disabilities in coordination with schools.

In order for this measure to be applied efficiently in practice, the 2014 Act introduces the idea of collaboration between three sectors: education, health and social care. More specifically, children with special educational needs can receive apart from educational provision by the local authority, social care and health provision when it is necessary. Moreover, the local authorities are mainly responsible for keeping under frequent review these three kinds of provision by consulting children with special educational needs who are supported with these provisions, their parents and their schools. In addition to this, local authorities are entitled to publish the 'Local Offer' that is intended to inform the public about the educational, health and care provision which is available in the area of the local authority for children with special educational needs (Department for Education, 2014b, p. 26).

Local authorities are also responsible for the preparation and provision of an Education, Health and Care (EHC) plan for children with special educational needs which replace the Statements of Special Educational Needs and Learning

Difficulty Assessments (Department for Education, 2014b; 2014c). The EHC plan supports the idea that children need to be educated within mainstream schools unless this is at odds with the wishes of the children's parents (Department for Education, 2014b). It is also valid until the person with special educational needs attains the age of 25, while it is reviewed and re-assessed every year from the date it was first made by the local authority in consultation with the children's parents and the governing body of their schools. Additionally, the main function of the EHC plan is to specify the children's special educational needs, the required special educational provision for them according to the outcomes of their assessment as well as their health care and social care provision when it is appropriate (Department for Education, 2014b; 2014c). The assessment process for an EHC plan starts with a request for EHC needs assessment for the child made by his/her parent or a person on behalf of his/her school to the local authority (Department for Education, 2014b). Then, the local authority determines whether special educational provision is necessary for the child with the consultation of the child's parent. In the case that this is not necessary for the child, the local authority informs the child's parent about the reasons for this decision. In the opposite case, the local authority notifies the child's parent about its decision to secure an EHC needs assessment, asking for the parent's views and for relevant evidence. After the completion of the assessment, the local authority provides the required support.

In line with the 2014 Act, the 2015 SEND Code of Practice introduces a number of changes from the 2001 SEN Code of Practice (Department for Education, 2015). In particular, it acknowledges the significance of children's and their parents' participation in the decisions concerning their support. Furthermore, it provides guidance for the joint services and cooperation between education,

health and social care aiming to support children with special educational needs. In addition to this, guidance on teachers' training is offered in order to improve the identification and support of pupils with special educational needs.

The main principles which underpin the 2015 SEND Code of Practice emphasise the importance of children's and their parents' feelings, views and wishes encouraging their full participation in decisions concerning their support. Moreover, the local authorities need to support the children in a way that ensures the facilitation of their development, enables them to achieve the best educational outcomes and prepares them for adulthood involving employment and independent living. Aiming to remove barriers to learning and participation, the 2015 SEND Code of Practice exhorts that children with special educational needs but without an EHC plan should be educated in a mainstream setting, thus limiting schools' possible discrimination against disabled children. This also presupposes that schools include children with special educational needs in every possible circumstance.

Children's early identification and early intervention are underlined offering greater control and choice over support to children and their parents. The EHC needs assessment and plan also presuppose full participation of children and their parents in discussions and decision-making over the type of educational support that is offered, while health and social care support are also provided where it is necessary. Additionally, local authorities are responsible for involving children and their parents in reviewing educational and training provision by providing the necessary information and advice. This includes their engagement at all stages in the planning, delivering and monitoring of services through

clarifying roles for children and their parents as well as providing feedback about those mechanisms.

The new measures which are now the responsibilities of schools include the publication of their SEN policy and information on its approach to support children with special educational needs in the 'Local Offer', involving teaching approaches, additional learning support, adaptations to the learning environment and the delivery of the curriculum. Furthermore, pupils' progress towards their learning outcomes is assessed and reviewed frequently by schools. Additionally, expertise among their staff who support pupils with special educational needs should be secured, including awareness concerning the type of special educational needs, the ways of adapting teaching and learning according to pupils' individual needs, and specialist training about the particular type of special educational needs. Schools' supplementary duties also involve the publication of detailed information about the arrangements for children's identification, assessment and support, while the means and resources that are used to support children with special educational needs are reviewed regularly so as to improve the quality of their provision.

The National Curriculum Inclusion Statement also suggests that teachers need to set high expectations for all pupils regardless of their prior attainment by setting ambitious learning targets for pupils through appropriate assessment (Department for Education, 2015). Pupils' potential difficulties need to be identified early and be addressed through planned lessons that enable them to have full access to the National Curriculum. Consequently, schools and teaching staff are responsible for assessing pupils' skills and progress regularly so as to identify possible indicators of learning difficulties including slower progress

among peers who have the same starting point, or a wide attainment gap between the child and his/her peers or in relation to his/her previous rate of progress. In that case, teachers in collaboration with schools' SEN experts assess the child and provide extra teaching or other interventions to improve his/her weaknesses. Formative assessments by teachers and the SENCO, in conjunction with discussions with the pupil and his/her parents concerning their strengths and weaknesses, are also involved in decision-making about whether special educational provision is provided to the child. The child's and his/her parents' views and wishes, and his/her expected outcomes and attainment are emphasised during the above process. In the case that specialists are needed for the child's support when he/she makes less than expected progress, then his/her parents can actively participate in the decision-making.

The SEN support includes early actions and decisions, a deeper understanding of the child's needs and what kind of support enables him/her to make good progress, which is also known as the graduated approach (Department for Education, 2015). Educational provision for children with special educational needs involves high quality teaching that is personalised and differentiated in order to meet pupils' individual needs. The new arrangement is that children and their parents can express their perspectives and experiences on these decisions and educational provisions, avoiding potential problems with their implementation.

For the provision of SEN support, a clear analysis of the pupil's needs is required by his/her class teacher and the SENCO (Department for Education, 2015). More specifically, the teacher's experience and assessment of the pupil, his/her previous attainment and progress, information about the school's approach to

pupil's progress are involved as well as the pupil's own views, his/her individual development compared to his/her peers, other teachers' assessment and his/her parents' experience and views. It is recommended that this assessment is reviewed regularly so as to ensure that the intervention and support meet individual needs, producing an annual report of the child's progress which is provided to his/her parents. All his/her teachers also need to be informed about the pupil's needs and any teaching approaches that can be used for his/her support, while his/her principal teacher remains responsible for working with him/her daily, even though the interventions involve one-to-one or group teaching away from the main classroom. Collaboration between the principal teacher and teaching assistant or specialist staff is highlighted allocating responsibility to the principal teacher to plan and assess the influence of interventions and support and the ways that these can be linked to the classroom teaching. This new measure illustrates the significance of the principal teachers' engagement with the learning of their pupils with special educational needs, minimising the possibilities that responsibility for these pupils are allocated to teaching assistants.

Pupils' inclusion in mainstream education facilitates their socialization and access in and to learning. However, assessing them under the same standards and without considering their starting point and individual needs sets learners identified with specific learning difficulties higher and more demanding expectations. In the following section, arrangements for the inclusion of pupils with specific learning difficulties in mainstream education in England are discussed.

Implementation of the Concept of Inclusive Education in England

Since the 1970s, a series of changes has been introduced in English education due to political realignments. Some of the principal educational reforms started in 1979 included the reduction of the powers of local educational authorities, the introduction of a curriculum controlled by the central government and the encouragement of competition among schools viewed as businesses which were competing for customers in the education market place (Booth et al., 1997; Booth et al., 1998; Clark et al., 1999). Consequently, parents were strongly encouraged to choose schools based on their examination successes in league tables, while oversubscribed schools were allowed to choose their pupils so as to increase their competitiveness. In 1988 the National Curriculum was introduced in a prescriptive way adopting the academic, subject-based curriculum of the grammar schools and establishing a bureaucratic assessment system.

In the following years the school accountability system appears to endorse competition, influencing significantly the implementation of the practice of inclusion. Although the 1994 National Curriculum simplified the assessment framework following the requirements of the Salamanca Statement concerning pupils' inclusion, it introduced national examinations at 7, 11 and 14 preserving the idea of placing high pressure on schools, teachers and pupils to produce good results. National inspections carried out by the Office for Standards in Education (Ofsted) aggravated the situation through their emphasis on schools' and teachers' failure in case of bad results affecting schools' popularity and teaching. Furthermore, teachers' stress and fear were increased due to potential

redundancies, while a narrow perspective on performance and a culture of 'shame and blame' shaped English education due to this intense focus on standards' improvement resulting in further accountability systems, inspection, competition, specialisation and selection among pupils and schools (Cole, 2005, p. 297).

Under these circumstances, the standards agenda in England tended to prevail over inclusive education, influencing schools' learning arrangements. In particular, its main focus on literacy, numeracy and science intending to raise standards of pupils' attainment and workforce skills associates education with the requirements of the labour market, narrowing the curriculum (Ainscow et al., 2006). Accordingly, the initial purpose of education appears to become the learners' contribution, first to the economy and then to the community reflecting a focus on economic instrumentality (Tomlinson et al., 1996). As a result, pupils' homogeneity is encouraged because their performances in standardized attainment targets (SATs) which represent schools' performance in league tables monopolise the interests of society (Armstrong et al., 2011; Cole, 2005; Wearmouth, 2000). As a result, the crucial problems that emerge from the adjustment of inclusive education within the existing standards agenda leads to a social crisis as educational reforms tend to distinguish successful from failed learners based on their standardized performance, while children with special educational needs are more likely to belong to the latter category.

This issue was also highlighted by Warnock causing numerous reactions of educators to her suggestions. In particular, the importance of all pupils' education was underlined, but under these circumstances it was recommended that it is significant to be educated with the same educational project but in

different institutions which protect them from social rejection (Warnock et al, 2010). Children's access to those institutions would be facilitated by SEN statements allowing effective learning to be provided to pupils with learning difficulties and without. Social discrimination and rejection of individuality, difference and diversity in learning became once again the threat for children with special educational needs through the above suggestion. However, as Norwich argues, Warnock's recommendation for separate institutions was not developed in a vacuum but it reflected her initial purposes for separate provision through special schools or special support. Therefore, it cannot be considered as a shift to her stance towards the project of inclusion but as her waiver to find alternative ways to include pupils with special educational needs in mainstream education. Indeed, as Warnock admitted, there was no shift in her beliefs justifying her suggestion for specialist schools as a way to ensure good quality education for pupils with special educational needs.

Inclusive education has been an area of intense interest and focus with the launch of the Salamanca Statement in Great Britain. Such a multi-faceted and extensive concept of inclusion, though, needs to take into account the practical issues faced by schools and to revamp the preceding educational programmes and structures according to inclusive principles. Less emphasis on school accountability mechanisms and standardized performance levels has the potentiality to allow realistic expectations on children's learning and outcomes, and to improve the quality of education. The problematic implementation of inclusive education, though, has more drawbacks for education as it may influence negatively pupils' learning, progress, self-esteem, socialisation and the future.

Researcher Positionality

I developed a belief that standardised examinations and grades do not necessarily represent pupils' efforts and knowledge since I was a pupil at primary school in Greece. Without experiencing specific learning difficulties, I noticed that all my peers had difficulties in learning, which was a common learning attitude for everyone. Throughout my schooling and especially in secondary and upper-secondary education, where we had internal and external standardised examinations respectively, I realised that the main factors to explain our difficulties in learning were the demanding taught content which was reflected in the high expectations of the Greek National Curriculum, the limited time offered for its processing and the various teaching approaches used within classrooms. All the above issues were placing students and teachers under excessive pressure to achieve good grades and to cover the required content within the pre-arranged time respectively, which is not the purpose of education according to my belief.

My bachelor studies in Greek Philology aimed in the main to prepare me to become a tutor in the secondary and upper-secondary education system reproducing these standardised patterns of teaching and learning. After completing my studies and working as a teacher, I decided to expand further my knowledge of curriculum design and development, which I considered as one of the main factors that conceptualise education. This led me to my Master's studies in Curriculum Design and Development at the Institute of Education. Meanwhile, I was teaching professionally in London and my attention was attracted by the way that children with specific learning difficulties were considered as different learners. This inspired and motivated me to explore in a

deeper manner how pupils with specific learning difficulties learn and how equal opportunities can be offered to them in education. Considering education as an actual right for all types of learners and not as a privilege for some of them, I started my PhD in curriculum design for pupils with specific learning difficulties in England. Trying to minimise the bias from my cultural background and personal experiences as a professional, this thesis suggests an alternative curriculum for pupils with specific learning difficulties in literacy at Key Stage 2 based on research evidence and a theoretical framework. Biographical details such as these are essential to understanding the way the researcher is positioned in relation to the object of their study.

Outline of Chapters

Chapter 2 discusses the theoretical background of the notion of disability and its influence on education. With the principal focus on specific learning difficulties and especially on dyslexia it continues the discussion of the key medical explanations, which have been provided in the context of the medical model of disability throughout the years. It also reviews the major curriculum models as they shape pedagogy and assessment. An overview of the principal learning models and assessment approaches in terms of how they conceptualise learning follows. The chapter is completed with a discussion of the theories concerning inclusive curricula.

Chapter 3 presents the research design of the empirical study of this thesis. In particular, the research questions and objectives as well as the ontological and

epistemological background of the study are discussed. Then, the methodology and the methods of data collection and analysis are explained providing detailed information about the sample of the research. Finally, the research's ethical position is examined.

Chapters 4, 5 and 6 present and analyse the findings from the three case studies. More specifically, Chapter 4 refers to the Blue Sky School, Chapter 5 to the Rose Garden School and Chapter 6 to the Sunlit River School. The findings are discussed in terms of the participants' learning characteristics, school's learning arrangements and inclusive practices. Additionally, the focus is on those factors which can influence significantly pupils' learning and self-esteem as they have emerged through observations and interviews.

Chapter 7 focuses on the holistic analysis and discussion of the findings of the three case studies underlining the key elements that influence the learning of the pupils who participated in the research and their self-image as learners. Their main difficulties in learning are examined in combination with the schools' inclusive measures aiming to meet their learning needs, while the influence of external factors on their inclusion, namely curriculum requirements, diagnostic assessment and labelling is discussed.

Chapter 8 concludes this thesis with a discussion of the key issues emerging from the empirical research and a theoretical examination of the concepts of inclusion and learning of pupils with specific learning difficulties and especially with dyslexia. I also suggest an alternative curriculum design based on extant curriculum theories and the study's findings. Finally, this thesis's potential contributions to further research are examined.

Chapter 2: Inclusivity and Specific Learning Difficulties: A Literature Review

Inclusive education has become a central priority for educational policy-makers in England who introduced measures for the integration of pupils with special educational needs in mainstream education. Nevertheless, these policies have been shaped by the various interpretations of the notion of disability, which in turn have influenced learning theories and practices eventually adopted in classrooms. This chapter discusses the development of theoretical perspectives about the notion of disability and their implications for education in terms of inclusion, pedagogy and assessment. Additionally, it examines the form that an inclusive curriculum can take. Theories of inclusion and how they influence curriculum development are also discussed.

Theoretical positions on disability and normalisation of education

The contradictory medical and social models of disability are extremely influential in determining the structures and processes of inclusive education, resulting in constant debates about their consequences for pupils' lives and learning. In particular, essentialist perspectives, which have been derived from empiricist/positivist and naïve realist perspectives, consider disability as an individual's pathological deficiency or impairment that necessitates rehabilitation (Bhaskar and Danermark, 2006; Slee, 1998). Based on this, the medical model of disability focuses intensively on its pathology and argues that genetic factors

can limit people's capacities (Bailey, 1998; Grenier, 2010; Nilholm, 2006; Oliver and Barnes, 2010; Warnock et al., 2010). The need for the diagnosis of individual deficiency, which provides guidelines for intervention programmes within education institutions minimising pupils' differences in learning processes, is emphasized for remediation purposes (Bailey, 1998; Bhaskar and Danermark, 2006; Grenier, 2010; Slee, 1998). Some implications of this model involve children's labelling and categorisation within educational settings causing low expectations about their attainment, while their deficits tend to be highlighted and perceived as barriers to their lives, disregarding other important influences on them, namely, familial, social and personal issues (Bailey, 1998; Grenier, 2010).

An opposite response to the reductionist perception of essentialism is the adoption of a social constructionist perspective, which was partially responsible in the 1960s for the development of the social model of disability (Bhaskar and Danermark, 2006; Slee, 1998). Despite the distinction between weak constructionism, which argues that there is an interpreted aspect in the construction of social objects or theoretical understandings, and strong constructionism, which argues that disability exists as an idea or belief in people's minds and not in reality, within social constructionism disability is viewed as a social construct based on socio-economic arrangements that can reproduce social marginalisation and failure amongst specific groups of people (Bhaskar and Danermark, 2006; Clark et al., 1998; Slee, 1998). Social institutions, namely schools, appear to generate failure for minorities working and studying in educational systems, which tend to be addressed to the majority of learners, and the concept of special educational needs was developed in order for this failure to be managed (Ainscow et al., 2006; Clark et al., 1998). As a result of the social contextualisation of what constitutes needs and in particular

what are considered as special needs, real individual learning characteristics are not actually represented, illustrating that a potential change of social circumstances, namely different kind of schools, can result in a possible disappearance of the concept of special needs (Clark et al., 1998; Clark et al., 1999; Dyson, 1990).

With an emphasis on social and economic factors in the construction of the notion of disability, the social model acknowledges the existence of disability, highlighting, though, that disability and impairment are not linked causally (Oliver and Barnes, 2010). This suggests that barriers to people's social and economic well-being are not set by the existence of disability but by social arrangements, which indicates the way that differences between people are interpreted (Allan, 2010; Grenier, 2010; Kinsella and Senior, 2008; Oliver and Barnes, 2010). Consequently, issues concerning educational principles, namely equality, equity, human rights, individuality, independence and social participation are raised through this model underlining political influences on them, while language is considered as a significant medium focusing more on how notions are expressed than on their contents (Allan, 2010; Bhaskar and Danermark, 2006; Grenier, 2010; Oliver and Barnes, 2010).

The post-modernist perspective on disability which emerged in the 1990s highlighted the significance of cultural and historical factors in its identification (Bhaskar and Danermark, 2006; Slee, 1998). More specifically, the conceptualisation of normality in societies across different cultures in terms of attitudes, values and concepts, plays a crucial role in the construction of the notion of disability in addition to socio-economic arrangements. Hence, various cultures view disability differently influencing understandings and explanations

about it within societies. In opposition to this, a critical realist perspective on disability rejecting essentialist and post-modernist frameworks supports the idea that a number of mechanisms need to be examined and explained, including biological, physical, psychological, psycho-social, socio-economic, cultural and normative mechanisms in order for the social event of disability to be understood (Bhaskar and Danermark, 2006; Scott, 2010). Through this viewpoint, the complexity and multiplicity of reality is emphasised and in particular its stratified nature, with the linguistic representation of a social event and its content tending to be considered as of equal importance (Bhaskar and Danermark, 2006).

The dominance, though, of the medical model which tends to medicalize pupils' learning in common with socio-economic factors has the effect of enhancing the concept of normalisation in education. In particular, since the establishment of inclusive education through the Salamanca Statement relevant educational policies attempt to combine difference with sameness and especially to adjust difference into regularity in learning (Wearmouth, 2000). Characteristically, mass public education appears to be addressed to pupils' average levels without taking into account individual learning characteristics and differences in learning processes, encouraging similarity among children (Gerber, 2004). For instance, educational stipulations which require pupils to 'reach agreed performance levels' disregard individuality in learning (Solity, 1996, p. 141), reflecting the belief that children's cognitive development and learning occur normally and similarly (Gerber, 2004).

This situation derives from the 'Factory Model of Education' which was introduced in the 1900s and presented schools as educational factories, students as a product and standardized tests as a measure of its quality and educational

progress. Competition was also promoted within educational settings through grades, levels, examinations, streaming, classes reflecting socio-economic requirements, while standardized tests started to be developed massively aiming to make educational institutions more efficient and effective. Measuring children's performance through standardized examinations in respect of the norms of cognitive development without considering their individual learning profiles, and informing the general public about schools' achievements, were prioritized among educational purposes, encouraging competition, uniformity and normality.

In a deeper sense, though, the use of standardized testing aims at organizing societies based on a notion of normalization (Scott, 2000). In particular, as Foucault (1979) suggested, although assessment is an educational tool it can dominate and even contribute to the formation of mass education, encouraging regularity and normality in learning processes as the only acceptable way of learning. It can also facilitate the top-down accountability of schools in terms of financial investment and time management, resulting in the increased use and frequency of standardized testing instead of its minimization (Scott, 2000; Serafini, 2002). Consequently, pupils' training for achieving high performance in standardized examinations is emphasised, narrowing significantly the curriculum into teaching basic skills, whereas children tend to develop their self-image as learners based on their attainment in meeting the expected performance levels, and in addition, attempting not to be viewed differently from normal learners.

This mechanism works in three ways: firstly, by transforming 'the economy of visibility into the exercise of power' (Foucault, 1979, p. 187); secondly, by introducing 'individuality into the field of documentation' (p. 189); and thirdly, by

making 'each individual a "case"' (p. 191). In the first instance, disciplinary power is exercised invisibly, and this contrasts with the way power networks in the past operated visibly, through the explicit exercise of force. This invisibility works by imposing on subjects a notion of objectivity that acts to bind examined persons to a truth about that examination, a truth which is hard to resist. The examined person understands him or herself in terms of criteria that underpin that process, not least that they are successful or unsuccessful. The examination therefore works by 'arranging objects' (Foucault, 1979, p. 187) or people in society.

In the second instance, the examination allows the individual to be archived by being inscribed textually. Furthermore, it is possible to understand this process even when the rhetoric of what is being implemented is progressive and benign. Over the last twenty years in English schools, the proliferation and extension of assessment through such devices as key stage tests, records of achievement, examined course work, education certificates and school reports and evaluation through such devices as school inspection, teacher appraisal, profiles and the like, means that teachers and students are increasingly subject to disciplinary regimes of individual measurement and assessment which have the further effect of determining them as cases. The third of Foucault's modalities then is when the individual becomes an object for a branch of knowledge.

In practice, the above intentions are realized through the introduction of the concepts of special and inclusive education. Despite the acknowledgement of children's individuality and difference in learning, the way that education responds to pupils' diversity is based on their categorization into normal and less normal learners in respect of their performance in standardized testing (Booth, 1998). For instance, pupils who perform less well than their peers or have a

disability can be considered as part of a valued diversity of learners requiring schools' immediate interventions aiming to meet their difficulties. Individualized learning through special provision and teaching differentiation which has been associated with special education tends to be based on pupils' identification and categorization in various sub-categories, namely learning difficulties or behavioural difficulties, creating a false impression that certain types of learners need different pedagogical approaches in order for them to achieve the regular learning objectives (Booth, 1998; Vehmas, 2009). In this way, failure is attributed to children rather than to educational policies and systems, devaluing the work of large groups of pupils (Booth, 1998; Tomlinson, 1982).

The dilemma that arises from the intention to provide the same education to different learners or to actually acknowledge individual differences in learning appears to be resolved by various approaches, namely mixed-ability teaching of a common curriculum and special intervention programmes which focus on the amelioration of pupils' learning difficulties, which attribute negativity to individual differences (Clark et al., 1999; Gerber, 2004; Vehmas, 2009). The rationale behind inclusive education is the maintenance of commonality in education attempting to adjust individual differences to regular learning processes. Accordingly, changes in schools' structures and practices aiming to include all learners is required for inclusive learning, while the SEN approach which aims to identify individuals and to produce statements of educational need can be said to contradict this inclusive concept (Learning and Skills Development Agency, 2006).

For this reason, shifting the focus of education from pupils' performance in standardized examinations to their learning, taking into account their individual

differences, is an essential part of the concept of inclusion (Ebersold, 2003; Hansen, 2011). However, in order for this to be achieved, societies through their educational systems need to accept the concept of difference and the acceptance of diversity (Norwich, 2008; Petrou et al., 2009, Reindal, 2010). However, league tables continue to be emphasized, and inclusive education that aims to respond to individuals' demands cannot be achieved efficiently (Evans and Lunt, 2002; Farrell et al., 2007). There is a constant risk that inclusive education can have the opposite results, reproducing pupils' categorisation and exclusion and understanding their differences in learning as negative and less than normal characteristics. The medical model of disability, though, has been a major influence on educational practices and purposes through its explanations about the causes of specific learning difficulties.

Pathogenesis of education: Medical explanations of Specific Learning Difficulties

The profound influence of the medical model on education has caused significant changes in fundamental beliefs concerning pupils' learning processes. In combination with the predominance of standardized testing viewed as the most valid indicator of pupils' learning, the current tendency in education suggests that learners who achieve unsatisfactory academic results based on standardized developmental levels need to be arranged in categories, such as specific learning difficulties, which can provide explanations about the pathology of their irregular attainment. Although pupils' homogeneity in learning and assessment is highly disputed, it continues to be considered as the only desirable and acceptable educational outcome, attributing individuals' failures to medical

reasons. Consequently, mechanisms of diagnostic assessments and intervention programmes which identify learners' medical causation of their low performance so as to provide relevant treatment appear to be leading education in a more medically-based direction.

The origins of this situation go back to World War II when systematic studies of soldiers who had missile injuries that affected their brain functioning showed that damage to the brain can cause the loss of some specific cognitive abilities, namely memory, writing, reading and calculating (Prior, 1996). Since then, research has focused on exploring potential links between harm in specific areas of the brain and problems to particular cognitive abilities in children. Characteristically, it was found that a brain trauma after an accident can cause problems to individuals' reading ability, creating the impression that children with developmental learning difficulties may experience a type of brain damage which is not obvious to observers. Based on this explanation, the biological or neurological approach to learning difficulties became more popular, as it provided explanations of children's learning and behavioural difficulties without taking into account the complex relationships between brain and behaviour.

Detailed descriptions of the main characteristics of specific learning difficulties based on the frequency of their appearance in identified pupils aim to provide an accurate learning profile for them. For example, according to the World Federation of Neurology, dyslexia is viewed as a disorder which appears to cause difficulties in learning, namely information processing, speed and style of processing regardless of children's sufficient intelligence and socio-cultural background (Prior, 1996; Reid, 2005). Difficulties have also been noticed in recall and recognition of words and sounds, in information categorization and

organization, in concentration and in memorization of timetables, instructions and lists due to learners' weak short-term memory (Grant and French, 2010; Reid, 2005). Additionally, dyslexic learners tend to read slowly in reading and writing, have difficulties in reading comprehension, make phonological errors in sequencing letters involving omission and/or addition of syllables in writing as well as confusing either words and sounds or words that have similar or the same sound.

Dyscalculia involves significant difficulties in basic mathematical operations and dyspraxia principally concerns difficulties in motor coordination without denying the possible existence of some learning characteristics of dyslexia. Additionally, Attention-Deficit Hyperactivity Disorder (ADHD) refers to hyperactivity and impulsivity, while Attention-Deficit Disorder (ADD) can be related either to impulsivity or to hyperactivity. However, pupils identified with specific learning difficulties present differences in their learning characteristics and processes introducing variety into their learning profiles, which makes problematic their categorization in certain groups of learning difficulties. However, despite the initial intentions of the above descriptions to facilitate better understanding of pupils diagnosed with specific learning difficulties, stereotypes about their abilities and skills result in difficulties that follow them for the rest of their lives, and in addition obscure their actual progress in learning.

In the reproduction of this conventional image of learners identified with specific learning difficulties, an important role is played by the medical explanation of the causation of specific learning difficulties. Characteristically, the causes of dyslexia include hypotheses about harm in the brain's left hemisphere which is associated with language, or genetic influence, or abnormalities in the brain's

development during the maturation process (Grant and French, 2010; Prior, 1996; Reid, 2005; Snowling, 2000). As a result, some of the key explanations provided by the main neuropsychological theories tend to include visuospatial problems concerning eye movement and vision. Additionally, auditory memory problems due to early otitis which results in limited memory and poor perception of information can be involved in the above explanations. Finally, problems with working memory that can be related to the short-term storage of information also tend to be used by those theories. In the following, some of the principal and influential medical theories for dyslexia are identified.

Visual and auditory theories for dyslexia

One of the principal theories for explanations of dyslexia is visual deficits due to brain or vision impairments that can cause difficulties in reading. In particular, theories of reading impairment suggest as the principal cause of pupils' reading problems perceptual dysfunctions based on their mirror-image and/or reversal mistakes in reading, namely confusing *b* with *d* or *saw* with *was* (Everatt, 2002; Uhry and Clark, 2004). A fundamental argument, which became the basis for some subsequent theories, was provided by Orton who claimed that in dyslexic learners the right hemisphere of their brain was dominant over the left resulting in image-reversed representation of letters/words (Everatt, 2002; Uhry and Clark, 2004; Vellutino et al., 2004).

An alternative visual-based theory, the magnocellular deficit hypothesis, supports the idea that an abnormality in neural pathways of the visual system causes dyslexia (Everatt, 2002; Vellutino et al., 2004). As Stein (2008) argues, dyslexia is considered as a neurological syndrome which appears to affect brain

development. More specifically, the visual magnocellular system which is related to timing visual events during reading sends signals of visual motions that happen (Stein, 2001). These signals that bring the eyes back on target determine orthographic skills depending on learners' sensitivity to them. However, in dyslexic children the development of the visual magnocellular system is impaired, reducing their motion sensitivity and resulting in their receiving the impression that letters are moving around while they try to read. This also influences their sensitivity in identifying detail or colour during reading, and this also has significant implications for in-depth information processing (Everatt, 2002; Stein, 2001, 2008; Vellutino et al., 2004) .

The above problems are related to the Scotopic Sensitivity Syndrome, also known as Irlen Syndrome (IS) or visual discomfort, which includes eye fatigue and strain, shadowing or blurring of words and letters, merging, doubling or movement of print letters, and problems of focusing on a task for an extended period of time (Everatt, 2002; Irlen, 1991, 2005; Noble et al., 2004, Stein, 2001). For the improvement of this kind of visual-perceptual dysfunction the use of visual filters, namely coloured lenses or overlays placed over the text have been shown to facilitate reading by isolating parts of the text (Irlen 1991, 2005; Noble, 2004). Problems in eye movement coordination also have the prospect of affecting reading capability, especially when non-typical eye movements are observed during the reading process, but whether poor or erratic eye movement control causes reading problems or the opposite or whether a third factor can cause problems to both of them is still being researched (Everatt, 2002; Uhry and Clark, 2004).

The theory of deficient visual attentional control suggests that reading difficulties are caused especially when visual stimuli are included due to problems in attention (Everatt, 2002). Nevertheless, correlations between poor attentional control and reading problems lead to invalid connections between dyslexia and Attention Deficit Hyperactivity Disorder. Therefore, interpretations which focus on attentional processes as the main cause of dyslexia lack a precise identification of the notion of attention resulting in superficial explanations concerning the relationship between attention and reading difficulties.

Accordingly, visual coding processes that enable and facilitate storage of representations specifying visual attributes of environmental stimuli, namely representations of words through graphic symbols, contribute significantly to the reading process (Vellutino et al., 2004). In particular, visual coding processes in combination with linguistic coding processes which include phonological coding (the capacity to use speech codes aiming to represent information through words), morphological and semantic coding (the capability to store information concerning concepts represented by words), syntactic coding (the capacity to organize words in sentences based on word order rules) and pragmatic coding (the capability to use language as medium of communication) facilitate associations between the spoken and the written language. However, problems with visual coding processes prevent learners from identifying sight printed words as lexical units (that include meaning), and may cause difficulties in reading and comprehension.

In considering auditory explanations, the recent anchoring deficit hypothesis suggests that dyslexic pupils' sensitivity to environmental sounds which easily distract them from their task especially within a noisy environment is attributed to

learners' failure to detect and implicitly anticipate repeated signals and to focus on the expected target (Banai and Ahissar, 2010). Research on potential auditory deficits in dyslexic children concluded that pupils with dyslexia experience difficulties with speech perception causing them a temporary deficit with temporal processing although they do not have pervasive deficits in auditory temporal processing (Vellutino et al., 2004). The difficulties in speech perception also cause difficulties in phonological processing affecting the reading process. Despite the influence of the visual and auditory explanations of dyslexia, the working memory deficit hypothesis appears to gain ground constantly among the medical theories.

Working Memory Deficit Hypothesis

Working memory is associated with storing and processing information for a short-time during demanding cognitive activities (Berninger et al., 2008; Gathercole et al., 2004; Pickering and Gathercole, 2004). According to the Baddeley and Hitch model, working memory is constituted by a number of interacting but temporarily separate memory systems with the most important being the central executive which is a limited-capacity processing system. The central executive refers to various cognitive processes, including the regulation of information flow through working memory, the coordination of access and retrieval from more permanent knowledge systems, namely long-term memory, the scheduling of various cognitive activities, and the way actions are controlled. It consists of three subsystems: the phonological loop which relates to the temporary storage of limited amounts of information, the visuo-spatial sketchpad which refers to the representation of information with visuo-spatial features, and

the episodic buffer which integrates information from various resources of cognitive systems, involving the long-term and temporary memory systems.

The phonological loop and the central executive, it is suggested, are highly related to the acquisition of new knowledge and complex skills. More specifically, the phonological loop contributes to learning the phonological structure of new words, while severe impairments in it cause poor vocabulary acquisition and learning difficulties. A weak central executive also prevents learning in scholastic areas, including literacy, vocabulary and numeracy. In particular, words are stored in three forms: a phonological form which is related to constituent sounds of spoken words, a morphological form that refers to meaning, grammar and semantic features of the word, and an orthographic form which is associated with constituent letters of the written word (Berninger et al., 2006; Richards et al., 2005). As a result, a deficient working memory results in the use of problematic phonological and morphological forms of word, influencing significantly its orthographic form.

A deficit working memory also has implications for another component of the executive system, the controlled attentional processing which refers to the maintenance of task-relevant information in case of interference or distraction (Lee et al., 2010). In other words, children identified with difficulties in their working memory appear to find it challenging to control their focus under circumstances that distract them, namely a noisy background, constraining significantly their learning (Howes et al., 2003; Lee et al., 2010). However, a weak working memory is not limited to reading and writing tasks as it can affect the capabilities of retrieving and verbalizing everyday information, illustrating that it is a complex and multifaceted problem (McNamara and Wong, 2003). This

theory in combination with current efforts to associate dyslexia with problems in phonological awareness tends to be used mostly in cognitive explanations of dyslexia.

Phonological Deficit Hypothesis

Some of the recent theories of dyslexia emphasize pupils' language-based problems as the main cause of their learning difficulties (Catts et al., 2002; Catts and Kamhi, 2005; Snowling, 2001, 2005; Stanovich, 1996). In particular, language is considered as a highly complex function with multiple dimensions, including phonology (units of sound), morphology (units of meaning) and syntax, as well as pragmatics which refer to the purpose or usage of language, and semantics which concern overall meaning (Uhry and Clark, 2004). Therefore, impairments in some of its functions are used to explain learners' deficient reading and writing skills.

The phonological deficit hypothesis suggests that difficulties in phonological processing and decoding can cause errors and confusion about letters and their sounds (Grant and French, 2010; Reid, 2005; Snowling, 2000; Stanovich, 1996; Stein, 2001). Phonological processing is directly related to reading acquisition in an alphabetic written system which is based on correspondences of grapheme and phoneme through phonological representations (van der Leij and van Daal, 1999; Vellutino et al., 2004). For example, pupils start to represent sound segments within words, namely phonemes and syllables specifying distinctive characteristics of those sounds, such as the sounds of *b* and *d* (Goswami, 2000). A potential deficit in phonological processing provokes challenges in word-identification processes during reading, influencing significantly decoding skills

(van der Leij and van Daal, 1999; Vellutino et al., 2004). Consequently, difficulties in decoding processes result in insufficiencies in phonological decoding (letter-sound), alphabetic decoding, print decoding (printed words), reading comprehension, spelling and phonological awareness (Prior, 1996; Snowling, 2000, 2001; van der Leij and van Daal, 1999; Vellutino et al., 2004).

One of the phonological processing capabilities, phonological awareness, is related to the metacognitive ability to concentrate on the form of words instead of their meaning and to comprehend that a series of sounds in a specific sequential order constitute spoken language (Uhry and Clark, 2004). Its development is crucial for reading and literacy acquisition as it enables children to apply their knowledge about phonics in new contexts during reading and writing (Hatcher and Snowling, 2002; Snowling, 2001). Accordingly, possible difficulties in phonological representations prevent the creation of connections between phonemic sequences of spoken words and letters of printed words as well as affecting the generalization of this knowledge in learning new words (Goswami, 2000; Hatcher and Snowling, 2002; Snowling, 2001). For this reason, the phonological deficit hypothesis tends to be the most intensively researched area and is now understood as precisely associated with dyslexia's capacity to allocate learners' problems to linguistic issues.

The need for a medical explanation of pupils' low performance in literacy led to relevant mechanisms which appear to encourage equal access to education for pupils with difficulties in learning. Diagnostic assessments in association with the provision of intervention programmes are two measures which have been introduced through educational policies so as to ameliorate pupils' difficulties in learning. Practical problems, though, caused by their insufficient functioning tend

to complicate further the situation in inclusive education, resulting in the opposite to what was intended. Diagnostic processes and educational provision as it is realised within the context of inclusive education are analysed below.

Diagnostic Assessment and educational provision for specific learning difficulties: two interrelated processes

The immediate consequence of the predominance of medical theories was the establishment of diagnostic assessments for pupils who present some learning characteristics of specific learning difficulties, with the intention being to assign special support to them. Diagnostic assessment is used to identify pupils' learning characteristics, knowledge, skills, capacities, strengths and weaknesses as well as learning difficulties and aims to provide initial guidance and advice to the learners and teachers concerning a specific course of study (Isaacs et al., 2013). Paediatric examination of children's health history, psychometric measurement of their academic achievement through cognitive diagnostic testing and clinical assessment of their psychological profile are involved in the generation of individual learning and behavioural profiles (Isaacs et al., 2013; Prior, 1996).

In particular, educational psychometric assessment refers to the principal areas of intelligence, including language abilities, attention and memory, visual-spatial issues and motor coordination (Prior, 1996; Reid, 2005). As a result, basic screening tests, namely the Wechsler Intelligence Scale for Children (WISC), Intelligence Quotient (IQ) tests, the British Ability Scales (BAS) and the Stanford Binet tests are used in the identification of problematic areas in children's

learning processes (Prior, 1996). However, their theoretical foundations have been criticised. For instance, these tests' technical accuracy in terms of validity and reliability as well as the prevalence of cognitive learning theories in their conceptualisation and the range of individual items within the tests tend to cause disagreements (Isaacs et al., 2013). Characteristically, IQ tests, namely the Wechsler Intelligence Scale of Children (WISC), continue to be used in identifying pupils with specific learning difficulties, despite the assurance that the majority of definitions include a stipulation that children's IQ is above 80 and that the cause of their difficulties is associated with particular cognitive impairments, such as short-term memory (Grant and French, 2010; Prior, 1996; Reid, 2005; Snowling, 2000). This situation, though, is justified either through a limited critical discourse about the use of IQ tests or because there is little research evidence resulting in comparisons of children's scores with intelligence norms (Elbeheri and Everatt, 2009; Howe, 1997; Stanovich, 1996).

Inconsistency between the principal purposes of the construction of those tests and the present reasons for their use points to their inadequate validity. More specifically, the first intelligence test, which was devised and published in 1905 by the psychologist Alfred Binet and his student, Theodore Simon, was used as a diagnostic instrument to measure pupils' everyday practical skills and knowledge, aiming to differentiate learners of normal ability from their peers who were far below the average and had been allocated to special education classes (Howe, 1997; Mackintosh, 1998). This test contained 30 items of various mental tasks, including memorization of sentences and lists of digits, following instructions, problem-solving, identification of similarities and differences between objects, filling in missing words in sentences and copying various designs by memory (Howe, 1997). The construction of these tests was not based

on any definition of intelligence; in contrast it emphasized only children's practicality, ability to deal with the world, and common sense (Howe, 1997; Mackintosh, 1998).

Retaining the main content of those tests, modern testing items tend to measure approximately the same pupils' abilities and skills, arguing, though, that these assess their intelligence. For example, the Wechsler Intelligence Test for Children, which was designed by Wechsler and Bellevue in 1939 and since then has been revised four times, contains 15 subtests organized in four categories: Verbal Comprehension Index (including subtests of vocabulary, similarities and comprehension), Perceptual Reasoning Index (including subtests of picture concepts, block design, word reasoning and matrix reasoning), Working Memory Index (including subtests of coding and digit span) and Processing Speed Index (including subtests of symbol search and letter-number sequencing) (Kaufman et al., 2006; Kezer and Arik, 2012). Its fourth version also includes tasks which measure problem-solving ability, emphasizing visualization, processing speed and working memory. Additionally, some subtests are not time-limited, while some items are either age-based or not (Kaufman et al., 2006). Technical issues, though, in guidelines of marking children's responses in some test items characterized by insufficient clarity are considered as significant design weaknesses because they influence the results and provide invalid summaries of children's academic achievements (Kaufman et al., 2006; Kezer and Arik, 2012; Watkins et al., 2007).

Nonetheless, the extensive emphasis on intelligence testing due to the growth of the psychological testing movement has created a state of affairs in which human intelligence is perceived as a measurable quality that is possessed in

different degrees and constrains individuals' mental capabilities determining their potential to succeed at difficult cognitive tasks and problems (Howe, 1997). Consequently, although a score in an intelligence test indicates a child's performance on a number of questions selected for practical reasons without reflecting their quality of intelligence, it appears to be overvalued, and in addition has significant effects on children's lives (Howe, 1997; Mackintosh, 1998). Furthermore, reliability issues concerning this measurement emerge from those tests being repeated under the same conditions and resulting in different scores (Mackintosh, 1998).

Other factors, such as parental background and education, socio-economic status, family size, physical location and environmental factors as well as historical events and children's experiences are a determinant of their IQ score, and are not considered by those who devise these intelligence tests (Howe, 1997; Mackintosh, 1998). Their purpose, though, to rank people and categorize them, 'replacing all that is unique about them with a single number', allows claims to be made that people's differences in their capacities are innate, immutable and measurable, and in addition, this has the effect of justifying social inequities and inequalities (Howe, 1997, p.9). Further to this, pupils' identification with learning difficulties through a comparison of their skills and intelligence with the normal average population is questionable as there is not an explicit definition of average intelligence (Elbeheri and Everatt, 2009; Snowling, 2000). Furthermore, it is widely accepted that children are considered as bright pupils when they learn to read easily and fast, reflecting a potential connection between intelligence and reading attainment (Snowling, 2000). Accordingly, when pupils' reading attainment is found to be below the average expected cognitive ability then it tends to indicate learning difficulties. Nevertheless, these kinds of

measurements contribute to children's current learning profiles and cognitive development, without illustrating their potentiality or potential progress they could make, as other factors influence their learning, namely their familial socio-economic status or their learning environment (Elbeheri and Everatt, 2009).

The influence, though, of these types of assessments, which are based on standard developmental levels, continues to grow within education, and in combination with the standards agenda they increasingly emphasize the importance of pupils' adjustments to particular learning attitudes. The origins of standardized learning and assessment go back to Jean Piaget's theory about cognitive developmental stages. In particular, this theory considers that all children develop their intellectual and thinking skills by passing through the same stages, while their completion can be deviated from only a little in terms of pupils' ages (Mooney, 2000). The four stages which correspond to specific chronological ages include the sensorimotor stage (birth to 18 months), the preoperational stage (18 months to 6 years), the concrete operational stage (6 years to 12 years) and the formal operational stage (16 years and older) (ibid.).

The general characteristics of the concrete operational stage, which focuses on primary school pupils, involves children's reasoning in forming ideas, while their thinking is limited to familiar events and objects in contrast to the hypothetical and conceptual thinking of the next and last stage. For instance, at that stage primary pupils develop a clear image and understanding of the nature of numbers as well as the ability to reverse their thought, namely if (a=b) then (b=a) (Boyle, 1969; Mooney, 2000). Furthermore, children work to the actual and direct experience for their learning and they gradually start to think in a more abstract way which enables them to calculate, add, multiply and subtract in their mind

without help from their fingers. Additionally, children tend to solve certain problems, to find differences in classes of objects and to deal with groupings and lattices (Boyle, 1969). The above learning characteristics appear to shape education and curriculum objectives creating stereotypes about the sequence of learning steps that pupils need to follow. Children's possible deviations from these standards automatically categorize them into special educational needs groups, either as gifted or disabled pupils based on their higher or lower achievements respectively.

This situation, though, which was influenced by Piaget's efforts to develop an evolution of learning, like Darwin's biological evolution of the species reflecting his background in biology, has been strongly criticized (Illeris, 2007; Pass, 2004). In particular, Piaget's intensive focus on children's thinking processes rather than on their social relationships and feelings resulted in an overestimation of mathematical, logical and scientific thinking as against other kinds of cognition, and this has provoked numerous controversies (Boyle, 1969; Illeris, 2007; Mooney, 2000). Many objections to the research design of his theory have also been expressed. Piaget's cognitive developmental stages emerged from his observations on his own three children, which raises questions about the representativeness of the sample, the validity and reliability of this scientific research and the generalisation of his findings (Boyle, 1969; Mooney, 2000). Similarly, adequate statistical analysis from Piaget's experimental reports and information about the way he conducted his experiments were not provided which would have allowed the use of the same methods by other researchers, making questionable the validity and reliability of his methods and findings (Boyle, 1969).

Despite, though, sound evidence about the inadequacy of Piaget's theory, it continues to be applied within educational institutions, and has had negative implications for pupils' learning, especially on those identified with learning difficulties. As Michel Foucault suggests, pupils with special educational needs are placed under constant mechanisms of surveillance by teachers, head teachers, specialists and parents enabling those professionals to acquire knowledge about their disability and their learning process and progress (Allan et al., 1998). Consequently, official records and statements of professionals' judgements on pupils with special educational needs are produced aiming to separate them from their peers in terms of special provision. Children who are not officially identified as having special educational needs but present some characteristics in their learning appear to be disadvantaged because they are not given a label that explicitly distinguishes them from the rest, which allow them additional support. Standardized examinations also tend to contribute to this situation by categorizing and establishing pupils as cases that need to be corrected, trained, normalized, classified or excluded from forming power relationships within education (ibid.).

Diagnostic assessment and intervention programmes constitute such mechanisms of pupils' categorization. In particular, the assessment process for pupils' diagnosis indicates a sequence of specific steps commencing from communication between children's parents and their teachers or the school's SEN Coordinator (SENCO), aiming to decide the kind of special support that can be allocated to them (Government, 2013). If the additional assistance does not have the expected results concerning pupils' progress, then the school can ask the local council or local educational authorities (LEAs) for SEN diagnostic assessment. The local council's decision about children's eligibility for an

assessment is delivered to parents within six weeks and in the case of their approval, pupils' assessment is realized by a council's team of experts, including educational psychologists, doctors, their school's head teacher and the SENCO. Pupils' parents can also be present during the whole process of assessment, for example in tests and interviews.

Significant delays, though, due to that long process have been noted, and these have an influence on pupils' learning and progress. For instance, it was reported that 'many adults with dyslexia feel that they have had humiliating and damaging experiences of school education' because they were not identified early at school, resulting in a lack of teaching adjustments to meet their needs and in their stigmatization as 'thick, stupid or lazy' pupils (Department for Education and Employment, 2000, p. 18). Therefore, a new assessment process which can ensure easier and unbiased access to pupils' inclusion through a less stressful system for pupils and their parents and at the same time providing more information about services and expertise support was recommended (Department for Education, 2011; Department for Education, 2011a).

In line with the reconstruction of the diagnostic process, new performance indicators for pupils with special educational needs informing their progress and the quality of their support by schools was suggested as well as improvements in teacher training, suggesting that the current support system contributes to their failure (Department for Education, 2011). Hence, the importance of provision aiming to ensure their progress with reasonable expectations about their attainment considering their difficulties and needs was emphasized. Furthermore, a flexible assessment of pupils with special educational needs based on their individual needs, difficulties and progress rather than on the

current criteria of National Curriculum Levels and Performance Scales was regarded as a necessary measure (Department for Education, 2011a). This special provision is aimed at ameliorating pupils' performance through targeted teaching support on the identified areas of their difficulties. In England it is based on the 'Individual Education Plan' (IEP), which derived from the 1975 American model for special education, and it concerns the actions undertaken by schools and local educational authorities for pupils with special educational needs in order to respond to their learning difficulties (Wearmouth, 2000).

From another perspective, though, intervention programmes that are addressed to particular groups of pupils who tend to present differences in their learning may result in the reproduction of normality, regularity, accountability and categorization within mainstream inclusive education (Annamma et al., 2013). Consequently, these kind of programmes designed according to various medical theories of learning difficulties lead to pupils' assimilation and treatment through different strategies, including instruction, modelling, decoding, learning targeting, memorization, metacognition and planning (Bosson et al., 2010; Chapman and Tunmer, 2003; Hammond, 2004; Hardaker et al., 2010; Kohnen et al., 2010; Larkin and Snowling, 2008; Reid and Wearmouth, 2002; Richards et al., 2005; Rupley et al., 2009). A negative implication for pupils involves misinterpretations of their capacities and intelligence resulting in their labelling and social stigmatization, influencing significantly their self-image as learners (Isaacs et al., 2013). Hence, in the context of an intensive emphasis on sameness of pupils' performance in standardized examinations, an image of pupils as patients who need immediate support so as to achieve the same levels as their peers is created for children who experience difficulties in their learning, affecting their self-esteem and eventually their learning.

According to various psychological theories concerning the self, pupils' self-esteem can be influenced significantly by other peoples' perspectives on them. In particular, individuals realise and understand, perhaps only partially, their internal states, including their own attitudes and emotions, by inferring them through observations of their own behaviour and the conditions in which this behaviour occurs (Bem, 1972). This leads to the development of their self-perception, involving feelings, thoughts, motives and self-regulatory strategies, in which an important role is played by the individuals' relations with significant others. Specifically, any individual who has a deep influence on a person's life is defined as a significant other (Andersen and Chen, 2002). In a person's life, their personality and self are shaped mainly by experiences with significant others, who have motivational and emotional relevance for the self (Andersen et al., 1998; Higgins, 1987). Their emotional and motivational significance can be explained by their self-regulatory function. In other words, motivational orientations and emotional outcomes usually depend on the standards, expectations and responses of those who are closest to them (Andersen et al., 1998; Downey and Feldman, 1996).

This also refers to socially shared beliefs about the standards that significant others have for the person, which can include beliefs concerning a significant other's wishes about whom one ought to be or about whom one should ideally be (Higgins, 1996). For example, the beliefs of the educational system, which represent how an ideal learner needs to learn and perform, tend to be expressed through the educational standards and expectations of the National Curriculum. This, though, can have a considerable influence on people's motivations, as particular goals and motives seem to shape the development and function of self and personality (Andersen and Chen, 2002). For example, the basic human

motivation is the need for human connection, which can be conceptualised as being approved of by the significant others, resulting in profound consequences for individuals' behaviours (Ayduk et al., 2000; Bandura, 1986).

Simultaneously, other fundamental motives operate, namely needs for autonomy and for competence or mastery (Andersen et al., 1997). These needs appear to facilitate the individual's growth, integration, social development and personal well-being (Ryan and Deci, 2000). Research has also shown that environmental factors can play a fundamental role in self-motivation, personal well-being and social functioning, especially when the social environments tend to be antagonistic towards these tendencies, influencing learning, personal experience, performance and well-being. Consequently, social-contextual events, namely communication and feedback that contribute to feelings of competence during action can enable intrinsic motivations for that action. For instance, research has shown that positive performance feedback can enhance intrinsic motivation, whilst negative performance feedback can decrease it affecting the individual's perceived competence (ibid.).

Furthermore, tangible rewards, deadlines, threats, imposed targets and directives tend to reduce intrinsic motivation because they are imposed externally in contrast to choices, opportunities of self-direction and acknowledgement of feelings which enhance intrinsic motivation as they allow autonomy (ibid.). Accordingly, people's efforts (e.g. parents or teachers) to foster specific attitudes in others can result in a range of the others' behaviour, including lack of motivation, unwillingness, passive obedience or active commitment. This also affects the internalisation and integration processes which are central issues in childhood socialisation. Specifically, internalisation

concerns people's adoption of a value or regulation, whereas integration refers to the transformation of that regulation into their own, which eventually will originate from their sense of self. Therefore, the importance of significant others derives mostly from their self-regulatory function for the individual's own emotional life by causing, for example, disappointment, fears or hopes (Higgins et al, 1995; Higgins, 1996).

Additionally, the above situation can have immediate consequences on the person's locus of control and eventually his/her self-esteem. In particular, an individual with an internal locus of control tends to perceive reinforcement as an outcome of his/her responses to attribute the reinforcement contingencies to his/her abilities and skills, while a person with an external locus of control tends to consider reinforcements as unrelated to his/her skills, attributing the outcomes to luck or chance (Hiroto, 1974). The latter attitude seems to be related to learned helplessness where pupils appear to associate their positive learning outcomes to their luck or to another person, namely the teacher instead of their abilities. Accordingly, their self-esteem, which refers to a person's experience of being able to solve problems capably, tends to be characterised by low levels, influencing significantly their behaviour, experiences, learning, relationships with others, personal targets and understanding of themselves (Mruk, 2006). Immediate consequences of low self-esteem also include anxiety, anger, hostility, shame and guilt, social anxiety, loneliness and embarrassment (ibid.).

Moreover, stereotypes that significant others may carry can influence significantly individuals' self-perception and eventually motivation and self-esteem. In particular, a stereotype is defined as a socially shared set of beliefs concerning characteristics of members of a social group (Greenwald et al.,

1995). For instance, a stereotype of a good reader appears to include fast reading pace. Although stereotypes are fixed impressions that do not necessarily represent reality, they tend to guide the judgement and action of individuals as well as to construct attitudes (Katz and Braly, 1935). Therefore, significant others, namely teachers, parents and peers, can affect negatively the self-esteem of pupils who experience difficulties in their learning and they appear to present a different learning attitude from the standardised image of the ideal learner as it is described through National Curriculum expectations.

Pupils' sameness in learning and assessment which derived from Piaget's learning theory continues to determine educational systems and pedagogies within classrooms. Labelling and social stigmatisation of children who present differences in their learning profile also remains as an omnipresent threat due to the reproduction of standardized developmental stages in education.

The theories which underpin the curricula are also play an important role in the above situation. The following part discusses the main curriculum theories and models and how they conceptualise learning.

Curriculum Theories

A curriculum is associated with each country's constitution and socio-economic needs. Within democratic societies, principles of respect for every individual's freedom, equality and adequate scope for citizens' participation and involvement in social actions, decisions and policies inform individuals' conduct towards other social members and the management of society (Kelly, 2009). Equality is understood as having a reciprocal relationship with justice. Justice refers to

anything that aims to generate or protect the happiness of political society, which is constituted by equal and free individuals, through the satisfaction of citizens' needs (Aristotle et al., 2004). Furthermore, differences among citizens and plurality in their opinions are viewed as a natural and acceptable democratic element (Aristotle, 1962), which challenge and change the legitimacy, validity, the content and the form of ordinances (Carr, 2003). In other words, aiming to a more democratic form of life, the interpretation of democracy needs to be challenged and revised by its active citizens.

As a result, a curriculum in such a society is planned so as to encourage equality and entitlement to education for all, enabling pupils' empowerment and emancipation in developing a real sense of participation and involvement in the polity (Kelly, 2009). Stenhouse (2003, p. 208) suggested that 'education enhances the freedom of man [sic] by inducting him into the knowledge of his [sic] culture as a thinking system. The most important characteristic of the knowledge mode is that one can think with it'. Nevertheless, education in modern democratic societies tends to work through curriculum and assessment notions of intelligence, competition and categorization among pupils instead of collaborative problem-solving activities and critical thinking (Dewey, 1916).

In this way, though, how and what pupils think seems to be controlled or directed through the requirement of sameness in attainment and knowledge (Carr, 2003). Popham emphasizes in his advocacy of curriculum development based on an objectives model that opponents of this model suggest that 'it is somehow undemocratic to plan in advance precisely how the learner should behave after instruction' (cited in Stenhouse, 2003, p. 208), while Kliebard sets it out more strongly: 'we begin with some notion of how we want a person to behave and

then we try to manipulate him [sic] and his environment so as to get him to behave as we want him to' (ibid., p. 208). Sameness in performance, thinking and knowledge allow and facilitate pupils' measurement and teachers' accountability but it does not reflect democratic principles and values.

The above situation derives from the modernist-vocational ideology which considers that education has a mainly economic reproductive function (Carr, 2003). More specifically, it supports the reproduction and regeneration of economic and industrial life's patterns that are intrinsic to modern technocratic society and it is determined by open competition in which equal opportunities to the acquisition of meritorious rewards for achievements, efforts and talents are offered to all. Accordingly, within this ideology the curriculum is designed to provide appropriate skills and knowledge for future consumers and producers in a market-driven economy, emphasizing pupils' preparation for the world of work. Furthermore, it criticises traditional distinctions between academic knowledge and practical experience as well as between training and education. Hence, it suggests the transmission of instrumental knowledge and practical skills relevant to working life in contrast to a learner-based curriculum of a liberal-progressivist ideology and to text-based curricula of a classical-humanist ideology.

On the other hand, the classical-humanist ideology argues that education's main function is cultural as it aims to ensure cultural continuity and social stability (Carr, 2003). This suggests an academic curriculum based on classical subjects, namely history and literature, which aims to prepare an intellectual elite for protecting the cultural heritage. Learning is text-based and is realised through didactic teaching approaches, and it is evaluated through formal examinations that assess pupils' knowledge, acquisition and mastery of cognitive skills.

Opposed to this is the liberal-progressive ideology which considers as the principal purpose of education individual freedom and rational autonomy (ibid.). Learning is viewed as a process of rational development instead of as a process of cognitive acquisition. Consequently, the curriculum is based more on pupils' developmental needs than on social and cultural needs, and its content is determined by pupils' interests and needs. This learner-based curriculum limits the role of academic subjects and the passive transmission of knowledge and it considers the teacher as a facilitator of pupils' personal enquiries stimulating their natural curiosity.

Based on the above, the modernist-vocational ideology tends to formulate the current trends in education illustrating that the ideology, which underpins educational purposes, influences not only the establishment of relevant learning theories within education, but also its curriculum design and development.

Curriculum Models

Basil Bernstein (1996) has identified two principal curriculum frameworks, the performance model and the competence model, which emphasise differently diverse curriculum dimensions. The performance model, that seems to dominate curriculum development worldwide, derives from the behavioural objectives movement. Its major elements include traditional forms of knowledge, strong and marked boundaries between subjects and between various pupil types, and pedagogic practices that are based on explicit recognition and realization rules. This curriculum model tends to promote normality in learning and performance which can be seen apparently through intervention programmes provided to

children with special educational needs so as to meet standardized expectations and requirements.

In contrast, the competence model allows learners' partial control over curriculum elements, namely the pace, selection and sequence of topics, interrupting in this way the normality and regularity of the performance model. Hence, pupils become more active in their engagement with knowledge and develop their self-regulated skills which enable their independent learning. Nevertheless, although the former model determines curriculum development, some elements from the competence model which refer to children's metacognitive skills and self-regulated learning appear to be involved in its purposes and learning targets. This illustrates a pervasive function of educational policies to foster independent learners who have self-awareness and responsibility for their own learning process, even though the prioritization of their successful performance according to standardized learning objectives continues to overshadow the above attempts.

The curriculum can also be planned in various ways. As Kelly (2009) notes, curriculum planning has four dimensions: objectives, content, procedures and evaluation, while the actual focus and priority on them define the planning models. The first model foregrounds the acquisition of curriculum content by pupils as its main purpose and it focuses only on the effective transmission of knowledge through different means, namely target planning, emphasizing learners' evaluation based on their attainment. The second model, which is known as an aims-and-objectives model, prioritizes the purposes of the curriculum. Therefore, its content is chosen in accordance with its efficacy at enabling pupils to achieve these purposes and it is structured through objectives that frame children's evaluation as to whether these objectives have been

achieved. The third model is the process or developmental model and it highlights the way that educational experiences are organized. Education is conceptualized as a series of developmental processes, whilst curriculum content, procedures and methods are selected so as to promote these developmental processes. Evaluation practices focus on both the suitability of the curriculum content and procedures, which have been selected, and on the assessment of possible development that might have been occurred. A fourth model delineates curriculum as praxis serving specific interests, for example, collective human well-being, whilst it specifies an end-point and considers instrumentalism as its main theme (Scott, 2016).

The pedagogical and assessment approaches which are used within learning environments can either minimise pupils' stigmatisation by acknowledging and focusing on individual learning needs, or magnify their existing learning weaknesses considering them as abnormal learning attitudes. In the following section some of the principal learning models and assessment methods are discussed.

Learning Models

The main learning models comprise instruction, observation, goal-clarification, concept-formation, problem-solving, practice, simulation, peer-learning, coaching, mentoring, reflection, metacognitive learning and assessment for learning.

An instructional model refers in the first instance to the introduction of learning objectives for pupils. During this process, teachers attract the attention of their

pupils and they connect children's previous learning with current information via recall of their prior knowledge (cf. Gagne, 1985). Then, the presentation of the new content is realised as well as its internalisation through various scaffolding processes. Stimulation of learners' performance and provision of feedback on it which allow them to make corrections are also involved. The process of instruction is completed with the evaluation of pupils' corrected performances.

Observational models focus on pupils' learning of behaviours and skills (cf. Bandura, 1977). Teachers display within their classrooms the actions that children need to imitate so as to apply them in various contexts. Their demonstration can be realised in three ways: first, through live modelling (e.g. acting out or displaying the required behaviours), second, through verbal instructions which describe and explain the behaviours, and third, through symbolic modelling (e.g. expressive performances and various scenarios). After observing the required behaviour/skill which has been performed by teachers, learners compare that performance with their own behaviour/skill and make the necessary adjustments, substitutions or modifications to its current form through various scaffolding processes. They are encouraged to practise their new behaviour/skill within an artificial environment with support that is then gradually withdrawn. At the end, learners transfer the newly acquired behaviour/skill to the real environment.

The model involving goal-clarification aims to present and clarify the learning purposes and successful criteria to and for learners (Zimmerman and Schunk, 2011). This involves teachers' providing information and explanations about the learning objectives that are planned to be taught in a session or series of sessions as well as the expectations for learners' successful accomplishment of

the tasks. An explicit indication of the standard and its meaning in combination with a description of learners' mastery of that standard can support pupils' learning processes enabling their further improvement through the amelioration of their weaknesses, and their reflection concerning their progress in relation to the curriculum (Meece et al., 2006). In the concept-formation learning model, learners are encouraged to process and shape the information and ideas that they have acquired, which has been derived from various sources, namely books and the internet, in a way that allows their partial or complete absorption.

The problem-solving model encourages learners' active engagement with finding solutions to given problems instead of being offered the answers (Anderson, 1993). Pupils through a series of interrogative processes concerning various tasks and activities use their skills of processing information (e.g. comparisons, analysis, synthesis) and discover solutions to the various problems they are given. Learners' mistakes during that process are an important and acceptable part of their learning processes as by assessing in a formative way their own work against the curriculum, they develop their own learning strategies and understand in a deeper sense their internal processes related to their own learning.

The learning model of practice can also contribute significantly to the enhancement, reinforcement and deepening of pupils' learning of skills and/or behaviours. Through practice learners have the opportunity to be involved in the same activity a number of times so as to ensure the development of relevant learning strategies and comprehension. Simulation is another learning model. Learners reproduce an activity or an event that they have learned through role-plays, scenarios, computer games, presentations and modelling. In this way, the

real event is simulated offering the opportunity for pupils to explore it further including conducting experiments within it, to understand more deeply the process and to internalise it (Scott and Evans, 2015). Simulation, also, prepares learners for real-life events through trials, making errors, and rehearsing skills and performances within safe situations without experiencing their negative implications in real-life contexts.

The following three learning models concern pupils' learning under others' support and/or guidance. In particular, the peer learning model exhorts pupils to collaborate on activities, namely problem-solving, and provide to each other emotional support when activities are demanding, feedback of their performance and peer tutoring (Falchikov, 2001). Through this approach, learners exchange ideas, examine their acquired knowledge and co-construct learning within equal relationships compared to power relations between teachers and learners. In contrast, the coaching learning model takes place between an expert and a learner usually within a one-to-one context (Collins et al., 1989). It includes expert's modelling of the activity and learner's practice under expert guidance and support mediated by scaffolding processes until the learner corrects his/her performance without any support. The learner is encouraged to articulate that process and to reflect on this by exploring other potential contexts where he/she can undertake that kind of activity. Similarly, the model of mentoring refers to a one-to-one informal transmission of knowledge between the mentor, who has greater knowledge, experience and wisdom, and the learner (Aubrey and Cohen, 1995). Mentoring, though, compared to coaching, focuses on learner's management of the life-course within a long-term period aiming to enlarge his/her networks, while coaching emphasizes the learner's changing

performance according to a particular goal within a short period (Clutterbuck and Megginson, 2005).

Reflection is closely related to metacognitive learning. It is a process where the learner recalls, examines and evaluates his/her own thinking processes, applied learning strategies, knowledge and understanding of being actively involved with an activity. Critical reflection aims to transform learning which supports the development of metacognition (Eames and Coll, 2010). It is an internal practice which can become a learning strategy when it is facilitated by various approaches and techniques, namely discussion. The models of metacognitive learning and assessment for learning (formative assessment) are discussed below.

Metacognitive learning

Metacognition has been defined as cognition, knowledge and control of cognitive abilities and activities (Brown, 1987; Flavell, 1987; Kluwe, 1987). Flavell expanded this definition and conceptualised metacognition as having two main concepts: first, there is metacognitive knowledge, which refers to combinations of information concerning three knowledge categories - person, task and strategy variables based on memory functions, and second, the metacognitive experiences which can be any kind of effective or conscious cognitive experience derived from already stored metacognitive knowledge, namely remembering a strategy of problem-solving (Flavell, 1987; Griffith and Ruan, 2005; Kluwe, 1987; Larkin, 2010). The person variables refer to a person's acquired knowledge and beliefs of themselves and others as cognitive human

beings, whereas task variables concern knowledge and information about tasks (Flavell, 1987; Griffith and Ruan, 2005; Larkin, 2010). Additionally, the strategy variables include knowledge concerning which strategies can enable the person to achieve their targets.

The development of metacognitive skills, including checking, monitoring, planning and prediction, was also emphasized as they enable individuals to organize and monitor their own thinking through the operation of specific mental processes (Brown, 1987; Kluwe, 1987). Metacognitive skills were also assigned to the component of an executive information processing system which includes executive decisions (that are addressed to monitoring or controlling their own ongoing cognitive activities, providing information about them and their current cognitive state), executive control (that involves classification of cognitive activities generating information concerning their type, mode and status, checking steps giving information about the state of cognitive system and activity, and evaluation of cognitive states and activities offering information about their quality) and executive regulation (that concerns decisions about the effort, amount, organization, course and direction of cognitive activity) (Brown, 1987; Kluwe, 1987).

Metacognition is associated with pupils' deliberate control over their own cognitive processes and activities that need a degree of awareness to them (Brown, 1987; Butler, 2015; Larkin, 2010). Consciousness of the learning process emerges when the children become capable of reflecting on their own actions in the presence of an actual event. Therefore, conscious reflection is started from the moment that children consider their own actions and describe them to others, although sometimes erroneously. Pupils' metacognitive

knowledge of themselves as learners begins to be built through their understanding of the link between the use of learning strategies and successful outcomes (Flavell, 1987; Larkin, 2010).

Self-regulated learners choose or create strategies for guiding, controlling and directing their learning and cognitive processes towards specific goals (Zimmerman, 2011). An action can become a strategy when it is chosen among alternatives aiming at the achievement of an intended goal (Griffith and Ruan, 2005). However, in approaching a task, pupils' feelings and emotions derived from previous experiences play an important role in learning apart from cognitive processes (Larkin, 2010). For instance, feelings such as interest, confidence, boredom, doubt or self-efficacy beliefs in relation to the tasks reflect pupils' past experiences in approaching similar tasks (Larkin, 2010; Tonks and Taboada, 2011; Zimmerman, 2011). The above also influences significantly pupils' metacognitive knowledge as well as their motivation for learning.

In reading comprehension it was found that skilled readers can monitor their ongoing performance by revising their reading strategies, determining thus the content of their reading and the way to read it more strategically (Garner, 1987). Additionally, comprehension difficulties are related to pupils' engagement in the reading process without active participation and without strategies. For example, it was found that pupils who ask questions during reading tasks present better comprehension in comparison to their peers who ask questions less frequently (Tonks and Taboada, 2011). Furthermore, cognitive strategies, namely summarizing, organizing graphically, searching for information, generating questions, clarifying unknown vocabulary, making predictions about the plot and monitoring comprehension are associated with comprehension and

metacognition, enabling pupils to self-regulate their reading and comprehension (Randi et al., 2005; Tonks and Taboada, 2011). Pupils' background knowledge based on the text in combination with knowing how to use and adjust previewing strategies for their reading event play an important role in reading comprehension as well (Griffith and Ruan, 2005). Therefore, understanding at the cognitive level includes comprehension processes, word knowledge, strategies and standards of text evaluation (e.g. syntactic, semantic, lexical) which influence comprehension and vice versa acknowledging though individual differences in all the above processes (Hacker, 1998).

Writing is closely related to reading where pupils need to activate additional cognitive processes. In the writing stages, prewriting, writing and rewriting are based on the respective principal processes of planning, translating and reviewing (Sitko, 1998). In the planning process three sub-processes are involved such as goal setting, generating and organizing, whereas the translating process refers to the transformation of ideas into written text and reviewing process to re-examine the written text by the writer comparing it to his/her internal representation of his/her intended text (ibid.). Use of metacognitive strategies, namely what kind of strategies are useful for a specific writing task considering its audience, genre, purpose and meaning, enables pupils to deal successfully with other challenges during writing, such as time limits (Larkin, 2010). Therefore, a variety of self-regulation strategies is needed to be used by writers, which include time planning, goal setting, planning and organizing writing, revising and evaluating the writing, gathering information relevant to the writing topic and self-instructing by setting the next steps in the writing process (Harris et al., 2011). Hence, the development of pupils' metacognition contributes significantly to their autonomous self-regulated learning. This can also be

encouraged through the appropriate assessment methods for achieving the same purpose.

Assessment Approaches

Learning would be an incomplete process without pupils' feedback about their knowledge, skills and attitudes. Assessment contributes significantly to allowing information about learners' performance, understanding and progress in their learning processes. Its various types meet different demands concerning children's learning. For instance, summative assessment emphasizes pupils' performance in the specific context of standardized testing, providing the results in the form of grades (e.g. A, B, C or 0% to 100%) (Brookhart, 2013; Koretz, 2008). The preference for this kind of assessment by education systems is based principally on administrative convenience rather than pupils' learning.

A major impediment for pupils with dyslexia with regards to summative assessment is that the skills and the content that testing is designed to measure are addressed mostly to learners without significant difficulties in their learning (Koretz, 2008). Therefore, biased test construction causes lower performance on the standardized tests of learners identified with dyslexia compared to their peers; their mastery of these skills is lower. A response to this inequality was the development of formative assessment which is based on feedback of pupils' attainment with reference to educational targets, their strengths and weaknesses (Black, 2013; Wiliam, 2013). Its main characteristic is that it compares pupils' performances to their previous ones offering formative comments without the use of grades and marks. Furthermore, it is highly dependent on children's understanding of the learning goal and on their self-regulation ability to monitor

their own learning enabled by discussion with their teachers. However, a possible association of formative assessment with grading influences negatively pupils' self-efficacy because they focus more on the grades which distort the description of their actual skills and abilities (Hattie and Timperley, 2007).

Self-assessment and dynamic assessment are two methods that can benefit pupils' learning by offering deep understandings of their learning processes; however, these are generally misused in classrooms. In particular, self-assessment is directly associated with metacognitive learning allowing children to understand how they learn, and to undertake the control and regulation of their learning by evaluating their own mistakes. In this way, learners become more independent in their learning by understanding the mechanisms of their individual learning processes and increase their engagement with tasks. Dynamic assessment, which was the suggested assessment method by Vygotsky, measures pupil's performance guided or mediated by an expert in order for his/her potential developmental level to be identified (Gredler and Shields, 2008; Palinscar, 2005). It reflects the Vygotskian concept of the Zone of Proximal Development (ZPD) which emphasizes learners' potential development rather than their actual developmental level, rejecting test-based learning (Chaiklin, 2003). Therefore, through dynamic assessment children's developing abilities and future independent performance are indicated and predicted respectively (Palinscar, 2005).

However, apart from the learning arrangements through curriculum design, pedagogy and assessment, other factors also contribute to the creation of inclusive learning environments. In the following part, the theories of inclusive

curricula and the ways that they influence the implementation of inclusion in schools are discussed.

Inclusive Curricula: theories and challenges

Since inclusive schools started to be a new reality in education after the Salamanca Statement in 1994, changes in educational structures and eventually in school curriculum have been realised in order for all pupils to have access to the National Curriculum regardless of their difficulties in learning. Accordingly, educational institutions in their efforts to meet the new requirements for inclusion of pupils with special educational needs in mainstream education developed inclusive practices which enable them to adjust the curriculum demands to pupils' learning needs. However, in practice these measures tend to reproduce a form of exclusion through their emphasis on standardized developmental levels and eventually children's performance, which led to the development of theoretical explanations of the notion of inclusion. Four types of theories - theories of change, organizational theories, conflict perspectives and dilemmatic perspectives - attempt to explain the problematic issues which emerged from the application of inclusive measures within schools.

Theories of change (cf. Fullan, 1992; Fullan and Hargreaves, 1992; Fullan and Stiegelbauer, 1991) explain the notion of inclusion through the perspective of educational change. In particular, educational change is understood as something more than a technical-rational process which encourages teachers to adopt and apply externally-generated innovations superior to existing practice. In contrast, educational change is characterized by social complexity and technical

simplicity which requires individuals' active engagement with it (Fullan and Stiegelbauer, 1991). It is argued that educational change will not occur if people just comply with innovations that are externally devised and imposed. Individuals need to construct their own meanings for the change and to transform their subjective realities so that educational change can be achieved. Consequently, the main preconditions for the success of an educational change process are the exploration and the construction of the meaning of change by individuals within their workplace which leads to cultural transformation. As a result, the problematic development of inclusive schools is caused by the imposition of various inclusive practices by governments, local educational authorities and school administrations on teaching members, while teachers are the main agents who need to construct their own meanings of inclusion as part of an overall cultural transformation of their schools (Ware, 1995).

Organizational theories (cf. Ainscow et al., 2006; Ainscow and Sandill, 2010; Skrtic, 1991; Wenger, 1998) are based on the organizational paradigm and they shift the focus from the characteristics of inclusive schools to how school change processes for inclusive institutions can be managed. According to this framework, the development of inclusive practices occurs not through the adoption of new technologies, but via the involvement of social learning processes which take place within the workplace and influence individuals' thinking and their actions concerning the notion of inclusion (Ainscow and Sandill, 2010). Members of staff are considered as a social group which is engaged with the achievement of a common and shared enterprise, whereas practices are understood as modes of negotiating meaning via social action (Wenger, 1998). Therefore, the reification of intended practice is realized in three ways: first, the development of a specific strategy as part of planned activities; second, a set of guidance for action within

the organization; and third, colleagues' discussions concerning the meaning and practical implications of the strategy. Common language, which permits colleagues to discuss further the aspects of their practice and shared experiences about its development, enables them to articulate what they currently do and define as their next steps (Hiebert et al., 2002). Hence, through collaborative processes within workplaces, which allow rethinking, reappraisal and focus on ways for moving practice forward, teachers re-examine their inclusive practices in terms of flexibility and responsiveness to pupils' diversity, permitting in this way processes of social learning to take place instead of the diktat of specific sets of inclusive techniques.

The theory of conflict perspectives (cf. Ball et al., 1994; Ball, 1997; Fulcher, 1993; Slee, 1995a, 1995b; Vlachou, 1997) focuses on the conflicts which emerge among competing interest groups in complex organizations. Within education, this framework concerns the complexities of educational policy development and its implementation, especially in terms of inclusion and equity. Schools are understood as sites characterized by complex processes, various and conflicting interests, which may prevent processes of consensus and collaboration being established within workplace (Ball et al., 1994; Ball, 1997). Therefore, the implementation of an official policy at a national or local level does not necessarily lead to its linear implementation at school or classroom level, because different interpretations, subversions and replacements of the policy by school agents are involved during the process of turning the policy into practice, which explains the contradictions between inclusive policies and actual practices.

In other words, the notion of inclusion threatens the interests of many groups in society which causes long-term debates and conflicts among its supporters and

its opponents (Fulcher, 1993; Slee, 1995a, 1995b). For instance, although the medical model reproduces pupils' categorization and pathologizes education, it continues to determine inclusive education practices, justifying in this way the existence of some specialists within educational institutions, namely educational psychologists and teaching assistants, who work exclusively with learners identified with special educational needs. Assuming that the medical model was not so powerful and influential within education, the presence of the above experts within mainstream schools may not be necessary. Hence, inclusion is not realized through the advocacy of inclusive policies, the promotion of effective practices and a consensus around shared values (Fulcher, 1993; Slee, 1995a, 1995b; Vlachou, 1997). What is suggested is a continuous struggle between the supporters and the opponents of the concept of inclusion.

Finally, the theory of dilemmatic perspective (cf. Clark et al., 1997; Clark et al., 1999; Gerber, 1995; Lunt and Evans, 1994; Norwich, 1993; Tomlinson, 1996) suggests that the notion of dilemmas can explain satisfactorily the tension between general and special education. In particular, social life is viewed as dilemmatic, because it requires choices among courses of action which are mutually exclusive (Clark et al., 1999; Lunt and Evans, 1994; Tomlinson, 1996). Accordingly, in education a series of dilemmas are involved taking various forms at different places and times (Norwich, 1993; Tomlinson, 1996). For instance, one characteristic dilemma exists among the notions of difference and commonality within mass education in terms of offering the same education to pupils who are different from each other (Clark et al., 1999; Clark et al., 1997). Some of the resolutions of this dilemma include practices, such as special provisions and mixed-ability teaching and learning in the context of a common curriculum for all pupils. Special education is also viewed as an outcome of the resolution of this

dilemma which attempts to correspond to pupils' commonalities through the same education, and simultaneously to take into consideration their differences in needs and learning by locating some of them in different institutions following different curricula (Gerber, 1995).

Furthermore, this theory does not consider the resolutions in dilemmas as their solutions, while their implementation is confronted by the need for the alternatives that they have rejected (Clark et al., 1999; Clark et al., 1997). Hence, schools attempting to apply inclusive measures emphasize the commonalities between pupils while at the same time they are challenged by their differences and offer urgently differentiated provisions. The dilemmas which are addressed to specific individuals and groups derive from the way that social life is organized at a specific place and time, whilst their resolutions cannot be separated from their influences (Lunt and Evans, 1994; Norwich, 1993; Tomlinson, 1996). Consequently, inclusive and special education is seen as a resolution of the dilemma commonality-difference, because mass educational systems tend to be considered as the most appropriate educational systems to offer education to all pupils.

Concluding this chapter, the predominance of the medical model in education has been supported by various mechanisms, which lead to learners' categorisation. Dyslexia has been intensively studied allowing its cognitive dysfunctions to be shown through medical theories that can explain the reasons for the unexpected low performance in literacy by some learners. This situation, also, affects negatively pedagogy, which has shifted its focus to pupils' ipsative assessments. It is more common nowadays for curriculum content and eventually learning and education to be shaped by summative assessment, transforming pupils'

education into training, especially for those who have been identified with specific learning difficulties. This situation also has a profound influence on pupils' self-perception as learners and on the development of their personality according to various psychological theories. Curriculum theories concerning the conceptualisation of learning as well as the inclusivity of learners with learning differences attempt to explain the reasons for the problematic implementation of inclusive curricula within mainstream education. Considering the above, pupils' successful inclusion in education and eventually in society depends on the theories that underpin learning, curriculum design and inclusion. The next chapter discusses the study's research design that was conducted within three mainstream primary schools in England.

Chapter 3: Methodology

This chapter examines the ontological and epistemological perspectives which underpinned the empirical research. It also outlines the methodologies and methods used in the collection and analysis of the data. The underpinning framework for this thesis is moderate social constructivism and the methodological approach that is adopted is grounded theory and case study. Research questions and objectives are provided for evaluation and reflection. The methods of data collection and analysis are described, and the ethical considerations that were taken into account in the research design are explained.

Ontological and epistemological perspectives

The main ontological question that researchers are called on to answer is whether reality exists independently from human activity. Traditional positivist theory, which derives from the empiricist viewpoint that knowledge is perceived through the senses, considers that the real world exists regardless of humans' belief systems (Scott and Morrison, 2006; Scott, 2012). Consequently, it is argued that research needs to be underpinned by a scientific base that allows researchers to access reality through the use of pertinent research techniques which aim to provide true descriptions of the world and to minimize researchers' bias and values (Scott, 2012). On the other side, relativist approaches which emerged from Protagoras's dictum that 'man is the measure of all things' support

the idea that truth cannot be absolute as it is based on human judgment (Bernard, 2000, p. 18). In contrast to naïve realism which defends the view that language reflects like a mirror real objects in the world, radical relativism denies the existence of an external reality operating independently of human actions and activities (Robson, 2002; Scott and Morrison, 2006).

This thesis supports a moderate realist ontology and especially the realist worldview of Wilhem Dilthey, who was not a supporter of positivism. In particular, Dilthey argued against the received notion that since scientific contents and methods are considered as products of human thought, then, truth and reality are also products of human beings acting in the world, and suggested a distinction between the different types of sciences (Bernard, 2000). Dilthey convincingly categorises science into two kinds, the natural sciences and the human sciences, where the latter focuses on people's systems of meanings according to how human beings live their lives. Although the effectiveness of science in studying non-human objects is acknowledged, the emphasis is traditionally on humanity's uniqueness, indicating the need for a non-scientific method for its study. Considering the above, this thesis accepts the existence of an independent reality which is studied in the natural sciences, but it maintains Searle's perspective that social reality is directly related to human beings who interpret and construct it according to their needs (Searle, 1996).

The epistemology of relativism views the construction of reality as a conceptual system associated with culture and society (Robson, 2002). Relativists argue that an objective reality cannot exist because societies and cultures have different conceptual systems, as well as different knowledge structures, which is understood either as an idea and/or interpreter of data or mind's construction.

This cannot be independent of people and this illustrates how it is constructed by human beings within society or individually (Cunningham and Fitzgerald, 1996). This study also supports the position of conceptual relativism, which considers that different societies arrange people's beliefs, thoughts and knowledge in different ways (Scott and Morrison, 2006). These social and cultural arrangements cannot be changed by individual will but only through collective agreement; they do not last for long periods; and they vary as they are based on different conceptual frameworks. Therefore, various cultures and societies over the years organize differently their experiences and the way they access and construct knowledge.

Constructivist theory, unlike logical positivism and essentialism, emphasizes the idea that people cannot know the world directly, but only through its construction by their cognitive processes (Creswell, 2007; Guba and Lincoln, 1994; Schwandt, 1994; Young and Collin, 2004). Knowledge and truth are viewed as social constructions and human perspectives on the world and truth as relative to particular arrangements in society (Guba and Lincoln, 1994; Robson, 2002; Schwandt, 1994). Furthermore, the practical function of knowing is an active procedure in which the human mind processes concepts or abstractions (Schwandt, 1994). In other words, people instead of discovering knowledge construct it by making models, schemas or concepts through which they make sense of their experiences, and these modifications allow human beings to process new experiences.

This thesis rejects the radical constructivist viewpoint where the absence of an independently existing world is supported and accordingly knowledge cannot be achieved by reference to it (Schwandt, 1994; Young and Collin, 2004). For

example, Ernst von Glasersfeld suggests that a real world cannot be known in any sense, although he accepts the existence of ontological reality (op. cit.). In contrast to this worldview, social constructionism claims that the only reality that people can know is language, which constructs reality rather than reflects it. Therefore, something exists in reality only from the moment it is expressed verbally or written through language (Hacking, 1999), while knowledge is understood as a human activity, which represents through language people's relationships instead of their internal processes (Schwandt, 1994; Young and Collin, 2004).

What is supported here then is a moderate social constructivist stance which highlights the social aspect of knowledge construction. It is acknowledged that influences on human construction derived from social relationships and networks, as well as social arrangements, power systems and any kind of discourses are social inventions (Scott and Morrison, 2006; Young and Collin, 2004). Additionally, the social basis of human institutions is foregrounded, such that future social arrangements are determined by those people who have powerful positions in society. Despite the differences between the variants of constructivism, they share a belief in a common research strategy. Constructivist theory suggests that the principal purpose of research is to understand the multiple meanings and knowledge of others in the world (Creswell, 2007; Robson, 2002). In this viewpoint, researchers acknowledge the influences of their social, historical and cultural background in their efforts to explore people's perspectives (Creswell, 2007; Scott and Morrison, 2006). As a researcher, I need to recognise that both my socio-cultural background and those who participated in my research co-constructed at multiple levels the final product of the study in relation to the area of social life that I was investigating. Consequently, during

the research process and the analysis of the findings I had an obligation to minimize prejudice and the influences of my background.

Methodology

Grounded theory within the three case studies was considered as the most appropriate methodology for this research study. Grounded theory is associated with the generation of theory in social research through the systematic analysis of data which relates the theory to its empirical setting (Glaser and Strauss, 1967). Both qualitative and quantitative data are important for the development of theory, although the main focus is on qualitative research because it allows researchers to gain the required information and to deal with various issues that have emerged from the empirical settings.

Grounded theory allows researchers to examine the truth and correctness of evidence constantly through the method of comparative analysis. Four stages of the constant comparative research have been identified: first, the comparison of incidents relevant to categories; second, the integration of categories and their properties; third, the setting of boundaries for the theory; and fourth, writing up the theory. Grounded theory is principally based on a procedure of data collection, called theoretical sampling, which permits researchers to collect data, code and analyse them from the beginning of the research, and at the same time decide simultaneously the nature of data they need to gather next for the generation of their theory (Charmaz, 2006; Cohen et al., 2011; Corbin and Strauss, 2008; Glaser and Strauss, 1967; Morse, 2007; Silverman, 2011;

Strauss and Corbin, 1990). Theoretical saturation is also used to inform researchers that additional data collection may not add anything more to the categories or properties.

Grounded theory is based on two major precepts: firstly, there is a continuous emphasis on the interplay between data collection and theorizing; second, the generation of categories from data collection continues until the researcher feels confident that the meaning and the importance of the data is established and that categories are saturated. The next step is to formulate more general or abstract expressions of these concepts, from which greater theoretical reflection can flow. As data collection and theoretical collection continue, hypotheses about the links between them are 'tested' further in the field. Silverman (2001, p. 71) describes a 'simplified model' of this as follows. First, an initial attempt is made to develop categories which illuminate the data. An attempt is then made to saturate these categories with as many appropriate cases in order to demonstrate their relevance. Finally, these categories are developed into a more general analytic framework, which has relevance outside the setting.

Five key themes emerge: first, the advocacy of pragmatic guidelines for research, rather than inflexible rules; second, that qualitative research needs to be concerned with analysis even more than description, thus emphasizing the central role of the researcher, and that the meanings of data as interpreted by participants are always re-interpreted by the researcher in the course of his/her engagement with the same; third, that theories need to emerge from the empirical research and not be added on; fourth, that the researcher embarks on research with an open mind, and not with pre-established theories to 'test' in the

field; fifth, that the selection of research participants cannot be fully known at the outset of the research. The last point precludes early or definitive sampling.

In the analysis of qualitative data, the key concern of researchers is to ensure that research findings are grounded in the information that is collected in the field and becomes the key data of the study. What qualitative researchers do with the information that becomes data is to categorize it and make connections between categories. Such data is mainly but not exclusively concerned with meaning rather than numbers. This is the key task for qualitative analysts that has its foundations in analytical induction and is based on Glaser and Strauss's (1967) *The Discovery of Grounded Theory*. Furthermore, the analytic process of dealing with data presupposes that it starts with the transcription of the first interviews and field notes, and these provide guidelines to researchers as to how they should deal with the rest of the data collection (Corbin and Strauss, 1990).

Data analysis in grounded theory includes three main kinds of coding: open coding which is usually applied in early phases of data analysis; axial coding that points to relationships between categories and their properties; and selective coding which is the most advanced form of axial coding (Birks and Mills, 2011; Charmaz, 2006; Cohen et al. 2011; Corbin and Strauss, 2008; Flick, 2006; Strauss and Corbin, 1990). Flick (2006) also adds a new form of coding called thematic coding. This type has as a background the theory of Strauss and results in the generation of a thematic structure using comparative methods of analysis. In contrast to this process, Flick's thematic analysis is based on the analysis of a single case reflecting the first participants' perception of the research topic. Open coding and selective coding are also applied in this method with the difference

being that selective coding aims to develop thematic categories and areas in the first instance for the single case.

Grounded theory does not necessarily ensure that different researchers will produce the same outcomes if they analyse independently the same data, but it offers them flexibility to be creative when they generate theory (Glaser and Strauss, 1967). Furthermore, objectivity can be maintained through grounded theory as the hypotheses and concepts derive in the first instance from the data analysis and then they are associated with formal theories if they exist. This avoids the problems associated with reductionism in correlational research. Changes made to the original model of grounded theory developed by Strauss and Corbin offered further flexibility to researchers. In particular, the existence of research questions facilitates the in-depth exploration of the studied topic, identifying the focus and the area of the research, while theoretical sensitivity which refers to researchers' personal qualities through their previous experience and knowledge about the area being studied allows them to interpret data through their previous knowledge of the field, to comprehend and to distinguish applicable from irrelevant issues (Birks and Mills, 2011; Corbin and Strauss, 2008; Kelle, 2007; Strauss and Corbin, 1990). Furthermore, grounded theory not only concerns theoretical generation, but also its verification, offering flexibility to researchers, who as a result may go beyond the use of comparative methods (Charmaz, 2006).

Constructivist grounded theory focuses on knowledge of the empirical world and it is constructed by both participants and researchers in the study (Charmaz, 2000). It allows the researcher to comprehend and interpret participants' perspectives, which is enhanced by conducting research in the subjects' natural

settings. The principal focus is on constructing meaning which is directly related to interpretive understanding. Furthermore, strategies and techniques of grounded theory are flexible and less prescriptive, and this is in opposition to the development of pre-formulated hypothesising and confirming or disconfirming these hypotheses. Criticisms of Glaser and Strauss's (1967) argument that strong links between theory and data make impossible theory's rebuttal by other data or theory, ensuring therefore, its continuity and duration in comparison to logico-deductive theories which are based on assumptions, made by social constructivists, who supported the idea that data represent what participants choose to reveal and hence, certainty about their quality may not be guaranteed (Charmaz, 2000). In other words, it was argued that data are 'reconstructions of experience' and they are not illustrations of authentic experiences (Charmaz, 1990, p. 514).

Glaser's version of grounded theory was associated with traditional positivism due to its tendency to consider reality as external and objective, while the version of Strauss and Corbin was related to post-positivism (Charmaz, 2000). Nevertheless, as Silverman (2011) suggests, the focus of Charmaz on participants' perspectives of reality through interviews, although it derives from her constructivist background, leaves unanswered the question about whether grounded theory can be used for the analysis of naturally occurring data. For this reason, Silverman (2011) suggests that even though social theories can shape data analysis, it is important to avoid Charmaz's assumptions about which topics are suited more or less to social paradigms, namely objectivism and constructionism.

In my research project, analysis started simultaneously from the first tranche of data collection (Strauss and Corbin, 1990). The interviews were transcribed and coded manually, like the field notes, without any use of software, allowing me to have constant contact with the findings and their in-depth understanding. Thematic coding of interviews and field notes was used, resulting in the generation of a thematic structure through comparative methods of analysis (Flick, 2006). Open and selective coding frameworks were also applied aiming to develop thematic categories in the first instance for each case. Additionally, in the data analysis, apart from social factors which are highlighted in the moderate social constructivist approach, physical, biological (including medical), psychological, socio-economic, psycho-social and cultural mechanisms based on the theory of Bhaskar and Danermark were also taken into account (Bhaskar and Danermark, 2006). In this way, deeper understanding of the field of special education and disability was achieved through the use of a 'laminated system' of the notion of special educational needs (ibid., p. 288).

A sample of the thematic analysis of the findings from the first case study, the Blue Sky School, concerning the pupils' memory skills which constituted one part of the main theme of "*Pupils' learning characteristics and strategies*" illustrates the thematic coding of the data which was undertaken in the following Tables 1, 2 and 3. The rest of the categories are provided in the Appendix 1.

Open Coding	Open Category 1
Lack of Memory: about spelling mistakes/ words-ideas they want to write / purpose of writing/ tasks of day's lesson/ time/ visual memory/ short term and working memory/ time tables/ instructions in general **Good Memory**: about topics they are interested in/ plot of their reading either reading it with teacher or not/ their written sentences / the task of their intervention/ lyrics of songs	Pupils' characteristics in memory skills

Table 1: Open Category 1

Open Coding	Open Category 2
Strategies of learning a new word-spelling-reading: 1.Use of dictionary: meaning/spelling 2.Effort to think if the word sounds/ is familiar (the familiarity of the word helps to their memory) 3.Ask a friend/the teacher or a family member for words' spelling/meaning/pronunciation 4.Break down the word into smaller parts orally or written 5.Remember the meaning and pronunciation of the word for the spelling 6.Handwriting or writing the word letter by letter 7.If mistake in spelling then copying few times 8.Check its correctness by someone else 9.Use of rhymes (e.g. 'because') 10.Making songs for letters or alphabet 11.Use of glossary for new words at school 12.No specific strategy which will repeat for remembering a new word 13.Tricky words putting on posters 14.Memorizing through repetition the spellings-daily practice 15.Additional practice of spelling at home	Pupils' learning strategies of learning to read a new word and to spell it

Table 2: Open Category 2

Axial Coding	Selective coding - Main Theme
Pupils' development of learning strategies to compensate difficulties in memory skills	*Pupils' learning characteristics and strategies*

Table 3: Axial coding and main theme

The above tables present the coding of the findings which were related to the pupils' memory skills. The first column of Table 1 demonstrates the open coding of the data which emerged from the interviews with all the participants, the classroom observations and the pupils' writing. This led to the creation of the open category with the code "Pupils' characteristics in memory skills". Table 2 illustrates another category which is associated with the pupils' memory skills and its code is "Pupils' learning strategies of learning to read a new word and to spell it". This includes the fifteen different ways that the pupils used so as to learn their spellings and their meaning or to learn how to read an unknown word. The axial coding (Table 3) demonstrates the relationship between the two categories and especially that the immediate consequence of the pupils' difficulties in memorisation due to their memory skills led them to develop learning strategies so as to improve their learning and performance in spelling and reading unknown words. This led to the selective coding which was used as a main theme: *"Pupils' learning characteristics and strategies".* The same process was followed for the rest of the pupils' learning characteristics involving their writing, reading and oral skills, which are also included in the above main theme.

Similarly, the main themes of "Principles and Curriculum", "Pupils' diagnostic assessment and self-esteem", "Special Provision", "Literacy: Classroom organisation", "Literacy: Pedagogy and Assessment" and "Reading: Classroom arrangements-Pedagogy-Assessment" which are used as headings throughout chapters 4, 5 and 6 emerged following the same thematic analysis.

Case Study

Case study is 'an intensive analysis of an individual unit (as a person or community) stressing developmental factors in relation to environments' (cited in Flyvbjerg, 2011, p. 301). It consists of detailed and deep analysis of information about the studied bounded unit which can lead either to new knowledge, which expands the researcher's experience or to the confirmation of existing knowledge (Flyvbjerg, 2011; Hamilton et al., 2013). It also aims to explore in-depth a 'contemporary' phenomenon within a 'real-life context' based on a variety of evidence derived from different information sources and mixed methods, namely qualitative and quantitative, avoiding thus its exclusive relation to qualitative research (Yin, 2009, p. 18). Cases can involve an individual, an organization or a group, allowing the researcher a deep understanding and holistic view of the social phenomenon in which he/she is interested (Cohen et al, 2007; Denscombe, 2010; Flyvbjerg, 2011; Hamilton et al., 2013; Hammersley and Gomm, 2000; Stake, 2000; Yin, 2009).

The main focus of the case study is to reveal the perceptions of research participants. Researching a 'case' is conducted in its natural setting and not in an artificial environment as with experiments, while the studied 'case' pre-exists the research and might continue to exist after it (Yin, 2009). However, the boundaries of the 'case' need to be verified and to justify its uniqueness and singularity (Hamilton et al., 2013). This allows researchers to investigate the relationships and the processes that may occur in real-life social settings, attempting to deepen further and to comprehend significant aspects of the 'case', offering their own interpretations about the reasons and the outcomes of their

research (Denscombe, 2010). Additionally, the collection of a wide range of data through different kinds of methods, namely interviews, observations, and documents, enables the researcher to triangulate their data from multiple resources (Cohen et al, 2007; Denscombe, 2010; Flyvbjerg, 2011; Yin, 2009).

A principal concern with case studies is their lack of a rigorous and prescriptive design and structure. These criticisms consider its flexibility to be a disadvantage; a significant bias can derive from researchers' efforts to verify their beliefs; and the generalizability of findings in broader population can be problematic because it is based on single cases and it cannot contribute to scientific progress (Flyvbjerg, 2011; Hamilton et al., 2013). In case study, similarly to other forms of research, an explicit and justified explanation of the chosen criteria is required as an essential part of the research (Flyvbjerg, 2011). Furthermore, the outcomes of a case study might force researchers to revise their own beliefs and hypotheses about the researched problem, while an openness related to the interpretation of research results allows readers of the study to have their own views and interpretations of the research findings that can vary from researchers' perspectives (Creswell, 2007; Flyvbjerg, 2011; O'Donoghue, 2007). Bias can also be found in quantitative methods, namely in the selection of variables for an experiment or of questions in a questionnaire or survey.

Additionally, a careful research design and selection of the 'cases' can allow generalization from single 'cases' to wider 'cases' with the same characteristics (Flyvbjerg, 2011). Two types of generalization can be applied in research: on the one hand, the logical, rationalistic, formalistic which is usually related to scientific discourse, and on the other hand, the empirical, psychological which refers to

personal experience and understanding and is called naturalistic generalization (Lincoln and Guba, 2000; Stake, 2000). In case study, the naturalistic generalization form can be used by its readers based on the recognition of similarities between 'objects and issues in and out of context' (Stake, 2000, p.22). In this way, depending on the resemblance of issues between cases, similar issues which happened to one case can happen in other cases (Lincoln and Guba, 2000), contributing significantly to improvements in comprehension about a topic and to an increase of experience (Stake, 2000). Rich description of the research design, its rationale and the way it was conducted can help the readers to decide whether the studied case might be applied in their own context (Maoz, 2002; Suter, 2006).

In this study, the case is a specific set of learning experiences of pupils identified with specific learning difficulties as they are shaped by the schools' curricula and practices. Embedded in this study are three smaller cases, the three mainstream primary schools in London which responded positively to participate in the research, and further embedded cases are the ten pupils. Case study enables the combination of several cases embedded in a case (Creswell, 2007). The schools were visited from November 2013 until April 2014. The interviews with the participants, the lessons observations and the analysis of the documents written by the children took place within the same period. The generalization of this study's findings and their interpretation is not provided, however, readers can draw their own conclusions based on their experiences and understanding through those findings (O'Donoghue, 2007). The research methods and the sample will be discussed later in this chapter.

Research Question and Objectives

The research study explores the influence of school curricula on the learning processes of pupils who experience specific learning difficulties. The principal focus of the study is to investigate the effects of schools' curricula and practices on the above pupils' learning in literacy at Key Stage 2.

The principal research question is 'How can a school curriculum provide effective learning and equal opportunities to pupils identified with specific learning difficulties for literacy at Key Stage 2?' The meaning of 'effective' learning is defined through the literature review and the study's findings concerning the learning profile of pupils identified with specific learning difficulties and especially with dyslexia. In order for this research question to be answered, a number of sub-questions were explored.

The first question was how can pupils identified with specific learning difficulties learn effectively? The learning processes of pupils identified with specific learning difficulties were examined focusing particularly on their learning characteristics and their cognitive/social/emotional needs. Furthermore, pedagogical theories, teaching approaches and assessment tools which are suited to their learning profile were explored.

The second question was how do schools' structures and practices provided by their curricula encourage effective learning for pupils with specific learning difficulties? According to English educational policy, schools have a responsibility to offer special provision to pupils with specific learning difficulties in order for them to have full access to the National Curriculum. Inclusive practices, involving

special provisions, teaching strategies, and assessment tools were explored with respect to their efficiency and efficacy in meeting the learning and social needs of pupils with specific learning difficulties.

The third question was which elements are taken into consideration in the design of a curriculum for this specific set of pupils? The design of curricula is based on various philosophies of education and thus it reflects corresponding values, purposes and aims. Therefore, pedagogical approaches, teaching styles and assessment criteria promoted through curricula are underpinned by a philosophy of education and a theory of learning. This study examined which elements best fit the learning characteristics of pupils with specific learning difficulties in the curriculum.

Research Respondents

The research was conducted within three mainstream primary schools in the London area which were selected through the database of the Department for Education from November 2013 to April 2014. The initial plan involved visits to schools once per week for an academic year. Difficulties, though, in gaining access to the schools led to the need for a more pragmatic plan because of these schools' limited time. Therefore, the schools were chosen in respect of their willingness to participate in the study and the plan was changed into visits for ten days in total to each school.

During the initial discussions about the research project with the head teachers and head of inclusion at the three schools, the criteria for the choice of purposive

sampling from the pupil populations were given to them (see Appendix 2) as well as a leaflet with information about the research and its process (Robson, 2011). Then, the schools contacted the parents of the pupils who met the criteria of the study and provided them with the information leaflet of the project (see Appendix 3). After the consent of the pupils' parents had been obtained, the pupils were also asked whether they wanted to participate in the study before the research commenced. The names of the schools and of the participants had been changed to afford anonymity to the respondents.

The sample of the research comprised ten pupils aged 9-10 identified either by an official diagnosis or by their teachers with specific learning difficulties and especially with dyslexia, while one of them was diagnosed with Autistic Spectrum Disorder and various learning difficulties. From the ten pupils, two attended Year 6, seven attended Year 5 and one attended Year 4. They were native English speakers, born in England, and they were speaking English in their homes. This choice was made to avoid misconceptions of specific learning difficulties (i.e. dyslexia) and having English as a second language. The distribution of the pupils was three pupils at the Blue Sky School, three pupils at the Rose Garden School and four pupils at the Sunlit River School. This age-group was preferred because of their ability to express and discuss their experiences, feelings and ideas about their learning difficulties in literacy. The influence of external assessment at Key Stage 2 was also explored in terms of affecting structures, practices and pupils' learning at the three schools.

The sample included the pupils' parents, the head teachers, the head of inclusion and members of the teaching staff, involving the main classroom teachers, teaching assistants, specialist teachers as well as the manager of the

dyslexic centre and the radio operator at the Sunlit River School. In particular, from the Blue Sky School the three pupils, three parents, the head teacher, the head of inclusion, the three main classroom teachers and the teaching assistant were interviewed. Furthermore, during the research a staff member expressed his willingness to contribute to the study by being interviewed concerning his personal experiences of dyslexia. From the Rose Garden School the three pupils, their main classroom teacher, the head of inclusion and the teaching assistant were interviewed. The pupils' parents and the head teacher from the Rose Garden School due to their personal issues did not participate in the study despite the offer of alternative dates for interviewing. From the Sunlit River School the four pupils, three parents (two pupils were twins), the head teacher, the specialist teacher, four main classroom teachers, the manager of the dyslexic centre and the radio operator were interviewed. The manager of the dyslexic centre and the radio operator at the Sunlit River School revealed during interviewing that they had been diagnosed with dyslexia, offering their personal experiences, thoughts and perspectives about the research topic.

Research Methods

In this study the principal methods of data collection were semi-structured interviews, naturalistic observations and document analysis of pupils' writing in literacy for ensuring data triangulation as is suggested in grounded theory. In qualitative research, interviews enable researchers to gain a deep understanding of people's opinions, beliefs and perspectives about the research focus

(Hamilton et al., 2013). They also offer flexibility for an in-depth exploration of the research problem through interactions between the researcher and the participants shedding light on their worldviews via a careful programme of questioning and listening (Seidman, 2006).

Schostak (2006, p. 1) considers interviews as an inter-view, 'a place where views may clash, deceive, seduce, enchant' and not as a tool used to elicit information from interviewees. Kvale (2007, p. 5), also, in his definition regards the qualitative research interview as 'an inter-view, an interchange of views between two persons conversing about a theme of common interest'. Hence, interviewing, which aims to construct meaning and develop knowledge about issues related to life, can be understood more as an emotional and social engagement between the participants than as a simple process of data collection (Cohen et al, 2011; Schostak, 2006). However, interviews might provide a representation of participants' experiences instead of their real experiences or events (Silverman, 2011). In particular, researchers' belief that they have access to participants' real thoughts and feelings through the process of interview may be illusory.

In a similar vein, interviews can provide an insight into participants' behaviours allowing their actions and arguments to be understood through the expression of their experiences (Seidman, 2006). Nevertheless, developing a perfect understanding of 'the other' might not be possible because people have different personalities and worldviews as well as experiencing differently common situations. The importance, though, of being different and having different opinions and beliefs is highlighted in interviews as otherness is more significant than sameness (Schostak, 2006). This belief is directly related to the purposes of

case study which refer to researching uniqueness than to whole populations where the intention is to extract common factors (Drever, 2003).

Multiple interpretations of a situation or an event can be suggested through interviewees' perspectives about a topic, highlighting the importance of how interviewees' responses are viewed methodologically, namely that they illustrate participants' experiences or that they construct narratives which need further analysis (Silverman, 2000). Different types of interviews in respect of theoretical and epistemological paradigms allow different understandings of the knowledge that has emerged through interviewing (Kvale, 2007). Characteristically, a positivist approach argues that truth and knowledge exist independently from people's perspectives and hence, they can have only one version which can be obtained through a rigid process of collecting data (Rubin and Rubin, 2005). In this viewpoint, positivism attempts to explore interactions between a limited number of variables using statistical analysis of data and a numeric language for their interpretation. As its main purpose is to offer explanations and predictions of human behaviours, it focuses on applying rules to specific populations based on simple relationships, which have emerged from controlled variables without considering the complexity and mobility of the social world (Guba and Lincoln, 1989). Positivism also highlights the idea that truth can be explored through a method independently of the content and context of research, with the process needing to remain uninfluenced by the researcher (Kvale, 2007). For this reason, it emphasizes the generation of a structured interview within a specific context aiming to reflect as much as possible the existing reality (Miller and Glassner, 2011). Therefore, positivists collect data independently of the research setting by using standardized questions in interviews so as to ensure validity, reliability and unbiased findings (Silverman, 2011).

On the other hand, emotionalism focuses on gaining an insight into interviewees' experiences through open-ended and unstructured interviews, which can enable researchers to describe participants' emotions and experiences (Miller and Glassner, 2011; Silverman, 2011). The third approach, social constructionism, considers that real knowledge about the social world can be obtained only partially as its versions are constructed through participants' interaction during interview (Miller and Glassner, 2011). As a result, constructionists are interested in the construction of meaning through participants' engagement during interviewing focusing on how narratives of various social issues are developed based on interviewees' experiences (Silverman, 2011). In line with this, they support the idea that people's perspectives of an event or situation are characterized by complexity, while the meaning given by the participants cannot be explored by pre-tested scheduled interviews of positivist research (Rubin and Rubin, 2005; Silverman, 2001, 2011). Hence, constructionists attempt to gain understanding through collating human experience and opinions by investigating specific issue and providing their own interpretations.

Interviews, though, apart from their philosophical heritage differ in other ways namely, purposes, depth and structure (Scott and Morrison, 2006). Based on their structure, they can be divided into structured, semi-structured and unstructured interviews (Cohen et al, 2011; Drever, 2003; Gillham, 2005; Hamilton et al., 2013; Kvale, 2007). Structured interviews are characterized by a standardized design of questions with pre-given answers intending to ensure the reliability and validity of research, while semi-structured interviews offer flexibility because the main questions (open and/or close questions) or topics that need to be covered are mentioned by the researcher, allowing new issues to emerge from the process of interviewing. Some types of semi-structured interviews

involve telephone interviews and mail interviews which despite their flexibility can limit the amount of content, the communication between researcher and interviewees and the observation of participants' non-verbal behaviour during the process (Cohen et al, 2011; Drever, 2003; Kvale, 2007). Unstructured interviews are mainly compiled with open-ended questions enabling their openness in terms of the exploration of the topic.

Unlike questionnaires, semi-structured and unstructured interviews do not provide answers in advance to interviewees ensuring the authenticity of participants' responses (Cohen et al, 2011; Gillham, 2005). Additionally, objectivity and validity can be guaranteed through the careful design of questions, and the presentation of the findings that might be opposed to researchers' worldviews as well as the concealment of researchers' beliefs during interviewing that can distort the process (Cohen et al, 2011). In this way, high quality information and data about the research topic can be collected allowing clarifications and explanations of possible misunderstandings and ambiguities to be raised during the process (Cohen et al, 2011; Drever, 2003; Gillham, 2005; Kvale, 2007). In combination with interviews' flexibility to provide 'natural occurring data' enabling exploration of peoples' actions in real life settings, namely participants' workplace or house, a holistic view of their worldviews and actions can be acquired enhancing the findings' quality (Silverman, 2011, p.166).

As the main purpose of a qualitative research interview is to allow researchers to gain information and develop knowledge about a specific topic, interviews follow a particular procedure that includes questioning and listening mainly from the interviewer's side (Kvale, 2007; Kvale and Brinkmann, 2009). Researchers tend

to have control of the interview setting by formulating the questions related to their research topic without though, revealing their stance, attributing formality to the process (Cohen et al, 2011; Gillham, 2005; Kvale, 2007; Kvale and Brinkmann, 2009). However, the power relation between the interviewer and interviewee does not prevent participants' interaction and engagement which permits interviewees to express their own perceptions of the world and to explain their opinions through their experiences (Cohen et al, 2011; Kvale, 2007). Therefore, as knowledge is constructed through participants' interaction during interviewing, interviewers need to be flexible following the interviewees' pace, maintaining their interest and eliminating any possible anxiety which may make interviewees defensive (Cohen et al, 2011; Drever, 2003). Additionally, participants' non-verbal signs, which might illustrate whether interviewees answer in a particular way such as aiming to please researchers, can be explored during the interview and used in the findings' interpretations (Cohen et al, 2011).

For this study's purposes, semi-structured interviews were conducted with all the participants allowing me to gain an insight into their perspectives and deeper knowledge concerning the research topic through their experiences and personal interactions (Drever et al., 2003; Gillham, 2005; Kvale, 2007). Interviewing children was a significant part of the study as their opinions and experiences can provide information and insights helpful for the improvement of programmes and policies addressed to them (Cohen et al, 2011; Schenk and Williamson, 2005). Additionally, as some of the adult interviewees were professional with experience and knowledge of the studied topic, the collection of rich data through their concrete responses was facilitated by the interview method.

Conducting the interviews in the participants' schools ensured a familiar and comfortable place, especially for the pupils, allowing me to have a deeper understanding of their environment which is directly related to the study. The arrangement, also, of interview setting with adults in terms of place and time was organized by them at their convenience, as I was informed in advance about their limited availability for only one interview (lasting on average from 30 minutes to an hour and half for each one) due to personal issues, which though, allowed a high rate of response to be achieved. In this way, I chose to demonstrate flexibility and to minimise my control over the interview setting which could have had an impact on the interviews. The head teachers were mainly interviewed in their offices. Similarly, the head of inclusion at the Rose Garden School and the manager of the dyslexic centre at the Sunlit River School were interviewed in their offices. The members of teaching staff were interviewed in their classrooms either during breaks or after school finished at their convenience. All the interviews with the adults were scheduled in advance by them at their choice.

The interviews with children were conducted in an empty classroom almost daily for approximately 15 minutes for each pupil during breaks, permitting interaction between the interviewees and the researcher to be developed based on trust and confidentiality. This enabled them to express freely their feelings and challenges that they experienced in their learning, offering their own perspectives on the research topic. I also had the opportunity to ask for further clarifications and explanations aiming to avoid misunderstandings and to gain a deeper insight into their perceptions and experiences (Denscombe, 2010; Drever et al., 2003). Sometimes the pupils had to attend other activities during the breaks which limited the frequency of the interviews.

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One-to-one interviews were chosen instead of focus groups because in this way the participants' opinions and feelings about the sensitive topic of learning difficulties could be expressed freely, confidentially and without being influenced by other participants. Therefore, interviewees' opinions, beliefs and thoughts were listened to separately, avoiding bias and the manipulation of the conversation by other participants (Denscombe, 2010; Fontana and Frey, 2005). Only at the Blue Sky School did the head teacher and the head of inclusion decide to be interviewed simultaneously in the head teacher's office because of their limited time. Although I was reluctant at the beginning with that choice due to the possible influence of the respondents on each other's answers, during the interview both of them expressed freely their perspectives on the research topic.

Some practical difficulties of participants' limited time for one-to-one interviews were overcome by conducting telephone interviews, for example, with the majority of the pupils' parents at the Blue Sky School and at the Sunlit River School. Only one parent was one-to-one interviewed at the Blue Sky School after giving her consent. A voice recorder was used during interviewing (also in the telephone interviews) for data accuracy and validity after the participants' consent had been obtained, while notes about the interviewees' responses were also kept during the process. In the one case of the participant who refused the use of voice recorder, notes were kept during the interview.

Prior to the interviews with the members of staff, I provided them with the same background information about the research study. The interviews' questions included open-ended and close questions focusing on the research area. The interviews with children usually had as a starting point their literacy lesson of the day, whether it had been observed or not. For instance, the pupils were asked

about their experiences of the day's literacy session and based on those further questions were asked about any difficulties they encountered and how they overcame them. An example of an interview with a pupil is provided in Appendix 4. The interviews' questions with the adults were categorized into three groups according to the research questions, involving the pupils' learning characteristics, their social and emotional challenges and their parents' practices at home (see Appendix 5). During interviewing, prompts for information clarification and probes for in-depth exploration of the participants' views were used, due to limited information about the research topic or an idea without further explanation being expressed (Cohen et al., 2007; Drever et al., 2003).

Various ethical issues emerging from the interviews were taken into account during the research. Characteristically, the participants ensured that they would not be criticized for their views and not be treated with bias and prejudice based on their age, gender and nationality (BERA, 2011; Schenk and Williamson, 2005). Moreover, during the interviews with the participants and especially with the children, a safe and friendly environment that allowed participants to express freely their opinions and beliefs was guaranteed (Cohen et al, 2011; Gillham, 2005; Schenk and Williamson, 2005).

All the participants were informed before the interview began about the purpose and the process of interviewing, the ways that would ensure their confidentiality and anonymity, and how and to whom the data would be communicated (Cohen et al, 2011; Schenk and Williamson, 2005). Additionally, it was explicitly explained, especially to the children, that they had the right to decide on their own if they wanted to participate in the research and that they also had the right to refuse or to withdraw from the process for any reason and whenever they

wanted without negative consequences before they signed the consent form and participated in the research (Schenk and Williamson, 2005). Furthermore, all the necessary measures which guaranteed and respected children's safety and well-being, namely the presence of a friend or an adult if it was requested by them, were taken.

All the interviews with the children and the adults were conducted without difficulties and problems. During the interviews with children I never mentioned the word 'dyslexia' as it was a sensitive issue for them which could cause them anxiety and/or sadness. Difficulties related to one particular child's sensitivities regarding her learning were overcome through her suggestion to interview me for few minutes before her planned interview, which I was very pleased to accept. Since then, she became more comfortable in sharing her learning experiences with me and answering in a more detailed way my questions.

Naturalistic observation in the participants' mainstream classrooms during literacy and reading sessions as well as in their classroom of their intervention programme was also used in order to obtain deeper understandings of their interaction with the curriculum (Scott and Morrison, 2006). I participated in the classroom as an observer keeping field notes because interactions between pupils and information, pupils and teachers, and pupils and classmates can be understood at a deeper level in classroom conditions and their role in pupils' learning can be identified. The notes during the observations were kept manually without the use of video or voice recorder aiming to minimise the effect of my intrusion within the classroom for both pupils and teachers which could have influenced their behaviours (Robson, 2011). My reflections on observing the class, literacy session and pupils' attitudes within the classroom were also

discussed with the pupils and teachers to aid further clarification. After lesson observations feedback was not provided to the teachers.

I conducted 28 lesson observations, including literacy and reading sessions (20 sessions) and special intervention programmes either one-to-one (7 sessions) or classroom support (1 session) for the three pupils at the Blue Sky School. For the Rose Garden School 20 lesson observations were conducted for the three pupils including literacy and reading sessions, 4 sessions for classroom support for Thomas, 19 sessions of classroom support for Matthew, and one special intervention session for Robert and Thomas outside the main classroom. For the Sunlit River School 21 observations of literacy and reading sessions for the four pupils in total, 1 session with the radio operator and two of the pupils, and 14 special intervention sessions outside the classroom for the four pupils in total. As at the Blue Sky School and at the Sunlit River School, the literacy, reading and one-to-one intervention sessions were scheduled often at the same time, I tried to observe the main classroom and intervention programmes for each of the 7 pupils at least two times respectively, giving priority to the pupils who were officially diagnosed. I also gave priority to one-to-one intervention programmes in my effort to identify the differences in pupils' learning and emotional states and the factors which influenced them between their attendance within their main classroom and outside.

Documents of pupils' writing in literacy sessions during the days of research study at their schools were also collected and constituted the third source of data. The documents were coded and thematically analysed. During the two-week visit at the three schools, I listened to the interviews, read my field notes and the pupils' documents after completing my daily fieldwork and before visiting

the school again. This allowed me to work constantly on my understandings, themes and theories which were arising from the data, while patterns that emerged were used to reject or confirm those understandings, themes and theories.

Data were also triangulated within and across findings. Characteristically, findings from the interviews with the head teachers and head of inclusion were triangulated with findings from the pupils, parents and teachers and lesson observations, while findings from the pupils' interviews were triangulated with findings from teachers, teaching assistants and parents as well as with pupils' documents and lesson observations. Themes, which emerged from one data set, were tested through constant comparisons with other data sets across different individuals, times and cases (Lewis and Ritchie, 2003). The spatial classroom arrangements of the ten pupils at the three schools are presented in this thesis in figures and the pupils' documents with images for data evaluation and reflection.

Ethical Considerations

As the main participants of the research were primary school children with specific learning difficulties, clearance from the Disclosure and Barring Service check (DBS) was obtained according to the requirements for access to schools. Discussions with staff members concerning the methods of data collection, the device that were used (e.g. voice recorder for the interviews) and my role in the classroom took place before sending letters of consent to the pupils' parents/guardians asking for their permission for their children's participation in

the study. Additionally, letters of consent were provided in advance to all the participants in the research, including the pupils. These letters informed them about the purpose of the research, its process, their rights during it and the use of their data after the research (see Appendices 6, 7, 8).

According to the British Educational Research Association (BERA), all the participants were treated respectfully without prejudice and bias concerning their age, gender and nationality (BERA, 2011). Additionally, they were informed about their right to express freely their opinions and beliefs and to end the process whenever and for any reason they wanted to. Furthermore, all the participants had the right to refuse the use of a voice recorder during the interviews as well as being able to choose a place for conducting the interviews which would be comfortable for them. Participants' anonymity and confidentiality are guaranteed by using pseudonyms and by removing characteristics that might identify them.

The next chapter presents and discusses in-depth the findings from Blue Sky School.

Chapter 4: Blue Sky School

'I always have this question why I can read but then not spell because if you can read then obviously you can spell but it's not the same way' (Carol, 10 years old)

'But not everyone is perfect' (Emily, 9 years old)

Blue Sky School is a mainstream primary school which accommodates more than 500 pupils. The majority are not native English speakers and approximately 6% of them have SEN statements (Department for Education, 2013b). The last Ofsted inspection assessed the school as outstanding for pupils' achievement, behaviour and safety, for teaching quality, for leadership and management. With regards to its inclusive measures, Ofsted (ibid.) commented that the good progress of pupils with special educational needs was achieved due to the provision of targeted support combining class and individual elements.

The three pupils who participated in the research were born in England and they have English as their first language. Carol and John were 10 years old and attended Year 6, while Emily, a pupil in Year 5, was 9 years old. Carol and Emily have been diagnosed with dyslexia and special provision is offered to them. John had not been diagnosed at the time of conducting the research; however, the local authority's educational psychologist was planning to assess him during that academic year. From the Blue Sky School the three pupils and their parents were interviewed as well as the head teacher, the head of inclusion, the teaching

assistant, their teachers and a staff member who was dyslexic and talked about his learning and social challenges.

Principles and Curriculum

The way that schools organize and structure their learning environments defines pupils' learning capacity and self-awareness. Apart from the content that is introduced to pupils through the curriculum, a set of principles and values is also promoted concerning acceptable attitudes towards the society and culture (Carr, 2003; Lawton, 2003). The head teacher of the Blue Sky School suggested that their main and 'non-negotiable' principle was to meet their pupils' individual learning needs enabling learners to be aware of their potential. As Vygotsky (1986, 1987) argued, every single child at a single stage in his/her development presents different strengths and weaknesses in their learning profile. As a consequence, the school environment and the way it works needs to be differentiated from the standard developmental levels which contribute to stereotypes being established about pupils' development and performance, and in the process a reconfiguring of their differences in learning as weaknesses.

Inclusivity is another essential principle of the school, allowing all pupils' accessibility to the National Curriculum in an 'enthusiastic' way through 'high quality teaching and learning strategies' (head teacher). In particular, the school aimed to create comfortable learning environments and to offer positive learning experiences to its pupils so as to educate 'diverse and creative problem-solvers and thinkers about developing enquiry skills' (head teacher). Learning was

viewed as a 'fun and enthusiastic and wonderful' process where pupils through various teaching methods and activities were stimulated to be 'learners themselves', fostering their active engagement with knowledge (head teacher). This child-centered perspective has its origins in Bruner's learning approach where children discover knowledge by identifying the problem and its solution on their own, enhancing their autonomy, self-directed learning, choices and development of skills (Bruner, 1996, 1999; Harrison, 2001). Pupils also take on responsibility for their own learning by setting their own targets and choosing their own learning pathways, empowering their capacities of reflection, self-determination, decision-making and self-awareness. The autonomy granted to pupils in this approach contributes to their independence in learning.

In practice, though, some factors are more influential than others with regards to schools' curricula and pedagogy. For example, National Curriculum requirements addressed to pupils' performance levels in external examinations tend to put pressure on schools, teachers, pupils and parents for children's high achievements in standardized tests. Due to the great importance of the above educational requests, schools and teachers focus on these National Curriculum demands, narrowing the range of teaching approaches, curriculum content to basic knowledge, and classroom arrangements to ability-based groups. This reflects the ideas of normality and homogeneity in education, which were introduced in the first half of 20th century and since then they have significantly influenced the structures of schooling resulting in common curricula, uniform teaching methods, age-related routines, homogeneity in performance and standardized examinations (Davis and Sumara, 2003).

Pupils' learning characteristics and strategies

The verbal expression of ideas was the strongest learning characteristic in literacy of the three pupils. Carol, Emily and John could use advanced vocabulary, detailed information and correct language orally, as it was observed and confirmed by their teachers and parents, which indicates that they do not lack competences in comprehending language structures and the correct use of English. As a result, linguistic knowledge and skills of analysis and synthesis have been developed. The three children were able to arrange their ideas in a logical order, using rich detail and complex sentences and apply grammatical and syntactical rules.

Nonetheless, their difficulties in writing, which is the principal evaluation format in formal assessments, prevent them from demonstrating their actual capacities in literacy. For example, the three pupils had 'brilliant' ideas (teaching assistant) and they contributed to classroom activities by 'bringing ideas' (all teachers), however, when they were asked to write them in their notebook, they were not able to in a satisfactory way. Characteristically, Emily's teacher emphasized that 'Emily has lots of ideas but when it actually comes to hearing her read her learning (= *writing*) sometimes it is not what she told me'. John's teacher also mentioned that although 'he often thinks outside of the box […] it doesn't get written down on paper. It doesn't cue what is in his head and to write it down on paper'. Similarly, Carol 'can write the most amazing and lengthy stories but they are almost impossible to read' and to be comprehended as the head of inclusion underlined.

The teaching assistant of Emily and Carol suggested that this happens because 'their mind seems to work faster than they can write'. This perspective which highlights the difference in pace between thinking processes and writing is commonly thought of as explaining the causes of dyslexia (Pollock et al., 2004) and especially children's capacity to use well-structured speech forms for communicating their ideas instead of writing them down. The emphasis on writing, though, does not allow the acknowledgment of learners' competence in speaking, classifying it as a secondary skill since formal examinations are written. Hence, children's attempts to retain their ideas and write them down quickly before they forget them due to memory and spelling difficulties tend to be explained by considering them as fast thinkers and slow writers.

Remarkable spelling difficulties were one of the main reasons that the three children experienced problems in the written expression of their ideas. For example, Emily and Carol tended to omit words or vowels in words in their writing. Image 1 presents an extract of Carol's writing in literacy:
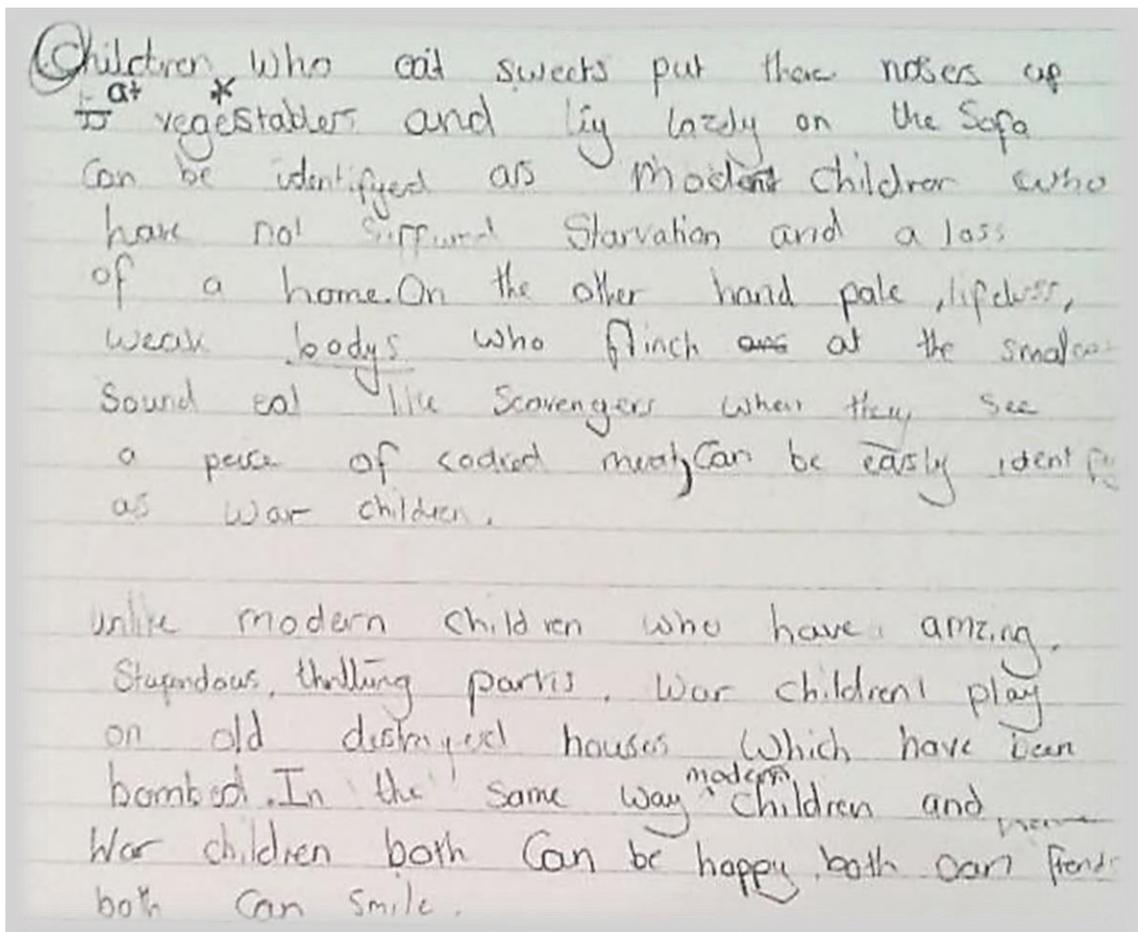
Image 1: Carol's writing

Based on the above extract, Carol's difficulties involve inserting the right punctuation, namely starting the sentence with a capital letter and misspellings of common words, such as 'there noses', 'vegestables' and 'amzing', instead of 'their noses', 'vegetables' and 'amazing' respectively. Her writing is organized in a logical order but with long sentences. She also uses advanced vocabulary applying grammatical and syntactical rules in a sophisticated way.

John's literacy difficulties, that his teacher noted, included problems in word order - missing out words and changing the whole meaning of the sentence - spelling mistakes and handwriting difficulties which did not meet the 'standards' of Year 6 set by the National Curriculum (Department for Education, 2012). In particular,

his 'literacy weaknesses are full stops, capital letters not in the right place, sometimes word order, missing out words, handwriting, things like that he needs a lot of support' as his teacher pointed out. Images 2 and 3 show extracts from John's writing taken with a few days' difference:

Image 2: John's writing

Image 3: John's writing after few days

John's handwriting of some words seems to be disproportionately bigger than with other words, causing difficulties in their reading (Image 2). However, an improvement can be noticed after a few days as it became tidier and neater (Image 3). Additionally, he uses punctuation but sometimes he does not start the sentence with a capital letter after a full stop. His sentences can be characterized by good vocabulary, logical order, and the proper use of grammatical and syntactical rules. Nevertheless, spelling mistakes can be observed, namely 'spair' and 'bodys' instead of 'spare' and 'bodies' respectively (Images 1, 2).

Emily, also, experienced difficulties in spelling and punctuation which led to her feeling 'annoyed' (Emily). Image 4 is an illustration of her writing:
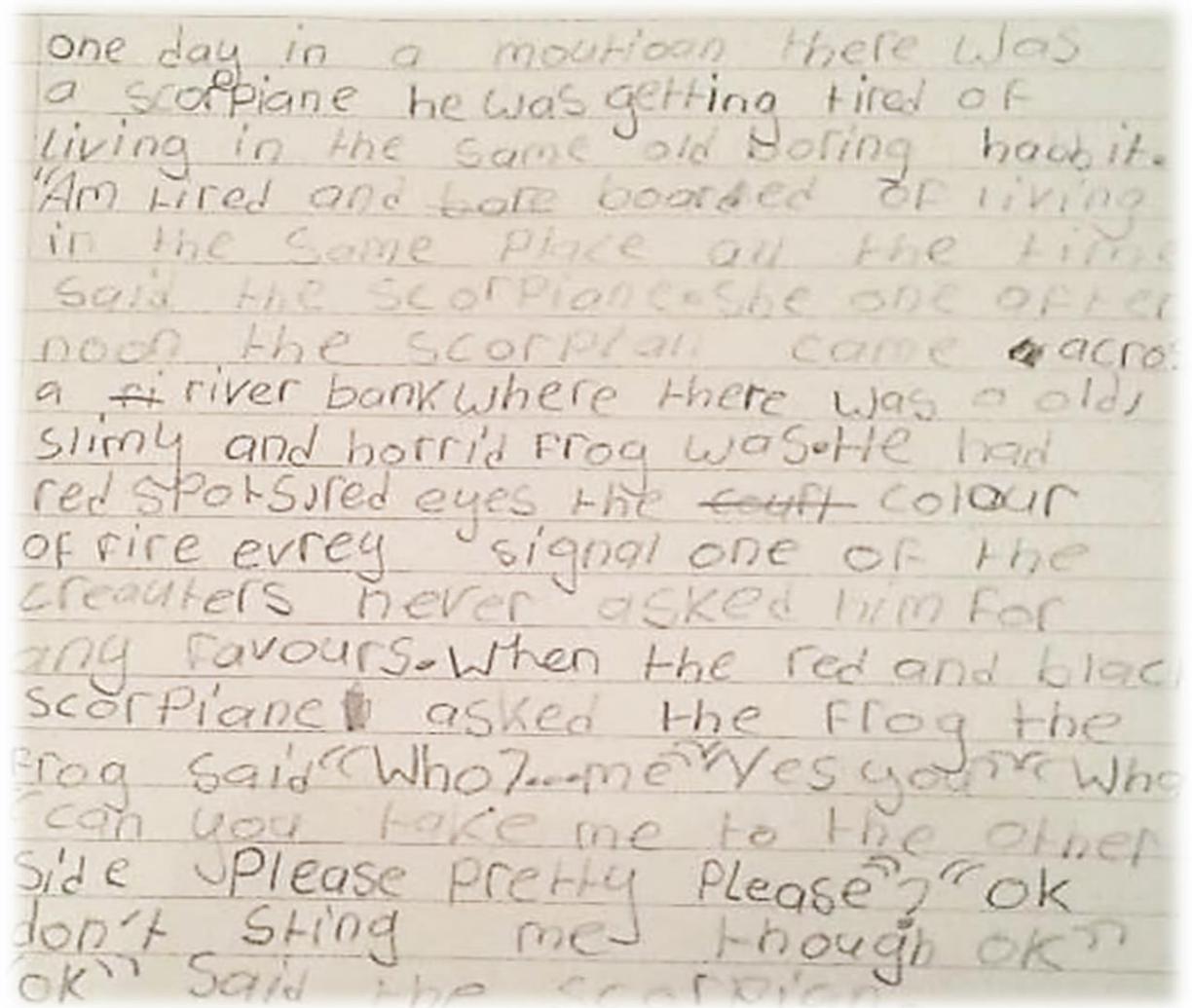
Image 4: Emily's writing

Her neat and tidy handwriting facilitates reading; however, her long sentences in combination with deficient punctuation create difficulties with comprehension. Characteristically, in the fourth line, she began with speech marks but she forgot to close them at the end of the sentence, while sometimes question marks and full stops are not used efficiently. Her spelling mistakes illustrate her difficulties in this area, for example, throughout her text the word 'scorpion' can be viewed in two different forms starting as 'scorpiane' and ending as 'scorpian'.

The three learners being aware of their spelling difficulties attributed their spelling problems to weaknesses in their memory. Carol mentioned that she does not have 'full memory' which made it difficult for her to memorize her spellings:

> I can never read a sentence and then if they asked me to spell that words I can never do it fully and I will never be able actually just straight to write it […] I wouldn't be able to remember it […] I find quite annoying when I can't spell names and I am not able to spell, like big words, so I got used to write spelling words wrong […] I feel alright because I have been doing this since I was young, but it is quite annoying knowing that other people can spell it and then you have to ask them […] when they (=*her classmates*) don't know (=*that she is dyslexic*) they just say 'why you can't know to spell that?' and it's fine because I just tell them that I am ok with that […] which is normal for me (Carol)

A greater emphasis on performance causes feelings of inferiority to pupils who experience difficulties in their learning due to comparisons with their peers.

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Furthermore, their actual progress in terms of their individual learning profile and starting point is disregarded, which can result in anxiety and eventually demotivation and low self-confidence.

Similarly, John and Emily referred to their difficulties in memory during the accomplishment of their literacy tasks:

> Sometimes (*while)* I am writing a word, I forget what I want to write, like sentence and I forget the sentence which might be a good one (John)

> I don't know how to spell 'elephants' though (Emily)

Carol also highlighted that she could not spell the word 'elephant' demonstrating that apart from individual memory weaknesses, the teaching and learning approaches used in classrooms contribute to their weaknesses instead of improving them. In other words, their memory limitations with regards to storage and recalling information for spelling and their writing tasks necessitate other kinds of teaching and learning methods involving revision and practice that can meet effectively their individual learning needs.

Memorisation of spelling patterns tends to be related either to memory weaknesses or to limited phonological awareness, often disregarding the accumulation of words that have to be memorised within a specific timetable and within their curriculum. In particular, deficits in phonological and visual memory as well as in associative memory of sound-letter can be considered as a common characteristic of pupils who experience dyslexia influencing subsequently their skills in spelling, grammar, syntax and in writing essays (Gang and Siegel, 2002; Grant and French, 2010; Reid, 2005). Nonetheless, improvements to their visual

memory through frequent practice and revision of spelling patterns, development of word-recognition skills, manageable spelling requirements according to individual learning needs, and further time for the internalisation of spelling patterns can allow learners to acquire memory strategies that enable them to overcome their barriers.

The three pupils' difficulties in memorisation were also highlighted by their teachers and parents. For instance, Emily's teaching assistant mentioned that:

> remembering what has been discussed in the carpet is key for her writing but when she goes back to the table she finds that she can't remember all the things that they have been through even though the teacher can put key words on the white board (teaching assistant)

Emily's parents also pointed to her problematic memory, mentioning that the memorization of time tables was challenging for her and although 'she can look at it for hours, it doesn't mean that she will be able to memorize it […] at times I realized that she has a big black out like she can't remember anything', despite her ability to memorize songs' lyrics. Conversely, Emily's teacher stated that 'Emily has a strong memory so I might talk about a book we did in the first week and I can be 80% sure that Emily can recall it', although Emily after reading 30 pages of a book informed her teacher that 'she couldn't remember anything of it' (Emily's teacher). Emily's occasional problems with recalling information may be misinterpreted as an inability to memorise and control information overload efficiently, according to educational requirements, which illustrates that her long-term memory difficulties can be crucial for her learning success.

John experienced considerable memory difficulties too. More specifically, one of his parents was concerned deeply about his memory abilities because 'he can't

remember things […] to ask him something to do he won't even remember it […] he forgets a lot'. Furthermore, John's memory weaknesses affected him on a daily basis, as his parent suggested that 'you have to keep reminding him every time, I send him to shop […] he forgets what to be getting'. His teacher also suggested that John's memory was weak especially in mathematics rather than in literacy concerning 'more intriguing things like time tables, what they have to do next, what's the next instruction'. In contrast, Carol's memory was considered 'pretty good' by her teacher for recalling information in guided reading but not for spelling. One of her parent commented that:

> one of the things that the assessment said was that the dyslexics don't have brilliant memories and her short-term memory was supposed not to be very good which is in the maths or the spellings, sometimes could be a problem but she's got good memory […] she could talk or bring things up that I might not remember in terms of everyday life (Carol's parent)

Weak memory was also a difficulty for the staff member: 'when once someone says a thing I find it difficult to get the information down and later from learning about being dyslexic I've learned that's because of working memory isn't so strong in people with dyslexia'. The generation and reproduction of stereotypes seem to be encouraged by medical explanations of dyslexia devaluing the significance of individual learning profiles and allowing erroneous assumptions to be formed about pupils' actual abilities and progress. In education, though, the demands for memorisation of information in a short-time span tend to be prioritised and overvalued. It is rarely questioned whether these curriculum requirements are pedagogically achievable and effective targets.

However, memory skills contribute to learning processes significantly and their development is considered crucial for pupils' progress. In particular, working memory is linked to the temporary storage and management of information in specific domains influencing the acquisition of vocabulary and knowledge that can be represented in visual or spatial form (Pickering and Gathercole, 2004). Many literacy activities in classrooms demand both storage of information and its ongoing highly cognitive processing. For instance, learners are asked to write a sentence with correct spelling about a specific topic providing detailed information. Children with inadequate storage capacities or less complex cognitive processes in combination with limited phonological awareness are likely to find this kind of activity very difficult. As a result, children's performance on those tasks is not indicative of their competences, while the development of memory strategies is important for their learning.

Following instructions, organizing and categorizing information are directly influenced by memory difficulties. Characteristically, Emily presented marked weaknesses in those areas, as her teacher and teaching assistant emphasized, potentially influencing the application of grammatical and syntactical rules in her writing and the quality of her writing in terms of ideas. In particular, Emily's teacher suggested that:

> I'll say her to write a paragraph […] and sometimes she gives me ideas and then she comes back with two sentences, well that's not a paragraph that you just put them together so when Emily finishes a task she finds hard to go back and analyse that and do what I've asked her to do (Emily's teacher)

Emily's memory weaknesses in combination with limited knowledge or application of planning in her writing tend to result in poorer writing outcomes compared to the verbal expression of her ideas. This, it has been argued, can affect the development of her metacognition which includes competences to monitor, manage and evaluate learning and performance (Knight and Galletly, 2005). Metacognitive reflection demands knowledge of concept, process and their integration in similar contexts allowing self-learning to be developed. However, deficiencies in working memory which affects the storage of information and the skills of managing tasks can narrow pupils' thinking skills and awareness of their learning, influencing their attainment and their capacity to learn autonomously. Consequently, Emily does not respond effectively to her teacher's instructions in writing up a paragraph.

Concentration difficulties can also play a crucial role in pupils' learning, as it was confirmed by the three pupils' teachers. More specifically, Carol's teacher had to remind her to read the instructions about the required literacy tasks, whereas John's teacher preferred to set him to work with classmates who could help him to concentrate: 'I'm taking him away from his peers […] so I make sure he is with somebody who is going to help him to concentrate'. This was also John's preferred way of learning: 'I work with my friend to help me so I won't forget, we work together'. Emily's difficulties in concentration and her strong efforts to remain on task caused her tiredness, which usually resulted in her failure to complete literacy tasks as it was observed in her classroom activities. Being aware of her difficulties in concentration Emily suggested that she would prefer the assessments in classroom to be conducted 'by people sitting in different tables and they can try to do their best with no one distracting them'. Her suggestion illustrates two important issues: first, the development of Emily's skills

in self-regulating learning, as she considers that sitting on her own has the prospect of benefiting her performance, which however was not taken into account within her classroom, and second, the pedagogical importance of spatial arrangements in classrooms which can influence pupils' performance.

The staff member also pointed to his limited concentration skills and his easy distraction during schooling because he found it 'difficult to focus on a lot of things at the same time', resulting in misinterpretations of his abilities and efforts, as 'all of my reports were saying that I was capable of more than I was showing and if I put more effort into my work then my work would be better'. Difficulties in concentration are not taken into account sufficiently in teaching and learning as teachers interpret them as pupils' lack of interest. However, distractions by external stimuli, namely noise and classmates, can influence children's learning processes, attitudes and abilities, resulting in their tiredness and failure to complete activities on time (Grant and French, 2010; Reid, 2011).

The three pupils' problems in reading, word recognition and pronunciation which were very obvious in their early years had improved due to constant practice. For example, Emily struggled in reading simple words like 'the' when she was younger, according to her parents. Nonetheless, this did not discourage her from enjoying reading books at her home which resulted in her making progress in reading. Carol, who characterized herself as a 'really lovely reader', because she could read five chapters of 20-25 pages each within an hour, was viewed as a fluent reader by her teacher and parents. Her tendency to read numerous books enabled her to improve her reading pace and decoding skills, as both her teacher and parents were quick to point out. On the contrary, John who experienced significant difficulties from the beginning of his school life, overcame

them by participating in the programme, 'Reading Recovery' (head of inclusion). Nevertheless, he was categorized at the lowest level for reading, as his teacher mentioned, because although his 'decoding is ok', it took him 'a long time to read' and his intonation remained the same throughout.

A variety of skills, namely phonological awareness, decoding, intonation and comprehension play an important role in the development of reading skills. Pupils identified with dyslexia present marked difficulties in the decoding process as they are not able to connect sounds with letters and to memorize them as codes, illustrating problems in phonological awareness (Snowling, 2001). For example, children learn to read and decode words but they can experience difficulties in applying and generalizing this knowledge to other contexts. In other words, they are taught systematically phonics so as to improve their phonological skills, but they present limited progress in reading unfamiliar words. Characteristically, the staff member mentioned that once he was not able to read a word because 'it was too long so I couldn't break it down into syllables, I couldn't make sound like any word I knew', illustrating his difficulty in applying these phonological rules to an unknown word.

Furthermore, the three children experienced difficulties with answering complex comprehension questions, especially when the answers were not obvious in the texts. As a result, they tended to 'skip' the 'hard' questions, because they could not identify their answers in the text, as Carol, John and Emily mentioned unanimously. This demonstrates that their word decoding deficits are connected to their comprehension skills influencing their ability to understand what they read simultaneously (Beaton, 2004). However, conventional teaching approaches in combination with teachers' low expectations from groups of

learners with poor reading standardized levels do not encourage the development of pupils' relevant strategies to dealing with texts and answering complex questions. Hence, pupils' difficulties in reading comprehension are not related to deficient cognitive skills but to their exposure to inadequate teaching and learning methods, as learners' skills to process and comprehend a text are not innate competences but are developed through education and experience.

Attributing, though, pupils' learning difficulties merely to their cognitive processes tends to disregard the negative implications of poorly conceived pedagogical methods on children's learning. Consequently, learners who present different learning attitudes to conventional teaching approaches seem to be taught with lower expectations concerning their learning outcomes and often these are limited to basic forms of knowledge. In addition, this situation can cause difficulties with the development of metacognitive skills, which prevents children from understanding how they can learn and how they can apply learning strategies in other contexts. John's teacher suggested that his learning techniques for writing and spelling had not been solidified giving the impression that 'he doesn't really push himself […] other people might say he is very lazy […] very stuck in the sense of a kind of apathy', although 'sometimes I do think that he is not really trying hard but other times I know he is trying very hard but nothing is coming out of it'. Especially with regards to making mistakes, John tended to accept his errors without trying 'to make it better' or 'to dispute them' (John's teacher) which indicates insufficient development of his metacognitive capacities.

Indeed, the three pupils experienced difficulties in their metacognition to different degrees, which resulted in their need to ask for further support. For example,

John expressed his preference to work on his tasks with his teacher's support when he had difficulties with his answers. Emily, also, preferred to be assisted by her friend when she came across difficult tasks, whereas Carol prioritized her preferences, firstly by working individually, then asking for help from her friend when it was necessary and lastly asking for her teacher's support. It seems that John and Emily feel more insecure about working autonomously, while Carol was observed to work on her tasks more independently. Autonomous learning is contingent on the development of metacognitive skills which allows learners to understand their learning processes and manage it by applying learning strategies efficiently in various contexts (Knight and Galletly, 2005). Pupils' need for constant support by their teacher or peers reflects the fact that their skill mastery is either not maintained or cannot be generalized in diverse contexts. As a result, they become more dependent on others' support rather than on undertaking responsibility for their self-learning.

Characteristic examples are the three pupils' learning strategies for overcoming their difficulties in literacy and reading, as they referred to them. In particular, in learning to read and spell a new word their strategies included the use of a dictionary for its meaning and pronunciation, asking someone else in the classroom or at home, breaking them down to smaller syllables, and checking their sound so as to see if it was familiar to them. When they forgot the word's spelling they tried to remember its meaning and pronunciation or they used mnemonic techniques, namely songs or rhymes from its front letters. For example, for the spelling of the word 'because' Emily and Carol used the following rhyme: '*big elephants can always understand small elephants'*. Handwriting exercises with joined or separate letters were also used for memorizing their spellings, while the two girls created a glossary of new words

with their teaching assistant's encouragement so as to revise them. Another strategy they employed was correcting their spelling mistakes in dictation by copying them several times. Daily practice and repetition of tricky words' spellings assisted the staff member to improve his memorization, as he suggested; however, none of the three children adopted these two learning methods. Furthermore, the staff member developed his visual memory by drawing pictures with the tricky words, such as 'sweet' and 'sweat'. Indeed, the connection between the picture and the word's spelling and singing rhythmically the alphabet is considered a common practice for pupils who experience dyslexia allowing them to visualize the word and to remember the right order of the letters respectively (Pollock et al., 2004).

In writing a paragraph, Carol and John explained that they did not organize their ideas through planning, but they were only thinking of a starting word, which could give them ideas to continue. On the contrary, Emily was encouraged by her teacher and teaching assistant to keep notes during classroom discussion, and to organize her ideas verbally, before she started writing. This approach can be helpful for pupils who experience limitations in managing their own writing because it assists them in organizing the content of their writing and developing their skills progressively, enabling their autonomous learning. Concerning reading comprehension and literacy tests, the children's strategies for replying to difficult questions involved in the main guessing the right answer, making an answer or skipping the difficult question when they could not find the correct answer after reading the text many times. This shows that they do not have the requisite skills to cope with demanding questions.

Their participation in classroom activities was also limited in comparison to their peers, especially in reading aloud their piece of writing or an extract from a book in front of the whole-class. As Carol's teacher explained, Carol prefers to read her writing out loud in a smaller group because 'it could be intimidating for her but when she is in a small group there is no hesitation'. Their preference for avoiding possible embarrassing comments on their reading skills by their classmates was enhanced by their awareness of their reading levels, as this was made clear to them by their placement in ability-based groups. Carol's teacher mentioned that he tried 'to pick someone from each table *(= ability-based groups)* with different abilities to share their work' by reading it aloud. In practice, though, it was observed that children from high-performing groups were selected more often to read aloud for modelling purposes in the classroom which can also explain Carol's discomfort in reading aloud her writing. Hence, pedagogical practices have the potentiality to reproduce stereotypes about pupils' abilities and skills limiting the development of their potential and self-confidence. This is also enhanced by the role of diagnoses in education and its importance for pupils' learning.

The role of diagnosis in pupils' learning and self-esteem

Diagnosis can have crucial implications for pupils' learning and self-esteem as it influences fundamental school structures, namely the provision of intervention programmes, and the social interpretation of pupils' learning difficulties viewed

as 'different' learners. The three pupils experienced issues with their self-confidence concerning their learning difficulties.

In particular, Carol's official diagnosis for dyslexia highlighted her poor working memory and lack of phonological awareness as an explanation for her difficulties in spelling, organizing her writing and reading comprehension. Emily was diagnosed with poor short-term and working memory and poor phonological awareness justifying her difficulties in spelling, organizing her writing and occasionally in reading. Emily's reading comprehension and reading pace were assessed as being poor and the suggestion was that she should be given more time to learn new concepts. Additionally, her diagnosis emphasised that her tendency to lose self-confidence when she realized that her efforts did not have the expected outcomes in comparison to her classmates, causing her feelings of frustration and stress. John had not been diagnosed at the time of conducting the research, although he was attending Year 6. This delay in the diagnostic assessment caused him to feel insecure about his abilities and skills.

The three pupils' parents, though, experienced difficulties in their efforts to achieve a diagnostic assessment for their children. Characteristically, the parents of the two girls had identified their learning difficulties from an early age and had subsequently asked the school's staff members to arrange for a diagnostic assessment. For example, Carol's parent started 'to push' for a diagnostic assessment when Carol was attending Year 4, while she was finally assessed when she was 9 years old. The then teachers responded to parents' pressure for early diagnosis that the children were too young for diagnosis. For instance, when Emily attended Year 3 her teachers said that 'she seems that she might get a bit longer to learn but we cannot do anything about it yet because she is

young' (Emily's parent). The main reason, though, was that the senior staff and Emily's then teacher did not want 'to label a child with a disability assessing as dyslexic or anything else', although, they advised her parents to arrange with the school a diagnostic assessment when Emily was 7 years old and more able to do the test (Emily's parent).

Pupils' diagnoses with learning disability have the potential to cause stigmatization for them, resulting in their isolation from mainstream society (Kenyon et al., 2014). For example, positive outcomes of children's capacities are not highlighted, as an emphasis is given to what they cannot do compared to their peers rather than what they actually can do, influencing negatively their well-being and self-identity. This problematic situation is likely to have been caused by the diagnostic system which locates the problem and its solution within the individual, although learning difficulties have been constructed within an educational-psychological framework in respect of the society's requirements for employability (Gillman et al., 2000). However, people's tendency to look for a label that can be used as an explanation for their difference in academic achievements compared to others' regular performances tends to view diagnostic assessments as an objective and established truth despite their questionable validity and reliability.

In particular, these types of diagnosis are based on assumptions that language represents accurately pupils' real abilities through standardized testing which considers children's diversity and difference in its learning as a problem. Diagnostic assessments involve tests of decoding, word recognition, spelling, writing, reading comprehension, mathematical problem solving and computational arithmetic (Siegel, 1999). Nevertheless, various factors which can

influence those tests' outcomes are not taken into consideration during the process. For example, in assessing reading comprehension, pupils' interests or familiarity with the topic, their different reading pace and inadequate teaching of reading strategies are not valued, affecting considerably the tests' scores, while in the evaluation of writing with time limits, the focus on its technical aspects, namely handwriting, spelling and vocabulary, provides a partial image of pupils' competences. For this reason, in the identification of pupils with learning difficulties, a series of assessments need to be conducted over a long-term period of time rather than one assessment session, taking into consideration teaching and learning approaches. In this way, diagnostic assessment can provide an holistic image of children's capacities to produce a piece of writing or to comprehend a text indicating the areas which need improvement, instead of highlighting as weaknesses specific skills separately, namely spelling and handwriting.

Children's reaction to the outcomes of their diagnostic assessment varies illustrating its potential influence on their self-confidence. For example, some pupils are embarrassed if they are known as dyslexics because they prefer not to be labelled as such and especially in front of their peers, while others feel relief with this label as it can justify their difference from the majority of their classmates, restoring their confidence in their intelligence (Smith et al., 2003). As Emily's parent mentioned, 'Emily doesn't like to be labelled as a child with learning difficulties, she doesn't see herself like that and she doesn't like people to say that about her so at times she feels upset about it'. Indeed, Emily in contrast to Carol never referred to the fact that she had been diagnosed with dyslexia during the research period, whereas her efforts to avoid this stigmatization as a dyslexic learner had negative implications for her self-

confidence and her learning. For example, she felt embarrassed to keep notes in her notebook during literacy lessons as part of her special provision, because she was the only pupil who did that in her classroom. In particular, her teacher noted that 'sometimes she does have that red book and sometimes I know that she doesn't like to take it because the other children don't sit with one', while she prefers to sit isolated at the table and write in it during the carpet time because 'the other children might comment, they might ask her what's that book'.

This attitude to differentiation, which was intended to help Emily with her writing, shows the other side of intervention programmes. Persistent reference to standards and level indicators during teaching encourages the construction of norms regarding knowledge, abilities and skills (Gore, 2001). In this way, learners' individuality is not acknowledged because homogeneity in their learning and performance is emphasized. This affects children's motivation and self-confidence, especially those who are categorized as low achievers, when they do not achieve the expected academic outcomes despite their efforts (Gipps, 2012).

On the contrary, Carol's attitude and confidence had been changed after her diagnosis, although 'she lacks confidence' due to her classmates' comments in the past concerning her performance, namely 'you are stupid' (Carol's parent). Characteristically, as her parent mentioned, 'what the dyslexia thing did for her was make her feel a little bit special and little bit like "I've got this and look at me how clever reader I am" so it went that way, rather than put her down'. Carol's need, though, to prove that her learning difficulties did not impact on her intelligence reflects her latent low self-confidence and her concerns about her performance due to prior negative comments. However, instead of losing her

motivation to learn, she concentrated on her attempts to doing better, which illustrates that apart from prior educational experiences, capacities, self-perception and motivational states, personality and current attitude towards to learning also contribute to pupils' responses to educational experiences (Gipps, 2012).

In John's case, the delay in his diagnostic assessment and lack of special provision resulted in him worrying about his abilities and intelligence affecting his learning progress. His parent emphasized that due to his difficulties in learning he feels 'kind of slow' and he used to say that 'I am very stupid, I am kind of stuck […] I am slow I can't do anything […] he becomes upset and he goes to one corner', refusing to study at home when he cannot understand the task. John's anxiety and concerns, it is suggested, are caused by his inability to explain why his efforts were not successful in meeting the learning targets, reducing in this way his motivation to learn. His attitude can be explained through a helplessness model which suggests that pupils with little academic successes despite their best attempts tend to reduce or abandon their efforts to learn because they do not consider themselves as able to succeed academically affecting their self-concept, their learning behaviour, self-esteem and motivation (Gipps, 2012).

The staff member explained that being diagnosed with dyslexia during his undergraduate studies changed 'my perception of my own abilities, my strengths and my weaknesses and since then my academic life went from good to much better', although he avoids revealing it because 'people bring preconceptions of my abilities which will be unfounded and wrong' endangering his career. He also mentioned that children's reactions to diagnosis can be varied, for instance they may like to be a 'bit different' or they might become offended and hide it because

'it is a learning difficulty that's going to be a kind of stigma'. As he emphasized, 'I am just a weak reader however, I think other people have equal weaknesses in other areas, there is not just a name for them yet, if somebody is weak in terms of creativity we don't really have a term for that'.

Stressing the negative implications of stereotypes on pupils' competences and future career prospects, stigmatization based on children's performances in standardized testing in literacy illustrates that these kinds of skills are overvalued in comparison to others, reproducing educational and social inequalities. Capacities in literacy and numeracy are emphasized socially because they are associated with employability which indicates what kind of knowledge it is necessary to have in life (Wearmouth et al., 2003; Wilson, 2002). Hence, depending on whether pupils can achieve the learning targets of a particular learning content which is considered as an important requirement, children tend to be labelled with a learning difficulty (Wilson, 2002). These skills are prioritized in education over skills in other domains, namely in the Fine Arts. The provision of special intervention programmes to pupils who have been officially identified with specific learning difficulties encourages this social prioritising of literacy skills.

Special Provision

Additional individual support in the context of special provision had not been allocated to John during the time of the research due to a lack of an official diagnosis. Nevertheless, he attended an intervention group, like Carol, which

focused on examinations' requirements so as to improve his level in writing for the planned SATs examinations in that year. For Emily and Carol who had been diagnosed with dyslexia the school provided an intervention programme three times a week based on the guidelines of the expert who assessed the two girls and on their teachers' comments on their performance in classroom activities and tests (head of inclusion, teaching assistant). In particular, it included two 15-minute one-to-one sessions outside the main classroom and a 30-minute session for classroom support by the teaching assistant. The one-to-one sessions were held in the classroom for intervention programmes, where two or three teaching assistants worked with groups of pupils simultaneously. That learning environment, though, can prevent the success of this special support, as it was extremely noisy at times creating concentration problems for learners. Emily was more vulnerable to noise distractions within this classroom compared to Carol. The fact that concentration issues were not taken into account in the special provision by ensuring a quiet environment can be viewed as a weakness of the intervention programmes in their ability to meet individual learning needs.

The special intervention programmes offered to those girls focused mainly on the remediation of their difficulties with respect to standardized performance levels and testing requirements. For Carol who attended Year 6, 'a lot of focus is on spelling and word-families patterns' (teaching assistant), as it was 'the year we need to prepare them for the tests' (head of inclusion). Similarly, for Emily, the 'main focus is on word families, spelling patterns just to help her with her spelling and dictation' as well 'to shorten' her long sentences, taking into account 'what would a marker want' (teaching assistant). However, improvement of pupils' basic educational skills pertinent to the curriculum can be questioned as markers' demands are given greater prominence than individual learning

characteristics. Hence, these programmes tend to focus on how pupils can succeed in testing situations rather than on how they can develop strategies and learning habits that contribute to their learning in the long term. Additionally, these intervention programmes, when they emphasize standardized developmental levels and testing requirements, have the potential to underline pupils' individual difficulties and disregard educational needs common to all learners and in addition they have the propensity to stigmatise children with difficulties in their learning (Corbett and Norwich, 2005).

The sessions mostly included the teaching of word-families, spelling patterns, and dictation of 2-3 sentences involving taught spellings of frequent words. Practising memory skills was not encouraged for Carol, despite her diagnosis, because her teachers wanted her to focus on the improvement of her spelling patterns (teaching assistant). Therefore, although memory activities can contribute significantly to the enhancement of memorisation skills, it seems that they are viewed as minor tasks compared to spelling exercises. Furthermore, during these sessions Carol was not encouraged to keep notes nor were photocopies provided for further practice and revision. Accordingly, the success of the intervention sessions relied heavily on Carol's memory skills, despite her memory weaknesses. The outcome of such an approach was for Carol to be unable to remember what she learnt during the sessions, as she mentioned immediately after a lesson: 'I had a couple of difficulties with some words that I didn't know so I can't remember any of them'.

Emily's sessions included activities for memory practice and use of assistive technology for her dictation. In particular, the software Speech-to-Text used in an IPad allowed her to convert her spoken words into written text (Smythe, 2010) by

reading the text of her dictation so as to see its written form. This helped her to comprehend the verbal and written form of the word simultaneously and to identify the differences between pronunciation and spelling, enhancing her phonological awareness (teaching assistant). Indeed, the speech recognition software can contribute to the improvement of spelling, writing and phonological awareness, because it does not require physical contact with the computer reducing in this way pupils' writing efforts and memory loads (Scherz, 2011). Furthermore, its contextual naturalness permits users to evaluate their own work and to make the essential changes to their texts. Despite, though, the positive effect of technology on Emily's learning, in practice the IPad usually did not work properly due to problems in voice recognition resulting in postponement of her dictation's correction and feedback.

The classroom support involved the pupils' facilitation in organizing their writing through guided discussion with the teaching assistant. For instance, Emily was encouraged to express verbally her ideas about the taught topic and then to write them down ensuring their logical order. The teaching assistant also intervened in correcting the grammar, syntax and spelling of Emily's sentences. However, it was observed that Carol's classroom support was not conducted on a regular basis, as during the research it was cancelled twice due to changes either in the teaching assistant's or Carol's schedule.

Self-assessment was not exhorted within intervention sessions because the two girls could not identify their spelling mistakes, as their teaching assistant explained. Characteristically, the teaching assistant mentioned that 'Emily can't always recognize her mistakes […] when she works on her spelling, it's hard for her to identify her mistakes', while 'if you show them *(= the misspelling)* they *(=*

Emily and Carol) will not say "yes" or "no" they might think is correct so you have to identify the words and then to use dictionary and look to find the words'. However, self-assessment, namely immediate self-correction of spellings can improve pupils' performance, strategies and mechanisms of their learning process (Brown and Harris, 2013). Children's self-evaluation according to particular criteria in combination with teacher's feedback enhances the accuracy of their responses resulting in their better attainment. Learners also benefit from confidential self-assessment as it encourages them to control and regulate their own learning, which increases their motivation and engagement with challenging tasks. Additionally, guided self-assessment fosters children's awareness of their own learning strategies and efficiency enhancing significantly their metacognitive processes (Gipps, 2012). Hence, pupils undertake the responsibility for their own learning by identifying their strengths and weaknesses and finding ways to improve. In the case of Emily and Carol, though, the fact that they were not encouraged to self-assess explains their lack of this competence.

The issue of specialization and the expertise of teaching assistants in dyslexia was raised by Emily's parent. The two girls' teaching assistant was a high level teaching assistant (HLTA). Emily's mother, though, was dissatisfied with the limited specialisation of the support staff on dyslexia: 'the people that help her around I believe they are not specialized teachers, they are not specific dyslexic teachers that they are dealing with her', while frequent changes in staff members who work with Emily tended to 'scare her a lot now'. Two issues emanate from the parent's comments about the nature of support: first, there is a need for specialized teachers of dyslexia who can understand the nature of children's difficulties and are able to tailor the intervention for their individual learning profiles (Galton, 2007), and second, the importance of providing consistency and

stability to allow trust to be developed and maintained between teacher and pupil, enabling communication and collaboration in their learning and meta-learning processes (Fergusson, 1994). Spatial arrangements within classrooms can contribute significantly to children's learning successes.

Literacy: Classroom organization

The school's main classroom arrangement was pupils' grouping, based on their performance levels or similar needs, 'for academic similarity' and improvement of their skills in literacy and numeracy (head of inclusion). Pupils' levels were identified through assessments of their performance in classroom activities and tests in respect of level indicators with specific target lists (head of inclusion). These ability-based groups allowed constant changes of their members according to their performance in tests each term, while mixed-ability groups were formed only for 'social kinds of reasons' (head teacher, head of inclusion). The classrooms of Carol, John and Emily accommodated 29, 30 and 20 pupils in total respectively. The three children belonged to average and low performing groups based on their performance levels. Figures 1, 2, 3 present the spatial arrangements of Carol, John, Emily and Figure 4 shows Emily's classroom during teaching assistant's support time.
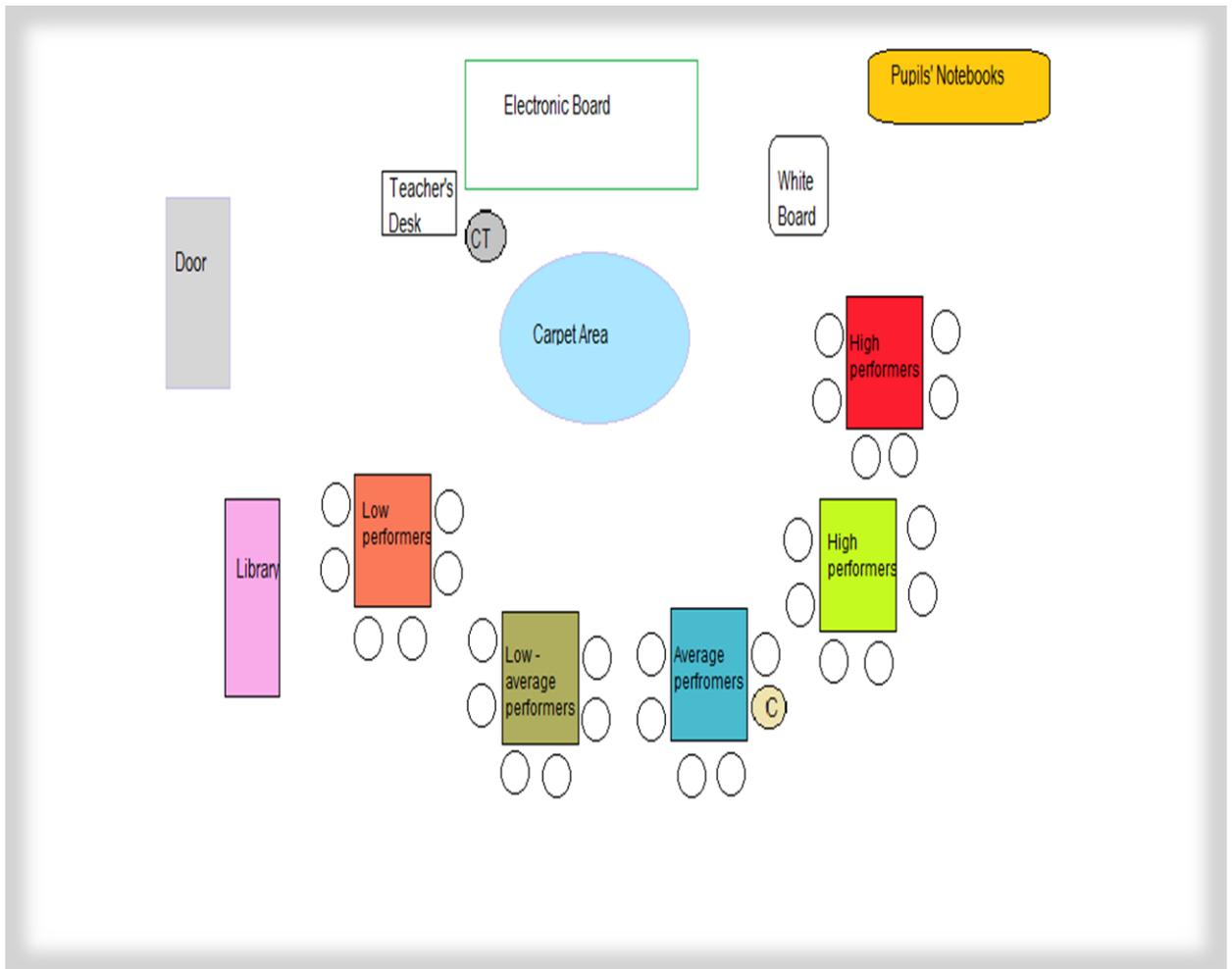
Figure 1: Carol's literacy classroom. C is Carol and CT is classroom teacher
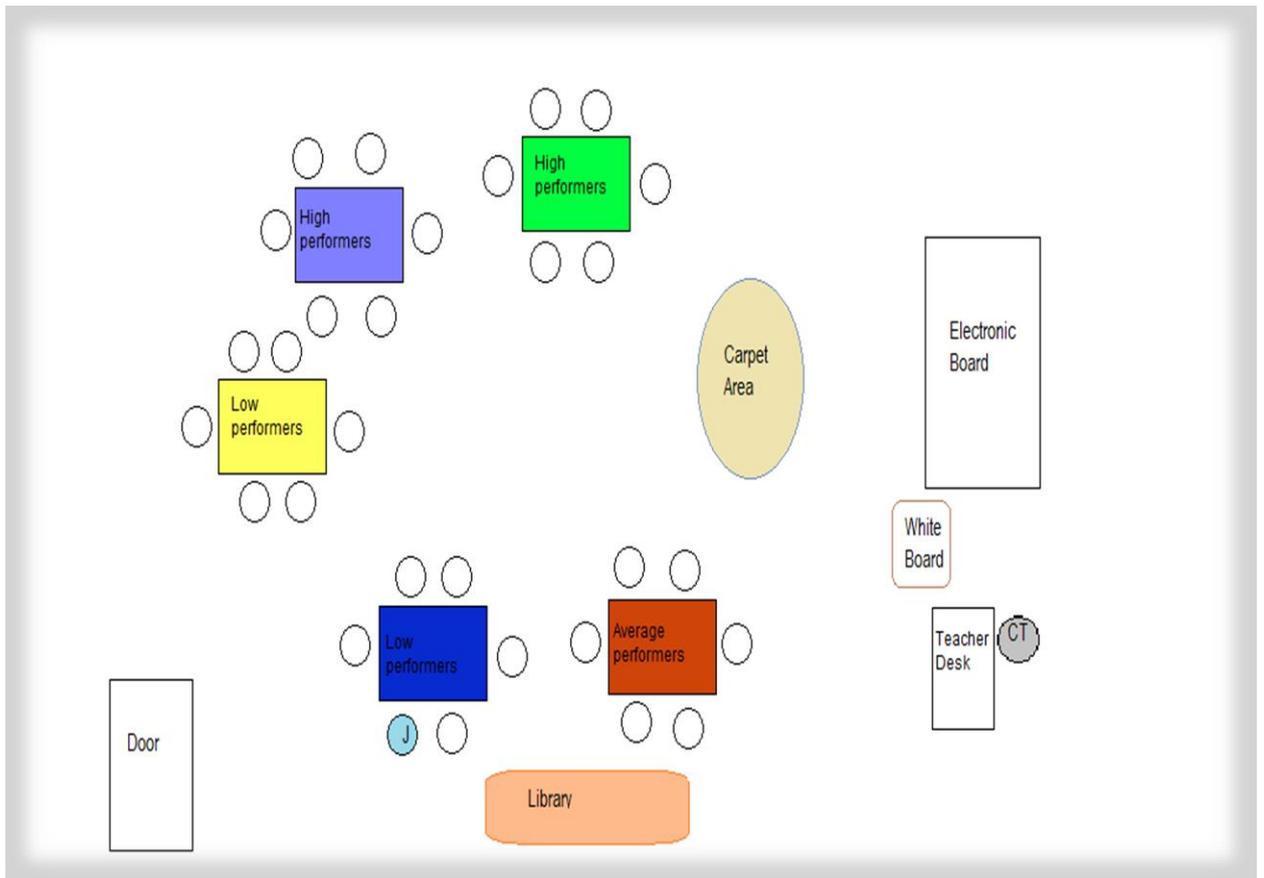
Figure 2: John's literacy classroom. J is John and CT is classroom teacher
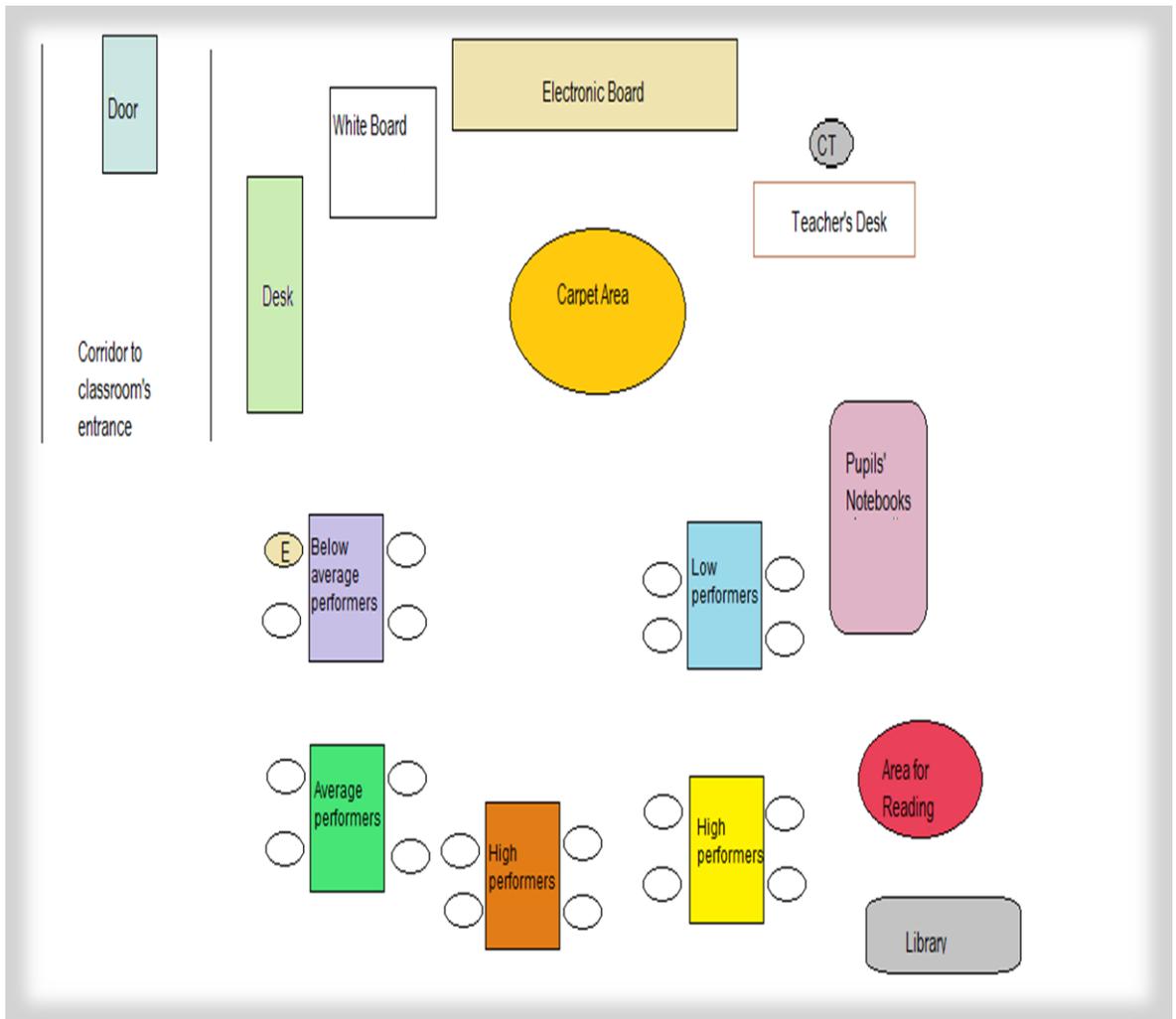
Figure 3: Emily's literacy classroom. E is Emily and CT is classroom teacher
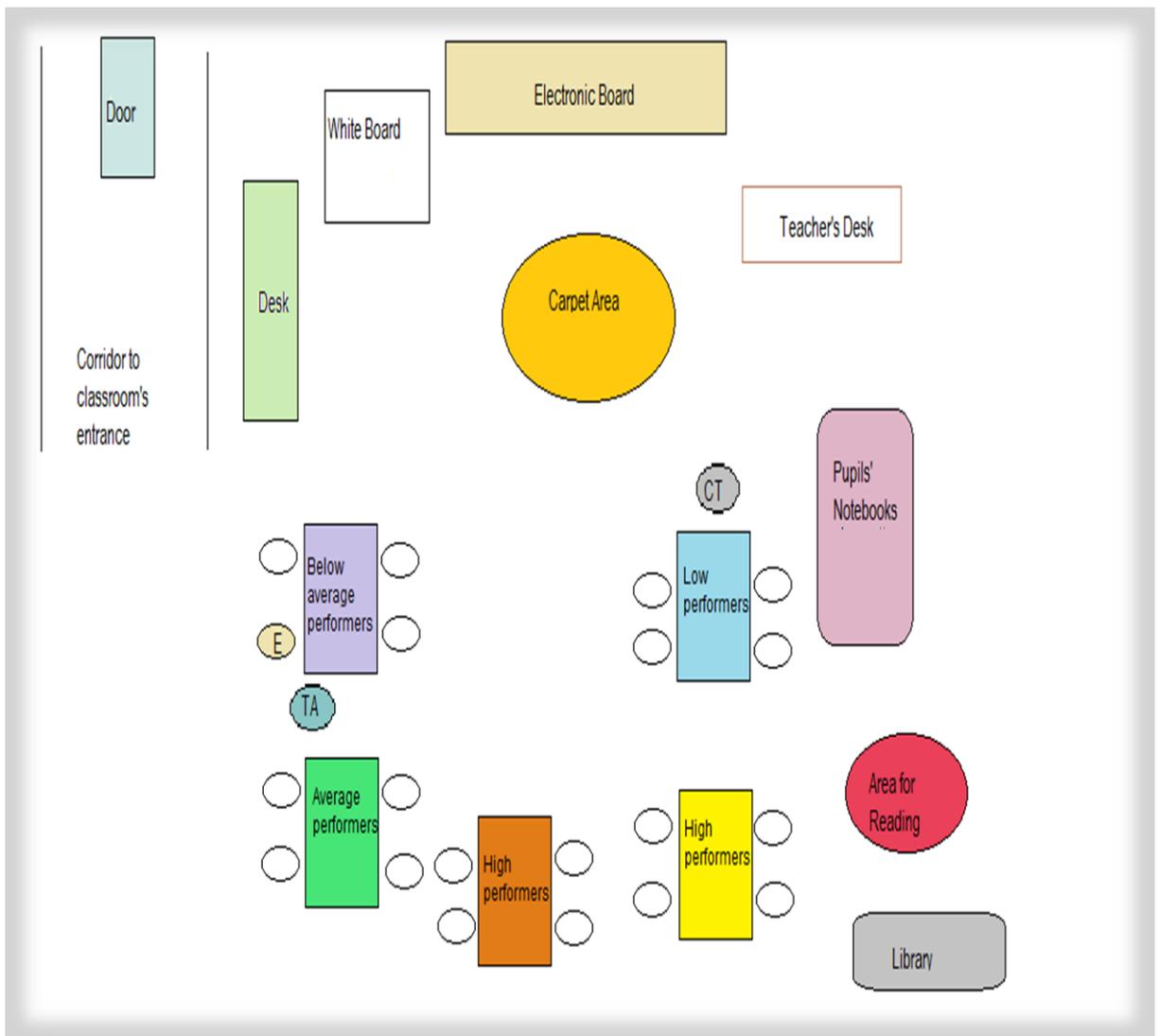
Figure 4: Emily's literacy classroom with classroom support. E is Emily, CT is classroom teacher and TA is teaching assistant

Ability-based grouping was chosen because 'the children learn best from each other in small groups' (head teacher) and the teachers were able to 'target the teaching to focus on that particular need' of the children who need extra support (head of inclusion). For instance, John was placed in a mixed-ability group for the grammar and topic sessions so as to exchange ideas, while in literacy 'he is in a lower group' because it is 'more personalizing learning there' (John's teacher).

The three teachers suggested that ability-based grouping allowed them to differentiate their teaching in respect of their pupils' individual learning needs. In practice, though, this kind of differentiation did not appear actually to address individual learning characteristics. Characteristically, Carol's teacher mentioned that he designed the day's lesson based on 'Carol's level rather than her statement'. This approach, though, is opposed to the concept of individuality in learning and categorises children in standardized groups disregarding their learning characteristics and devaluing the role of diagnosis.

Stereotypes about pupils' learning abilities are also reproduced limiting their opportunities to function within mixed-ability activities. For instance, Carol was usually set to collaborate with members of her own group during whole-class tasks illustrating the problematic realisation of peer learning. In contrast, Emily's teacher preferred to mix her pupils during peer learning activities, although they were normally arranged in ability-based groups. The main reason for this was that her teacher did not think that 'it helps them', as 'Emily won't learn anything' from sessions if she was set to work with the same level classmates (Emily's teacher). Therefore, as Emily's teacher mentioned 'Emily might be with a child who is at a higher level than her to support her, share ideas', while she can also learn through providing her assistance to lower levels classmates than herself.

This pedagogical approach endorses the idea of a scaffolding process through peer learning, which can be facilitated when there is one experienced pupil who has achieved the required learning target and he/she can support his/her classmates' learning process (Vygotsky, 1987; Wood and Wood, 1996). However, grouping based on learners' academic similarity precludes pupils' interaction with more experienced peers, and children's learning difficulties are

exposed affecting their self-esteem (Corbett and Norwich, 2005). Children's self-image as learners tends to be determined by their past achievements in combination with their observations and feelings concerning their teachers' interactions with them, but also with their classmates (Gipps, 2012). Therefore, children consider themselves as successful learners based on their interpretations of their teachers' expectations of their performances. Especially when pupils experience difficulties in their learning, their self-confidence is potentially influenced by their difficulties and failure to perform in the expected way (Rose et al., 1996). Accordingly, an erroneous assumption about regularity and normality in performance can be developed among pupils resulting in the social isolation of low achievers, while the pressure for high achievement in external examinations appears to influence teaching and seating arrangements, focusing more on standardized levels and their improvement (Gipps, 2012).

Significant problems in pupils' socialisation and cooperation skills can be created through competitive learning environments. For example, Carol suggested that she should work independently on her tasks without seeking classmates' support because 'some people don't help me so I just do it on my own'. Collaborative learning seems to be discouraged through classroom arrangements that divide children into high and low performers, while competition which characterizes norm-referenced learning and reflects social comparison threatens productive peer relationships and empathy (Gipps, 2012). Consequently, because of competition, peer support tends to be minimised, allowing in this way the covering up of pupils' misunderstandings about their academic work, especially of those who are considered to be low-achievers.

A characteristic example of pupils' demotivation due to lack of empathy among classmates for their learning difficulties was given by the staff member based on his personal experience:

> I really enjoyed geography. I took up two levels as well and this was in Year 8 and I really enjoyed it and I was really trying hard to just to get on with my work and paper around me and then a question that I had to do and I couldn't skip out because it was supposed that the questions were in order and I couldn't read the question there was one word in there that I couldn't read so I couldn't read the question cause I couldn't read that one word and I didn't know what the question was asking me so I couldn't do the work and I stuck there and I couldn't do it and in the end I felt really stupid and I said 'ok forget about it, I am going to ask someone what this word means' and that's I never used to do cause I feel very stupid about it and I asked what this word means and they laughed at me 'oh you don't know what this word means?' and I just said 'oh why I bother?' and I didn't do it, I didn't do my work, I just couldn't pass that, it was just about barrier so that's the one thing that sums up the negative side of dyslexia for me (staff member)

Based on the above, how pupils' learning difficulties are treated by teachers and classmates within educational institutions can shape the way that they are viewed socially. Children's categorisation according to their performance in standardized testing seems to foster the development of problematic socialisation for all peers, as low performers tend to feel inferior and embarrassed, and high performers might be unable to show understanding and

empathy. This tendency, though, can have further consequences as two categories of citizens might result, the able and unable ones. Therefore, competition within classrooms has the potential to set up additional social barriers to pupils apart from their learning difficulties. As educational principles and learning environments are seen to need to protect and improve pupils' well-being, learners' groupings can be viewed as a problematic educational practice restricting their potential. Pedagogical and assessment methods also play an important role in how pupils progress and in the development of their emotional states.

Literacy: Pedagogy and Assessment

Literacy is defined as people's basic individual ability to read and write and its sufficient development and evaluation seem to be encouraged through educational policies and schools' practices for various reasons, including accountability and employability purposes (Olson, 2009). Reading and writing are also perceived as a social practice, which enables children's expressions and interpretations via their engagement with various texts. Therefore, apart from basic reading and writing skills, literacy involves reflective skills concerning pupils' comprehension, reflection and their own interpretations of material resources.

The National Literacy Strategy Framework which was introduced in England and it was in force at the time of this research study suggests that a daily literacy hour permits schools to develop and raise standards in literacy concerning

pupils' skills in reading, writing, listening and speaking (Department for Education and Skills, 2012). This framework in most cases determines schools' structures and classroom organisation in significant ways. In particular, it emphasises pupils' reading and writing fluency through advanced vocabulary, grammar and syntax, development of their phonological awareness and spelling, self-regulation and self-assessment of their own learning via planning, editing and presenting their own writing. Pedagogical approaches, namely whole-class activities, discursive and interactive teaching strategies (e.g. modelling, demonstration, scaffolding) which take into account learning objectives and pupils' learning needs are also recommended so that the above targets can be achieved. Additionally, the National Literacy Strategy Framework endorses activities in writing and guided reading to be realised in small ability-based groups as they allow pupils to learn how to read and write independently and to be involved with various texts.

Based on the above, the Blue Sky School organized its pupils' learning through a very structured routine. The same schedule was applied daily in all classes concerning literacy's activities, including 15 minutes for grammatical tasks at the beginning, a 30-minute guided reading session, and then an hour for literacy. In Years 5 and 6, pupils were also assessed through standardized testing once per week, involving dictation, writing and reading comprehension tests. The head teacher explained that this kind of 'structured routine helps children to develop resilience', while 'consistency' was encouraged which allowed children to know what they were going to be taught and how they would start the day regardless of the Year (head of inclusion). Additionally, through this the school aimed to teach children social norms (head teacher), introducing socially acceptable attitudes. Indeed, structured routines in educational settings, which define

agents' roles and relationships within them, are seen by some scholars to be used to transfer social structures and cultural principles from one generation to the next (Lawton, 2003). Social needs and requirements are communicated to pupils through school organisation that supplies them with social and cultural knowledge and experiences.

However, pupils with differences in their learning pace tend to experience difficulties in meeting strict time regulations efficiently, sometimes resulting in incomplete tasks that do not illustrate their actual skills. The school's intention, though, was a simulation of 'what things are going to be expected of them' without ignoring their individual learning needs (head teacher). Expectations, accountability and acknowledgement of children's contributions also shaped the school's learning structures. In particular, the head teacher emphasised that through the school's arrangements 'everybody should know what is expected of them, everybody should have feedback and being held to account, everybody should feel that they have been valued for what they bring, everybody should feel that they have been developed' which constituted a motivational tool for pupils when expectations were adjusted to individual learning needs. Carol's teacher used expectations as a medium of encouragement to his pupils: 'I expect a lot […] but when they give me what I expect there's a lot of accountability, when someone is not doing what is meant to do then there is repercussions for that'.

This kind of pedagogical approach, though, has the prospect of creating teacher-centred classroom environments where teachers control their pupils according to specific regulations by using punishments or praise (Baumrind, 1971). Its potential implications for children's learning include pupils' avoidance of active

involvement in the lesson's activities and their isolation, especially when they experience learning difficulties. For example, due to teachers' excessive emphasis on educational targets, which are based on standardized developmental levels and generalized to all children, individual differences in learning can be perceived as the pupil's failure to meet the standard requirements resulting in his/her demotivation and stigmatization (Corbett and Norwich, 2005; Frederickson et al., 2004; Graham and Harwood, 2011). Consequently, teachers' expectations need to consider pupils' starting points and individual learning differences so as to have positive outcomes.

The three teachers, though, attempted to include all the children in literacy activities by arranging role-play and whole-class discussions about their writing topic. The discussions either required children to be gathered in front of their teacher, like Carol and Emily, or to remain in their groups, like John. Figures 5 and 6 illustrate Carpet time in Carol's and Emily's classrooms:
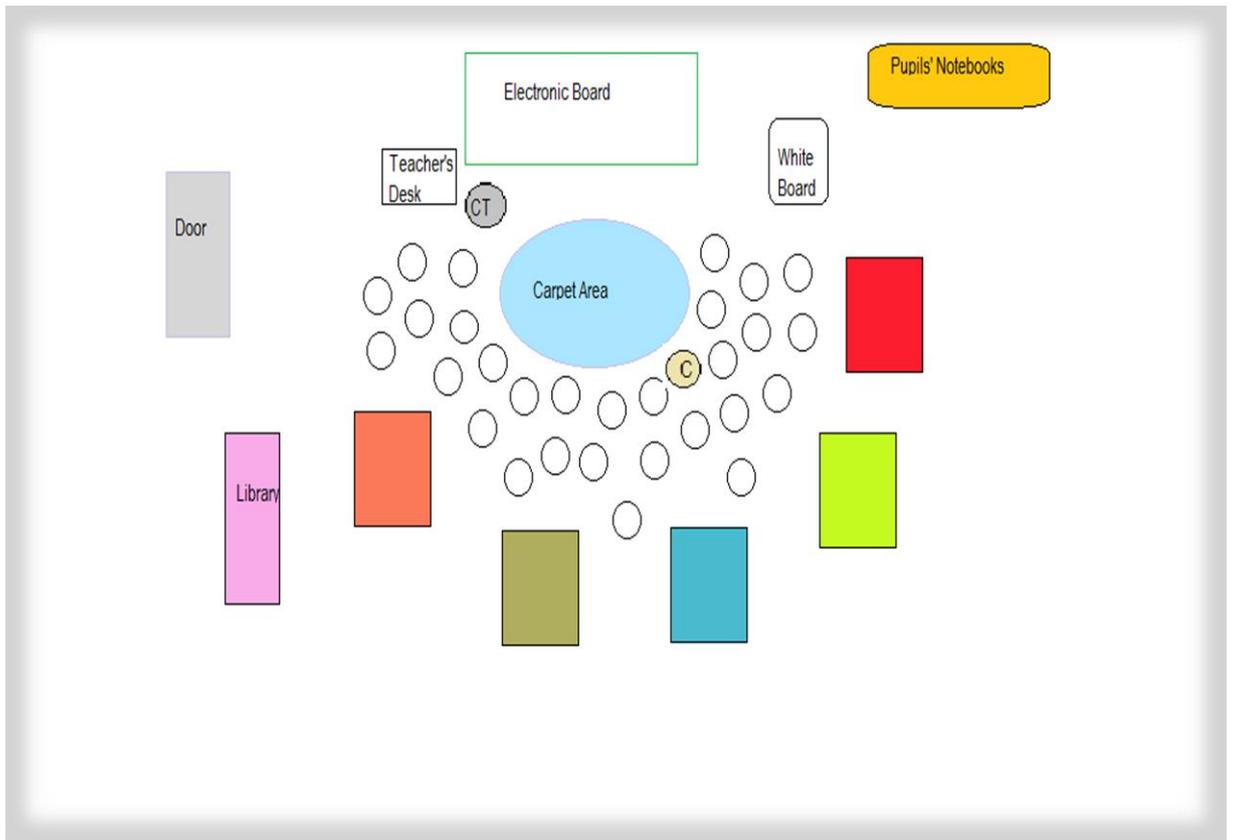
Figure 5: Carpet time at Carol's classroom. C is Carol and CT is classroom teacher
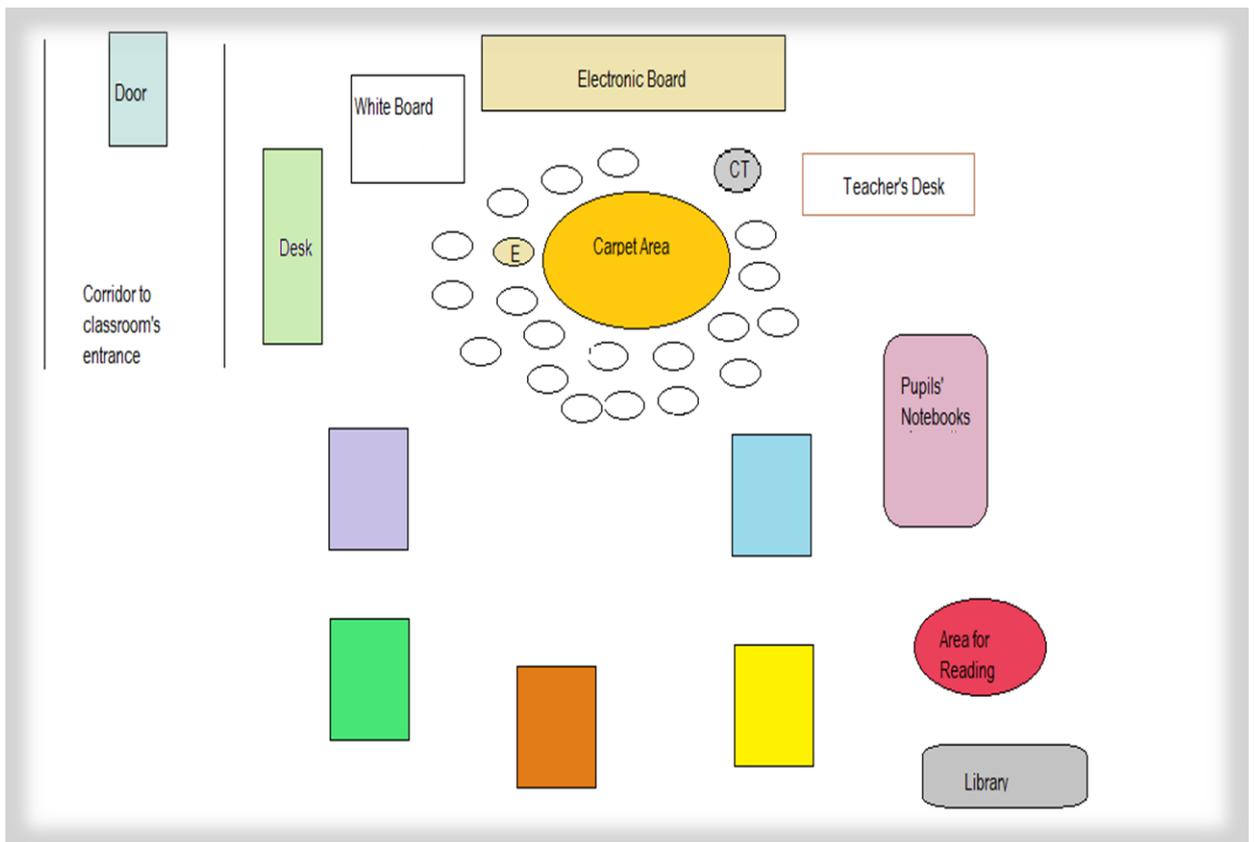
Figure 6: Carpet time at Emily's classroom. E is Emily and CT is classroom teacher

The choice of the carpet area allows teachers to control children's behaviour and attention during shared activities, namely discussion, and to interact directly with all their pupils, whereas learners can have the opportunity to be merged in a group regardless of their levels (Comber and Wall, 2001; Edwards and Usher, 2003; McGregor, 2003). In this way, teachers have the opportunity to revise the previous day's learning targets and to connect them with new knowledge through modelling (Comber and Wall, 2001). Accordingly, children's learning is mediated through accessible learning steps and analysis of tasks that allow them to develop their skills with the teacher's support (Corbett and Norwich, 2005; Vygotsky, 1986, 1987). The above seating arrangement and the described teaching approach which was adopted by the three teachers encouraged Carol,

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Emily and John to interact with their classmates and listen how they processed the new knowledge enabling the three pupils to refine their own learning strategies. Technology was also used for this purpose, namely PowerPoint presentations and IPads which were provided for grammatical, syntactical, writing and spelling tasks.

The main working style in the three classrooms was individual learning, instead of peer or group learning, as levels' improvement for the external examinations was intensively emphasised, illustrating the remarkable pressure for high performance on schools, teachers and pupils. Children were exhorted to consult before they started writing their level indicators, deliberately located on their tables. However, level-oriented teaching and learning has the potentiality to cause misinterpretations of children's abilities. Carol mentioned that 'if I have made these levels *(= higher levels)* I would be a bit smarter than these levels here, they *(= the high-performers)* know more than the others', whilst Emily tended to be stressed and scared during tests because her mistakes could influence negatively her levels (Emily's parents).

Exploratory talk was also affected by the focus on pupils' performance, as it presupposes children's freedom and comfort to express their thoughts and enquiries on a task with the purpose of further exploration and avoidance of potential misunderstandings (Barnes, 2008). The five main principles of effective dialogic classroom talk are described as collective, where teachers together with pupils deal with learning tasks either in groups or as a whole class; reciprocal, where dialogic discussion between teachers and children aims to share ideas and alternative perspectives; supportive, which encourages pupils to express their ideas freely without evaluating them as correct or wrong and to develop

common understandings on learning tasks; cumulative, which refers to a linear link between teachers' and children's ideas with further thinking and enquiries; and purposeful, which is associated with teachers' control of classroom talk according to a particular educational target (Alexander, 2008).

In practice, though, classroom talk was found to be mainly purposeful according to the above theory, as it involved mostly teachers' closed-questions addressed to the whole class that aimed to check their pupils' successful completion of tasks. The three pupils' participation during whole-class discussions was limited and they remained mainly silent throughout. Emily and John tended to ask their friends or their teachers in private when they needed further explanations, while 'Carol doesn't probably ask as many questions that she might be able to ask […] she doesn't ask that much for help at least at writing', as her teacher mentioned. Consequently, an emphasis on pupils' high achievements in combination with the insufficient encouragement of the other types of exploratory talk within classroom appear to influence the extent of active participation of these three learners with learning difficulties in exploratory talk.

Dictation was one literacy activity that discomforted the two girls significantly. An unknown text of fifteen lines was dictated to pupils and some of its words which belonged to the list of the high frequency words were mentioned so that they could be checked for their spelling. Images 5 and 6 present Carol's and Emily's text for dictation:

Dictation

Dearest Kitty,
My hands are still shacking tho it's
been two hours since we had scare. I
should explane that are 5 extinguaishers in
the building. The office staff stupidly forgot
to warn us that the carpenter,
or whatever he's called was comeing
to fill the extinguashers. As a rusult
we did't bother to be quite til I
heard the sound of hamering on
the landing. I imudetly asumed it was
the carpentor and went to wary
Bep, who was eating lunch, that she
couldent go each downs stairs. Father
and I station our selves at the door
so we could heare whether the
man had left.

Image 5: Carol's dictation
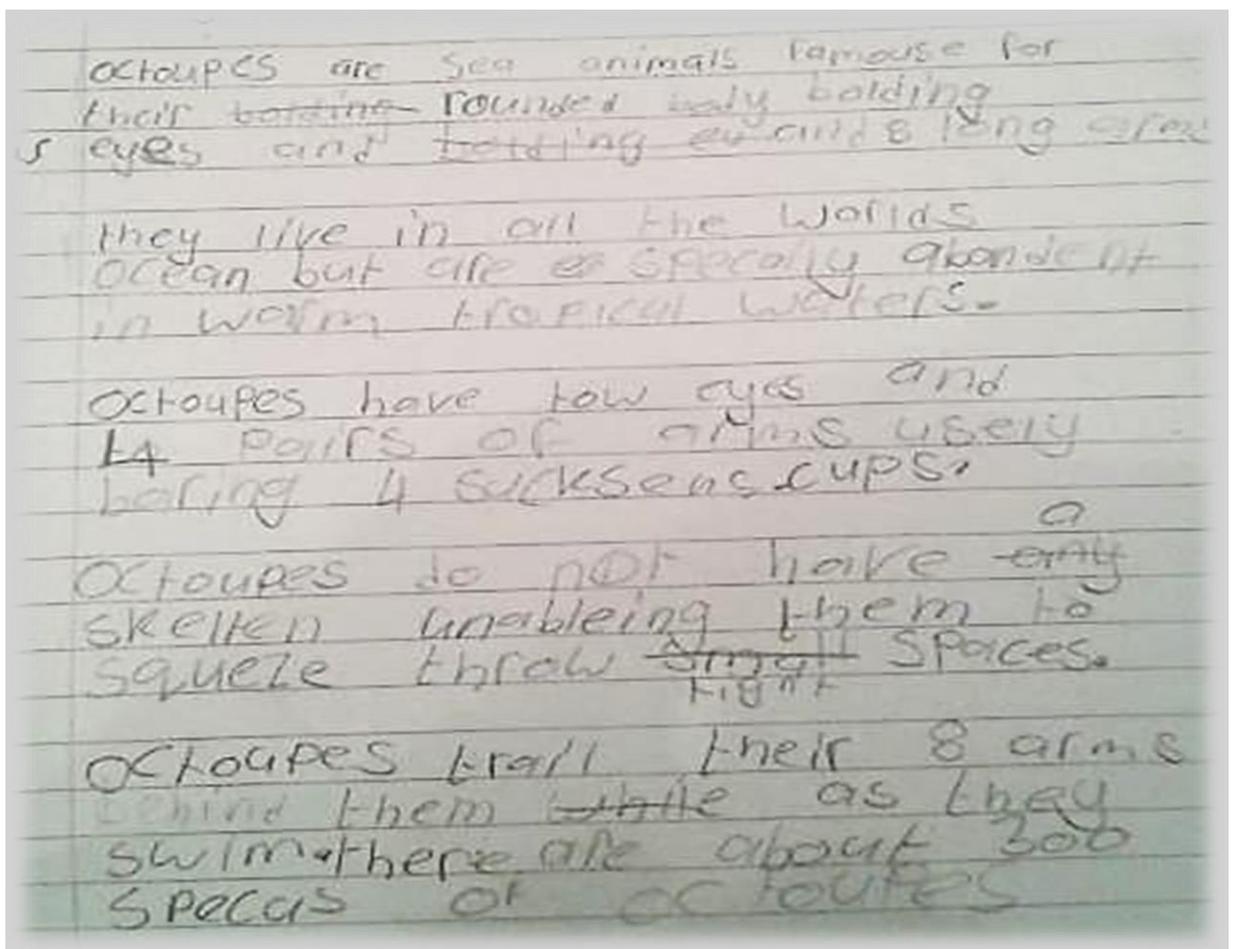
Image 6: Emily's dictation

Emily and Carol preferred to know in advance what the text was in order for them to be prepared at home and to revise it before the dictation due to their difficulties in memorisation of spellings. As Emily emphasized 'we can at least know what is about and the words that we don't know to try to spell them again and again […] if we forget on that day we can look at it quickly before the session'. Carol expresses how she experienced the process:

> you have to just write and see if you can remember what someone
>
> speaks out some lines and you have to remember them and write
>
> them down and sometimes it can ruin really your handwriting and

then you can't and you just rush and you have to spell everything and

it was wrong and it is really annoying (Carol)

Based on the two girls' experiences, this pedagogical approach for spelling seems to disregard individual learning needs influencing pupils' outcomes and reproducing stereotypes about their abilities. As a result, this inefficient method may cause the two learners anxiety and stress when they realized that they were going to fail despite their efforts.

Not setting dictation as homework was against the schools' policy about homework. In particular, concrete exercises for pupils' extra practice at home were not encouraged, while only 15-minutes of reading and 15-minutes of mathematics per day were recommended (Carol's teacher). Reading was considered as 'the most important because they can become more familiar with words and vocabulary' (Carol's teacher). The rationale behind this policy was to encourage them to be learners themselves (head teacher), in terms of regulating their own learning according to their individual learning needs. Despite, though, the school's intention to support its pupils' independent learning, the absence of specific directions concerning the areas of difficulties of the three learners, namely spelling appears to stress them in terms of their performance.

This policy, also, resulted in a concern for the three pupils' parents who would have preferred homework to be set. For instance, Emily's parent mentioned that 'If I have someone specialized in the field and can give maybe a bit more guidance […] like "this is what she needs to do", this kind of structured work'. Carol's parent also suggested that specific homework marked by her teacher could illustrate her progress, while 'this kind of self-awareness type of homework' did not help Carol because 'what Carol does all the time is she reads and really

they didn't need to comment on her reading'. John's parent underlined that 'at school they don't set homework […] I think it's another mistake because the teacher says "there is no homework", no extra work for the teacher but I think that homework is very important because […] sometimes is quite difficult for the children to understand' the new information provided within the classroom, therefore, they need time to process and practise it at home. The parents' opposition to the school's policy about homework resulted in their initiative to arrange home activities for their children's practice, for example practising reading and time tables for John, whereas for Emily audio-visual tasks, dictation, reading, time tables, writing and tests with time arrangement were the norm. However, Carol's parents mentioned that 'Carol's method of learning is at school, she thinks that this is where she learns and she is not going to learn at home' which has the prospect of restricting the further development of her meta-learning skills through her re-engagement with similar activities in different learning environments.

Homework assignments which are designed in accordance with learners' individual learning needs and intend to aid in an organized and systematic way children's review, practice, application and internalization of the taught knowledge can support pupils' learning (Jha, 2006). Similarly, homework which concerns pupils' preparation for the next day's lesson, the expansion of their exploratory skills concerning specific topics without time limitations, and their self-directed learning, can inform teachers and parents about learners' progress (ibid.). Additionally, learners' organizational skills, namely time management, can be developed helping them in classroom settings. Independent learning and self-discipline can also be encouraged improving learners' capacities in learning processes and developing further their metacognitive skills. As a result, pupils'

sense of responsibility about their own learning tends to be developed which has the potentiality to enhance their self-confidence and self-development, especially when parental intervention is not considered as a necessary presupposition for homework's successful accomplishment.

Feedback was provided constantly to the children by their teachers in various forms, namely verbal feedback through teachers' replies to pupils' questions during carpet time or during writing by giving to pupils 'some advice on how they will improve it' (head of inclusion). Furthermore, written 'detailed' feedback demonstrating the essential improvements was offered to a focused group of pupils 'on a rota basis because you can't give very high quality written feedback to every child for every book every day' (head of inclusion).

This descriptive feedback, usually in the form of written suggestions, informs learners about their progress in achieving learning targets enabling them to improve their attainment (Hargreaves et al., 2014). In contrast to evaluative feedback, which notifies pupils about their performance through grades and short general comments including praise or criticism, this type of feedback directs children concerning their learning processes, highlighting specific areas of their learning which need to be improved. In this way, pupils refine their learning strategies and approaches, developing their metacognitive skills efficiently. Reports, though, based on numerical measurement are officially used in schools although they only provide a summary of pupils' attainment in relation to the National Curriculum levels which is reported to their parents and used in league tables for schools' accountability purposes (Hall and Sheehy, 2014). Nonetheless, this may not constitute an effective learning tool for children's learning, because the focus tends to be on teaching the tests' content rather than

on pupils' actual development of skills, affecting their learning processes, motivation and self-esteem.

Peer assessment is also an assessment method that is intended to allow pupils to learn how to evaluate a written work based on specified assessment criteria without using grades, and encourages their personal involvement in assessing and self-evaluation (Hargreaves et al., 2014). This assessment mode was also endorsed by the school, and it was applied in Emily's and John's classrooms. Carol's teacher, though, did not apply, or at least not very often, peer assessment because he had 'never noticed whether it is positive or negative for Carol'. Through peer assessment pupils assess their classmates' writing based on learning objectives and this also acted formatively. However, this method did not always have the expected outcomes. For example, Emily mentioned that her classmate's feedback to her was not successful: 'he didn't really give me a next step, all he wrote was a "next step" and then next to it he said "well done" […] I gave him next steps […["try to write bigger" because he didn't write big enough'.

In practice, it seems that some children are not able to apply the assessment criteria. This indicates that peer assessment presupposes pupils' development of literacy skills and assessment's mechanisms, involving recognition and evaluation of the elements that constitute a well-written text. However, through guiding and supporting each other's learning, children can undertake a central role in learning which enables them to develop their reflective abilities of their own learning processes (Hargreaves et al., 2014).

Pupils' self-assessment was encouraged in the case study school through the use of checklists which included the National Curriculum requirements for

literacy. That kind of checklists were found only in Emily's and Carol's notebooks and they are presented in Images 7 and 8:

Image 7: Emily's checklist for literacy

Image 8: Carol's checklist for literacy

At the end of their writing, the two girls evaluated their writing by checking whether they had followed the checklist's instructions. Teachers also checked pupils' self-assessment outcomes according to the checklists informing them about their attainment. Children's involvement in the assessment of their own work has the potentiality to benefit significantly from the setting of their personal objectives (Rose, 1994). In combination with teachers' assessment, pupils can acquire useful insights and construct interpretations of their own performances. Hence, pupils can learn how to evaluate their own work acknowledging their strengths and targeting the improvement of their weaknesses.

Reading: Classroom arrangements, Pedagogy and Assessment

Reading was a daily 30-minute session organised into four group activities including, guided reading with the teacher, answering the comprehension questions from the session with the teacher, individual reading activities, and independent reading of a book of their choice. Figures 7, 8 present the seating arrangements for Carol's and John's reading with their teachers:
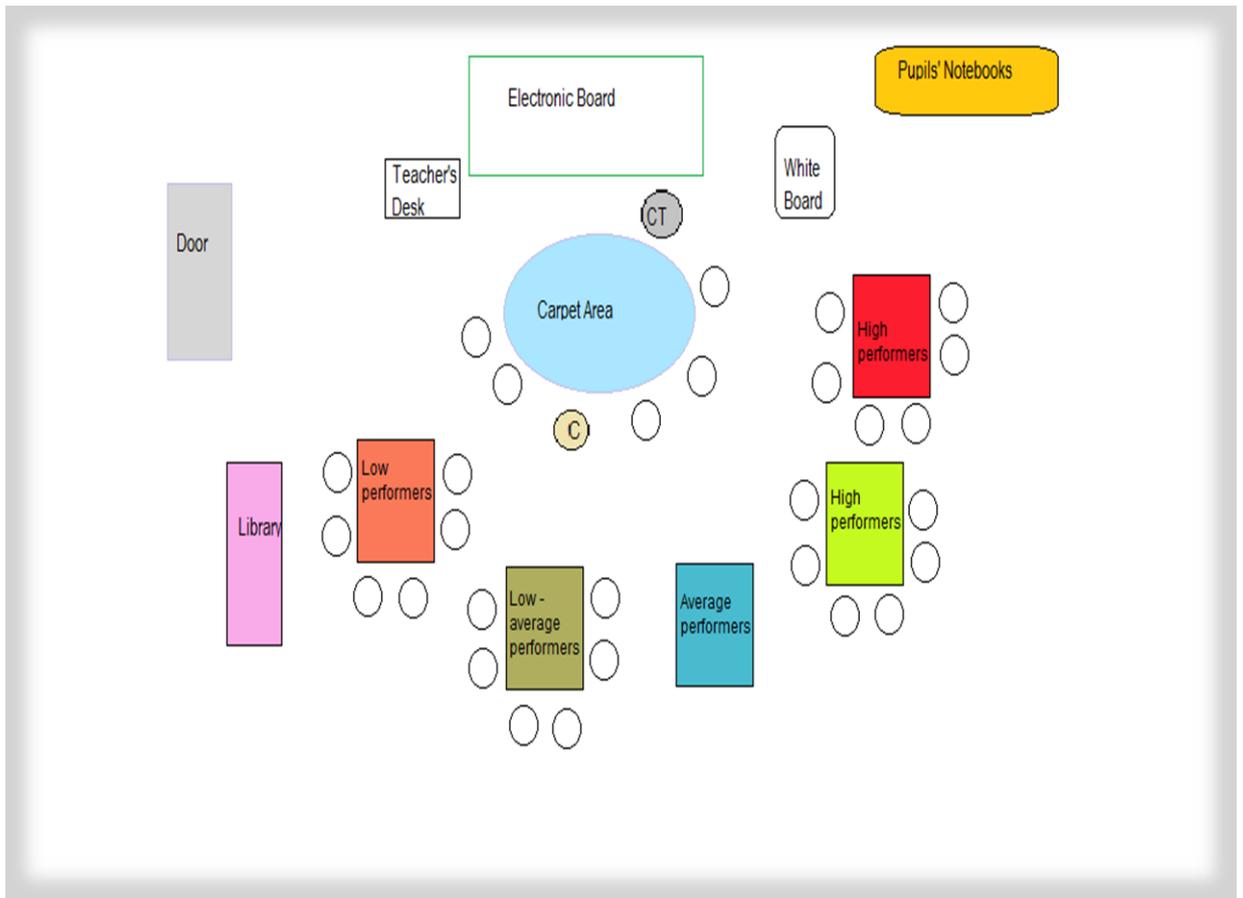
Figure 7: Carol's guided reading with her classroom teacher. C is Carol, CT is classroom teacher
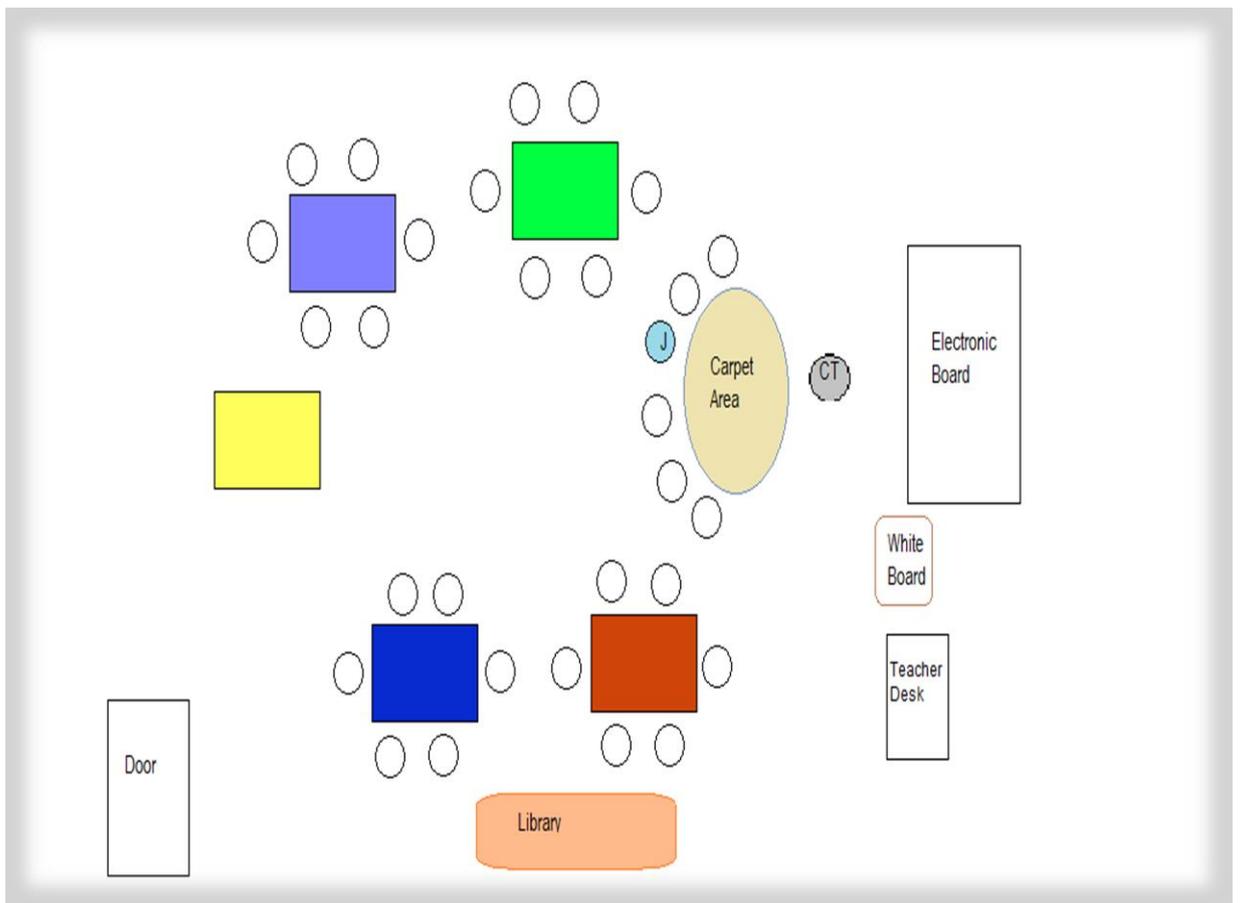
Figure 8: John's guided reading with his classroom teacher. J is John and CT is classroom teacher

Carol remained with her group at the same table for the other reading activities, while John changed tables but still belonged in the low performer's category. Although the above seating arrangements intended to facilitate the differentiation in teaching and supportive resources for the learners that the study has focused on, they appeared to limit the two pupils' interactions within their ability-groups. Emily, though, presented the most mobility (Figures 9, 10, 11) in her classroom for reading activities. Apart from reading with her teacher on the carpet area, she also used the reading corner for her independent reading and she sat with another group for the rest of her activities. This was significant because it enabled Emily's concentration during independent reading, while it encouraged

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her peer learning through exploratory talk by sharing her enquiries on her reading materials with her classmates who did not belong to the same ability-group.
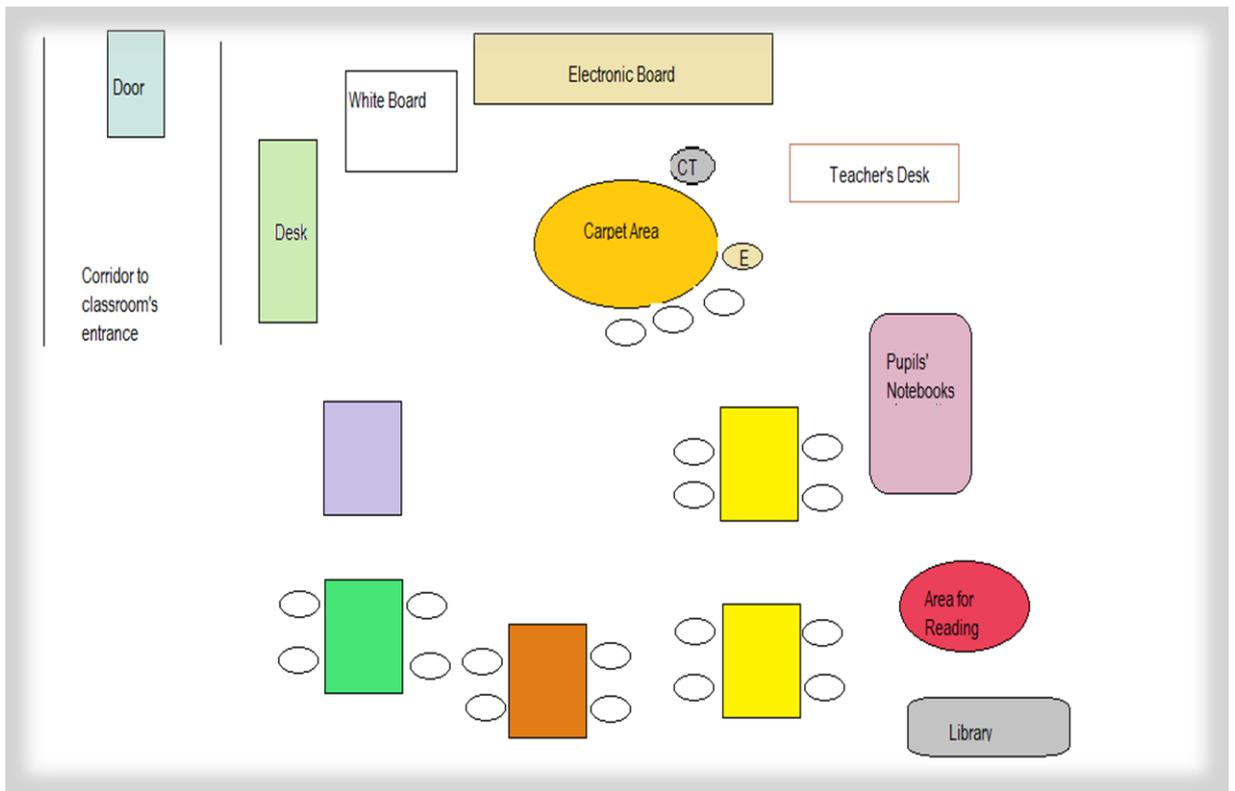
Figure 9: Emily's guided reading with her teacher. E is Emily and CT is classroom teacher
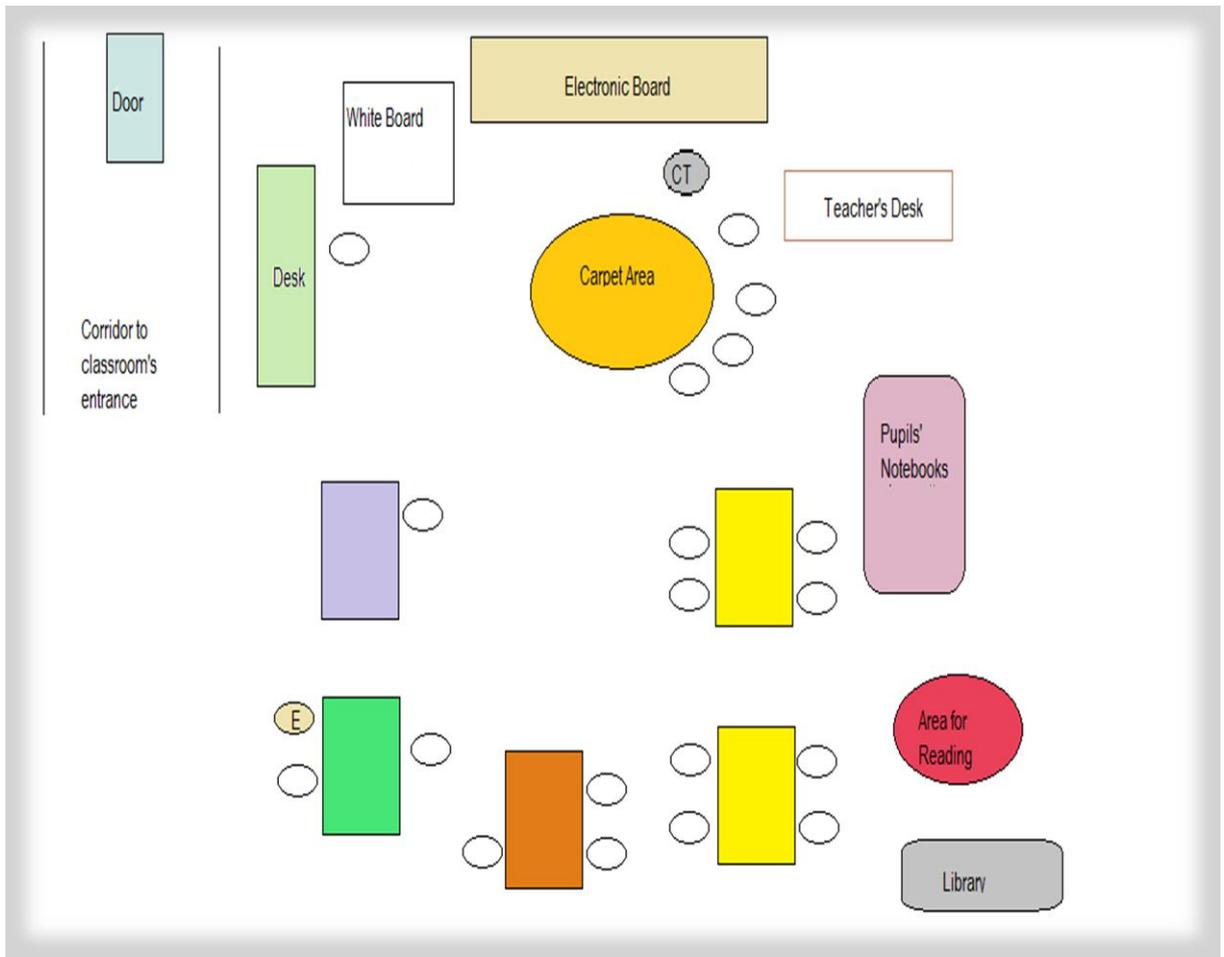
Figure 10: Emily's reading activities. E is Emily
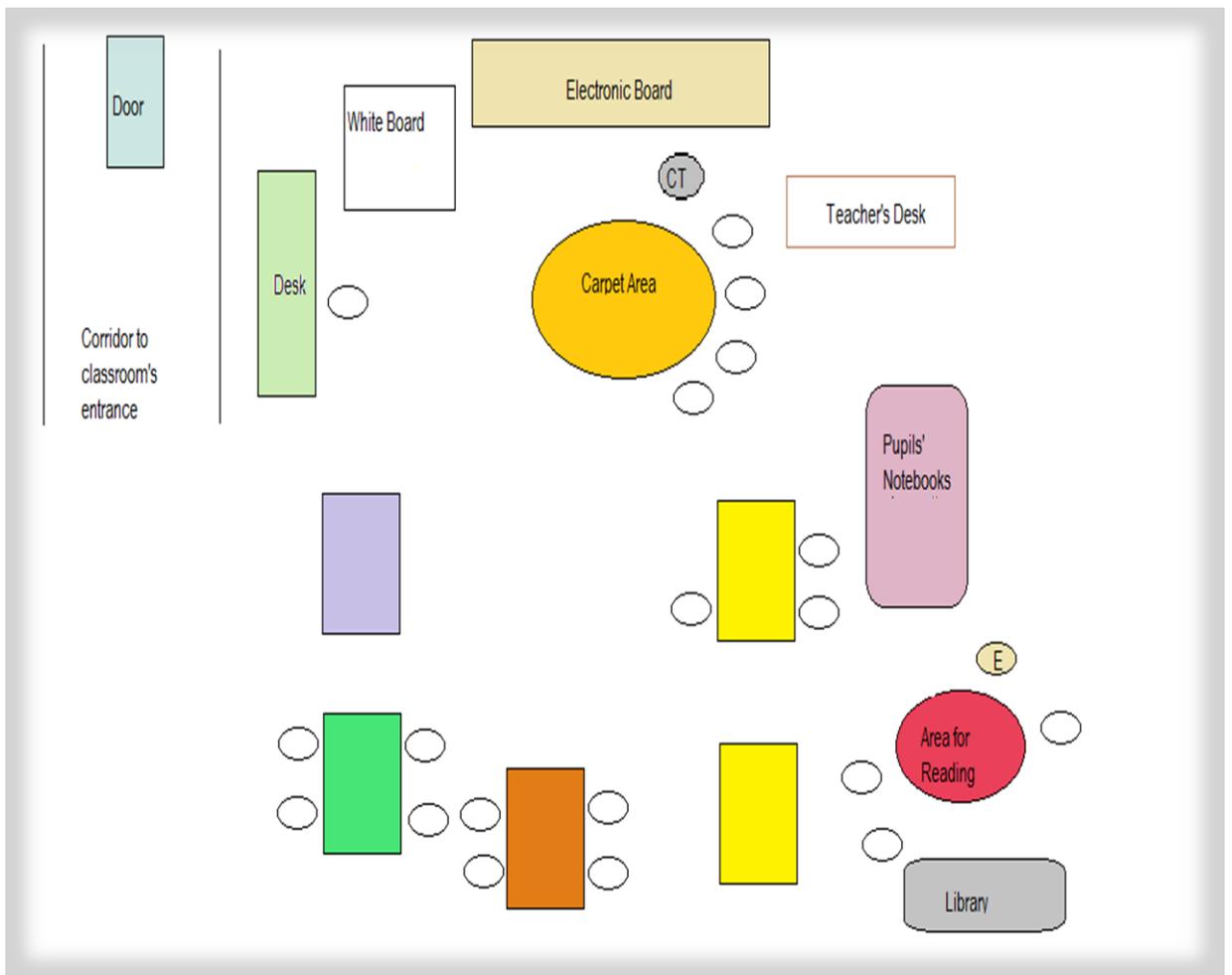
Figure 11: Emily's independent reading. E is Emily

The school's choice of arranging reading activities in ability-based groups instead of applying whole-class teaching and learning approaches to the texts has the prospect of facilitating differentiation in terms of resources. The purpose of differentiation is to make accessible to all learners the lesson's common learning objectives through different approaches based on their individual learning profile, experiences and knowledge (Bearne and Kennedy, 2014). Hence, the learning goals can be adapted to children's learning needs ensuring their achievement by all. In practice, though, it tends to be used for the teachers' convenience. For example, at the case study school the differentiated teaching approaches and

reading materials were not addressed to the pupils' individual learning characteristics but to the group of pupils who presented similar performances in standardized assessments.

Additionally, some scholars argue that differentiation can contribute to teachers' low expectations of pupils' attainment, especially for those who experience difficulties in their learning. In particular, different instructions are given to the lower-ranked groups compared to high-ranked groups, reflecting teachers' expectations (Collins, 2006). For instance, resources which are used for pupils with learning difficulties in reading comprehension activities can be less challenging compared to the requirements of external examinations, whereas teachers' questions on taught texts can be less complex compared to other groups. Characteristically, in guided reading it was observed that teachers' questions to the three pupils' groups mainly involved the meaning of words and information from the text. Complex questions based on higher-order thinking skills, namely analytical or critical thinking, were not encouraged, resulting in learners' deficiencies in these competences. Consequently, the three children tended to avoid answering them, as it has been mentioned previously, due to their deficient practice in them.

As in formal examinations, though, the texts and questions are addressed commonly to all children regardless of their learning profile, misinterpretations of pupils' abilities are easily enhanced attributing their low performance to children's individual cognitive deficiencies. Accordingly, the gap between the teaching materials and approaches, which are used for differentiation purposes for pupils identified with dyslexia in accordance with their low level, and the official tests'

content, which concerns higher levels, could be said to contribute to pupils' failure and give a misleading impression about their attainment and progress.

Additionally, the three children apart from the meaning of words were rarely encouraged to ask questions about the meaning, purposes or structure of the text, limiting their comprehension skills to the basics. Pupils' active involvement in their learning task, though, instead of merely responding to teachers' requirements has the potentiality to facilitate their deeper understanding of the activity's purpose and meaning (Byers, 1994). Furthermore, mixed-ability arrangements are highly recommended by some scholars for group-work as they contribute to peer learning and to pupils' achievement of learning targets, motivating learners' engagement with challenging tasks (Bearne and Kennedy, 2014). Therefore, differentiation via ability-based groups does not necessarily foster learners' development of thinking skills and strategies of approaching challenging texts, while mixed-ability discussions can allow them to internalize how their classmates are engaging with the texts and its questions.

Individual reading activities were designed to permit pupils to practise reading comprehension independently. In particular, the three children were engaged individually with comprehension questions of various small texts by creating a pattern with their answers. At the end, they checked whether the pattern of their answers agreed with the pattern given in the solutions. In the case of a wrong answer, they were required to start from the beginning again without knowing which answers were wrong and why. Carol mentioned this activity that 'when I was in Year 4 and it was near to us I found it quite fun, but lately it is getting really old, because I am reading the same book over and over again which is quite

annoying', illustrating that the limitation in resources caused her demotivation, which eventually can lead to deficient development of her skills.

Independent reading offered independence to learners enabling them to manage their own learning, whereas during guided reading, pupils practised their reading skills and their comprehension skills through reading aloud and replying to teacher's questions respectively. Nevertheless, whole-class discussions, which are claimed to inspire pupils' engagement with their classmates' questions and answers, as well as modelling how their peers processed information and children's development of their metacognitive skills, were not encouraged because of the importance which was given in the differentiated teaching within classrooms according to pupils' levels. Immediate verbal feedback was provided to them concerning their attainment in reading tasks, while written feedback was given for their written answers of comprehension questions.

Reading assessment was mainly conducted through standardized tests with the principal focus on evaluation of reading comprehension. In particular, reading includes fluency and accuracy in reading silently and aloud and comprehension of texts (Gipps, 2012). Therefore, a standardized test with high validity in terms of adequate reading's evaluation needs to cover all these aspects of reading. Nevertheless, in practice standardized testing in reading focuses only partially on assessment of reading and especially on comprehension. The three children's limited practice in complex comprehension questions, though, may result in poor development of their relevant skills and potential failure in those tests illustrating that differentiation can reproduce academic failures.

Concluding this chapter, the findings from the Blue Sky School showed that the ways that the school structured their learning environments influenced pupils'

learning and progress in significant ways. Pedagogical approaches that focused on dispensing instructions and correct knowledge allowed control over what was learnt but limited pupils' free and active engagement with knowledge. Intensive emphasis on the improvement of performance levels, as it is required by the National Curriculum, did not encourage the development of long-term learning strategies and children's motivation to learn. Learning under these conditions, my findings showed, neither had the expected outcomes on pupils' achievements nor encouraged their interest in learning, especially for children who experience difficulties in learning. Practices, such as intervention programmes and ability-based grouping which focused merely on the amelioration of pupils' weaknesses according to the demands of examinations did not necessarily have positive results on children's learning and self-confidence because they highlighted their difficulties as something not acceptable and they did not encourage their independence in learning. Finally, the existence or not of diagnosis complicated further children's social relationships and emotional states when the learning environments are based on competition. Its role in their learning was not valued as much as it was supposed to because the focus was not on the pupils' individual learning characteristics but on their standardized performance levels. This, though, was in line with the National Curriculum expectations of children's improvement of two levels in Key Stage 2. The standards agenda considers individual differences in learning as problematic learning attitudes which urgently need to be normalised.

The next chapter presents and discusses the findings from the second case study at the Rose Garden School.

Chapter 5: Rose Garden School

'I would keep writing but not that much for people who have disabilities and stuff like that and the people who don't have disabilities should do more activities like go outside to have more activities like that' (Robert, 9 years old)

Rose Garden School is a mainstream primary school which accommodates approximately 200 pupils. More than half of them do not have English as their first language and roughly 16% of them have a SEN statement (Department for Education, 2013b). The last Ofsted inspection assessed the school as outstanding for its overall effectiveness and as good for teaching and learning, curriculum and other activities. In particular, Ofsted suggested that its programme of special intervention for pupils with disabilities and learning difficulties was considered as a highly effective support.

The three pupils who participated in the study were born in England and they are native English speakers. Robert was 9 years old, while Thomas and Matthew were 10 years old. All of them attended Year 5 and they were classmates. Matthew has been diagnosed with Autistic Spectrum Disorder (ASD) and a range of difficulties, including learning difficulties, and social and behavioural issues. Robert and Thomas had not been diagnosed at the time of conducting the research. From the Rose Garden School the respondents comprised the three pupils, their teacher, Matthew's teaching assistant and the head of inclusion.

Principles and Curriculum

The school's main priority was to provide its pupils with 'a happy place to learn', where 'all children are included and treated equally' having equal access to knowledge and learning resources (head of inclusion). Its inclusive practices allowed this to be achieved by taking into account individual learning needs (head of inclusion). The school accommodated a number of pupils with a range of special needs, some with severe kinaesthetic and/or mental difficulties/disabilities, arranging its physical structures in such a way so as to facilitate their circulation and inclusion within the school.

With regards to the school curriculum, for the foundation subjects the school teaches 'the International Primary Curriculum which is cross-curricula and also builds on their literacy and mathematics skills that they have already learned' (head of inclusion). In particular, the International Primary Curriculum has been designed round thematic units of learning, including modern topics, namely inventions and machines (Fieldwork Education, 2015). It is intended to enable learners to make associations of their subjects with literacy, mathematics and the real world encouraging their motivation to learn, while a variety of learning tasks can permit collaborative learning, peer learning, active learning, learning outside the classrooms and role play to take place. In this way, pupils are intended to participate actively in the exploration and construction of knowledge through their experiences instead of learning passively what is transferred to them within classrooms.

For literacy and mathematics, the school teaches the National Curriculum using its performance levels to measure pupils' progress through standardized tests (head of inclusion). More specifically, in the context of literacy, the National Literacy Strategy requirements were followed since they allowed children to work on developing and writing a lengthy piece of work based on specific zones within the timeframe (head of inclusion).

Setting a timeframe in writing, though, may disadvantage pupils who experience difficulties in that area. As a result, children who naturally work at a slower pace tend to rush their writing in order to meet the time requirements. This is a flaw in the structure of literacy sessions because teachers and pupils focus more on completing the writing within the timeframe than on producing a good piece of writing. Without the time pressure, pupils have the opportunity to think about their topic, to improve the structure and ideas of their writing, and to discuss with their teacher potential misunderstandings and confusions about the use of grammar, vocabulary and syntax within their sentences. In this way, exploratory talk is encouraged and literacy becomes free from the technical nature which is given to it.

Nevertheless, the situation in teaching literacy is different in practice. The head of inclusion suggested that:

> sometimes the National Curriculum goes too fast, I don't think it's the National Curriculum but I think is the level we need to get through by the end of Year 6 and the pressure of two or three levels of progress, this occasion is too much for them and if they had a bit more time I think they might be able to develop what they are doing but we have

a system we have to work within that so we're trying our best to get them through that system (head of inclusion)

Considering the above, it could be said that additional pressure on teachers and pupils for performance levels' improvement can restrict essential time for processing information and knowledge which has the prospect of preventing children from developing their skills.

Pupils' learning characteristics and strategies

Robert and Thomas were viewed as 'bright boys' because 'they've got lots of really good ideas, they are very articulate but their reading and writing are holding them back a little bit' (head of inclusion). Their difficulties in literacy led to the assumption that both of them present signs of 'questionable dyslexia' which required their diagnostic assessment to be revalidated (head of inclusion). However, the school planned to arrange a diagnostic assessment only for Robert for two reasons: first, the school said that it could not afford the cost of two diagnostic assessments, and second, the head of inclusion considered that Thomas might not have dyslexia: 'I do not think Thomas is dyslexic now'. This situation underlines the importance of early identification of pupils' learning difficulties. It also shows that there is a large element of uncertainty about the reliability and validity of these diagnostic tests as well as schools rather randomly deciding whether or not to pursue an assessment for their pupils with learning difficulties.

In order for children to enter into the process of diagnostic assessment, their repetitive failures in learning to read and write successfully are presupposed (Crombie and Reid, 2009). This, though, has the potentiality to delay the provision of intervention programmes by schools influencing detrimentally students' self-esteem, behaviour and motivation. As a result, pupils might experience high levels of frustration and anxiety due to their difficulties resulting in possible negative effects to their emotional and social states, namely anger or isolation. This illustrates that teachers need to be prepared adequately so as to identify and to support their pupils' individual learning needs from the first signs of their difficulties.

In practice, though, local educational authorities are required to provide diagnostic assessments to pupils who experience significant difficulties in their learning, and, if they are not able to, this can cause difficulties for the schools. Due to financial constraints, decisions about diagnoses and statements are based on available resources rather than on pupils' needs in order for costs to be reduced (Galton and MacBeath, 2008), as is the case of the Rose Garden School. Accordingly, the implications of such decisions have the potentiality to burden children's learning and emotional well-being by setting boundaries to their progress, which has the further effect of potentially damaging their future prospects. Furthermore, the specialist expertise of teaching staff is now considered crucial as an important factor in the success of the inclusion programme because it can forestall pupils' early learning difficulties and provide them early support after an official diagnosis. For example, Matthew, who had been diagnosed with Autistic Spectrum Disorder involving a range of needs, namely social and emotional difficulties, received additional support based on his individual learning characteristics, which enabled him to improve his

learning. However, learners, such as Robert and Thomas, who had reached Year 5 without identification of their learning difficulties, as their diagnostic assessment depended on the school's finances, illustrate that the concept of inclusive education does not always function in respect of its claims, resulting in inequalities in its realisation.

The principal learning characteristics of the three boys were their ability to express themselves better verbally than in writing, because they experienced marked difficulties in writing sentences (teacher). Characteristically:

> Robert is very much a talker, Thomas will write it down but he needs to talk to somebody first about it and he needs more support some guidance to say 'ok what about we put that word or to change this sentence' but they do like to talk about it first (teacher)

As writing involves grammar, syntax, spelling, vocabulary and comprehensible handwriting, the three pupils' difficulties in those domains can be compensated for by the development of their verbal skills, which was their preferred way of expressing their ideas. Additionally, through discussion the children who participated in the research learnt to organize their ideas and make the necessary changes in the vocabulary and syntax of their sentences before they started writing, ensuring in this way its correctness. The overemphasis on writing as the principal medium of examinations devalues pupils' verbal skills, when they experience difficulties in their learning, although their outcomes are more representative of their thinking skills and their knowledge of language use rather than their outcomes from their writing.

In particular, Robert's difficulties involved setting punctuation, spellings and writing complex sentences (teacher). A sample of his writing is provided in Image 9:
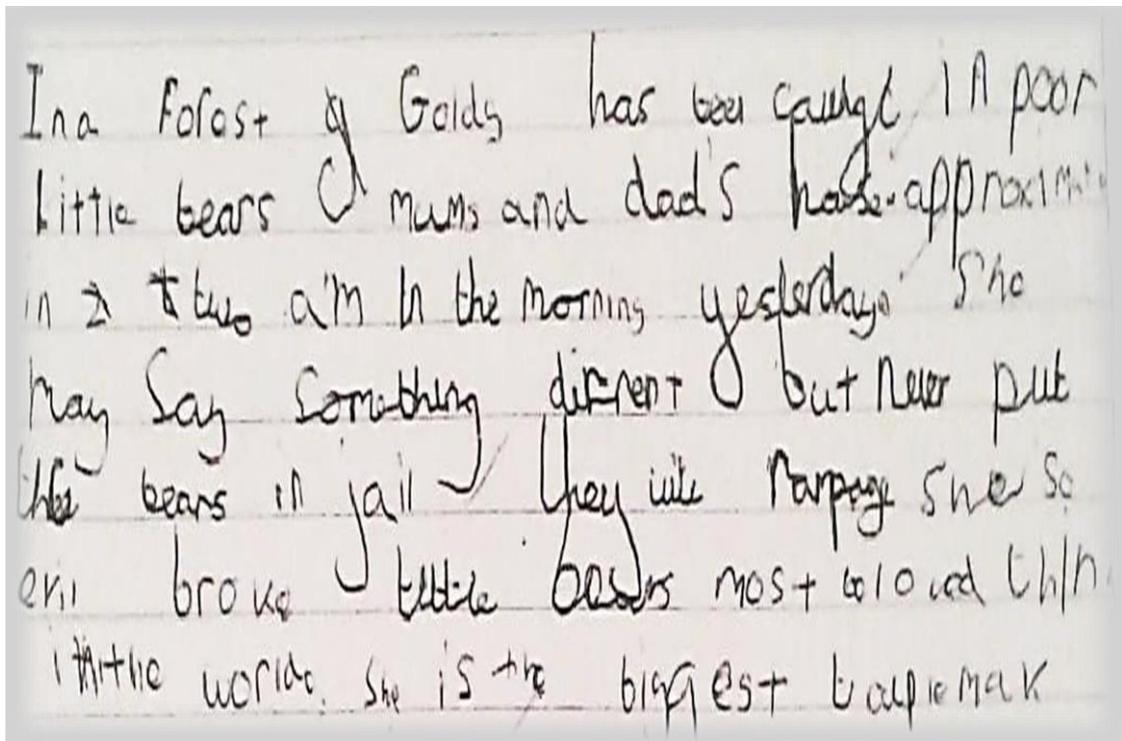
Image 9: Robert's writing

Robert seems to use limited punctuation, and his poor handwriting can make the reading of his text difficult. For example, in the first sentence he put a full stop before the word 'approximately', although he did not need to, whereas at the end of the second sentence after the word 'jail' he forgot to put it in. His sentences, though, tend to follow a logical order, but they are simple as he does not use connective words and advanced vocabulary. Spelling mistakes, namely 'difrent' instead of 'different', demonstrate his difficulties in that area.

Thomas also wrote in simple sentences and sometimes he rushed his work, which resulted in its untidy presentation (teacher). His major difficulties were in

his handwriting as it was 'quite bad still, it is very big and sometimes you cannot read the words' (teacher). Malformed letters, untidiness, misspellings and peculiar punctuation are some of dyslexia's indicators, while when speed of writing results in malformed handwriting and disproportionate size of letters it tends to be related to poor motor control (Tansley and Panckhurst, 1981). An example of Thomas's handwriting and writing is presented in Image 10:
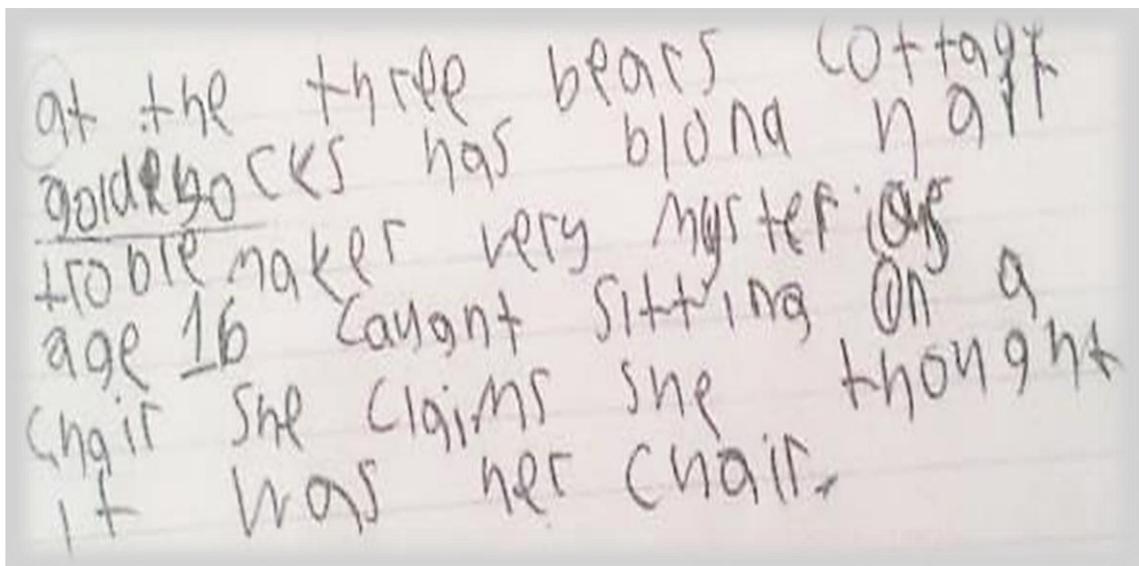
Image 10: Thomas's writing

Thomas's handwriting does not have the expected style, although he was a pupil of Year 5, which illustrates his difficulty in shaping the appropriate size of letters. Furthermore, he experienced difficulties in putting punctuation, namely capital letter at the beginning of the sentence, and in writing complex sentences by using connective words, adjectives and adverbs. His sentences seemed to be written in a telegraphic style that consists of short sentences with mainly nouns and verbs. Additionally, his writing followed a logical order, but his vocabulary was not advanced sufficiently. His spelling capacity is reasonably

advanced as he had only one spelling mistake in the word 'troublemaker' missing out the letter 'u'.

Matthew's writing consisted of simple sentences, whereas he rushed his work and he struggled with the grammar and structure of the text, namely writing in paragraphs (teacher). Image 11 shows his writing with his teaching assistant's support:
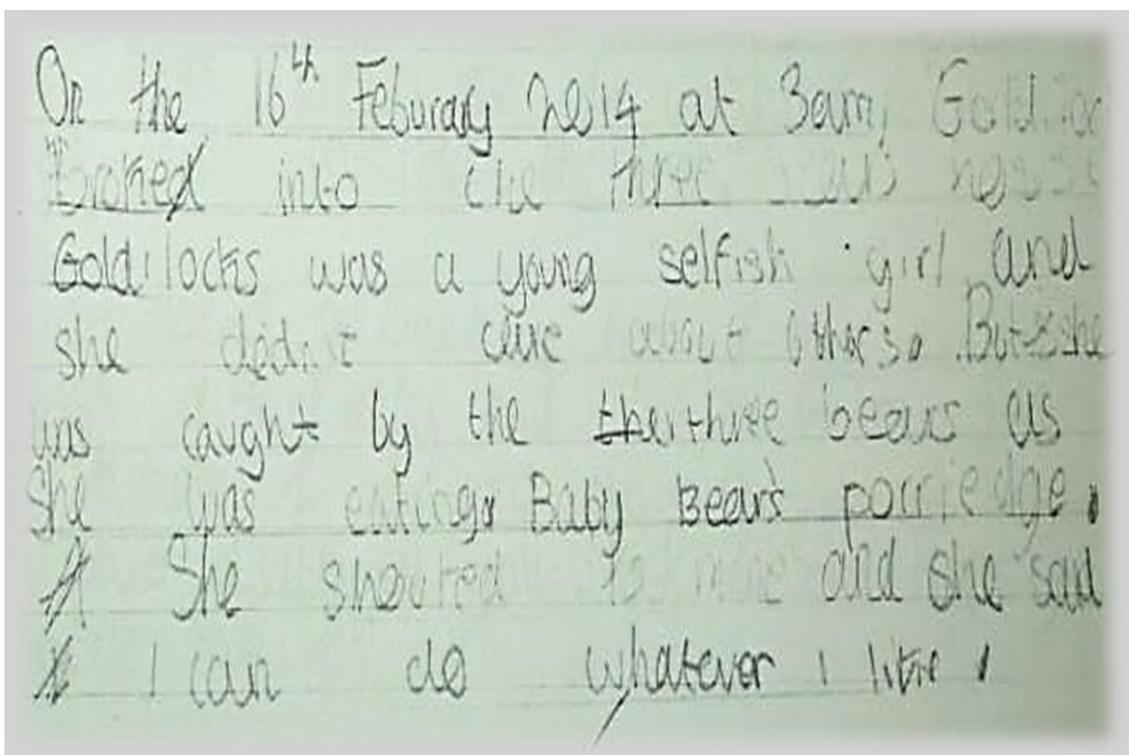
Image 11: Matthew's writing

Matthew's handwriting is neat which facilitates its reading. He can also use punctuation successfully, while his sentences follow a logical order, and conform to syntactic and grammatical rules. His vocabulary, though, is not advanced, while quite a few spelling mistakes demonstrate his difficulties in spelling, namely 'Feburary', 'dedn't' and 'porriedge' instead of 'February', 'didn't'

and 'porridge' respectively. However, this piece of work was written with the constant support of his teaching assistant and it has progressed with her assistance in terms of its organization, vocabulary, connective words and punctuation. I will discuss this issue later in this chapter.

With regards to the three pupils' memory and concentration skills, Robert and Thomas were considered to have good memory skills that enabled them to follow instructions without any further reminding. In addition, they were able to concentrate on the task despite working in a noisy classroom at times. Thomas, unlike Robert, was also good at mathematics, memorizing time tables without significant difficulties, as his teacher confirmed. On the other hand, Matthew had good visual memory, which helped him with his spellings, but he could not concentrate and follow instructions without being constantly reminded (teacher, teaching assistant). His teacher highlighted that 'Matthew is just distracted all the time; he is always looking around and playing with something'. Indeed, people identified with autism are generally prone to distractions affecting their concentration and their understanding of instructions (Jolliffe et al., 2001).

Matthew was also good at mathematics but he could not apply it in other contexts. In particular, as the head of inclusion suggested, 'he does not see the big picture in a lot of things socially and academically', whereas the application in other similar contexts of what he learns is a problem for him, and results in him being placed in the lowest groups of his classroom (head of inclusion). For instance, he can learn spellings but he finds them confusing to use in sentences (head of inclusion). Furthermore, tests were highlighted as a helpful method for Matthew's learning because 'that's the way his mind works, he is autistic, he

learns through tests, with Matthew everything is the application of what he learned' (head of inclusion).

Matthew was generally quite competent in spelling words or mathematics but writing sentences with words that he learned tended to create difficulties for him. This can be explained through his difficulties in recognizing different social contexts, and in his interactions with his classmates, which does not allow him to expand his experiences and to develop this capacity. For this reason, great importance was given to two areas: first, the development of his social relationships, which had improved compared to the previous academic year through his participation in the social intervention group, and second, to his independence and autonomy in the learning process (head of inclusion). Matthew's learning progress and emotional well-being had improved significantly by acquiring experience of success through undertaking initiatives for his learning and making friends with his classmates (Matthew's teaching assistant). For instance, during literacy Matthew interacted efficiently with his teacher and classmates in whole-class discussions, answering to his teachers' questions.

With regards to reading skills, the three learners were good at reading texts but they experienced remarkable difficulties in responding to complex comprehension questions, as their teacher underlined. A possible explanation for this difficulty is that pupils make efforts to overcome their decoding problems by shifting their focus to reading the text accurately rather than processing its meaning and plot simultaneously. Deficiencies in decoding printed letters in combination and potentially weak short-term memory capacity have the prospect of causing difficulties in comprehension questions, especially when the

answers are not obvious in the text and need to be the product of thinking (Pollock et al., 2004; Tansley and Panckhurst, 1981).

Due to their difficulties in writing, the three boys expressed a preference for reading rather than writing, while if they need to write they chose the least arduous approach, namely writing sentences instead of paragraphs. For instance, Matthew mentioned that he prefers reading because in writing 'you have to figure out something, while when you read, you stay silent and read'. When the three pupils needed to answer complex comprehension questions in reading that were not obvious in the text, they tended to ask either their teacher or classmates for help, illustrating that they had not developed learning strategies for reading comprehension tasks.

With regards to spellings, the three boys preferred to express verbally their spellings instead of writing them, while practising handwriting with joined-up letters during their writing of their literacy topic or in separate activities did not allow them to memorise their spellings. As the three pupils mentioned, they preferred to write the words letter by letter, because joined-up letters in handwriting prevented them from distinguishing the letters, causing them confusion. The practice of handwriting, though, which is also included in literacy activities is considered necessary for pupils to learn to form well-shaped letters (Department for Education, 2013a). Furthermore, increasing handwriting's speed is encouraged so that forming letters is not perceived to be a barrier to formulating their ideas in writing. Nevertheless, pupils who experience kinaesthetic difficulties are under pressure, when their writing pace is not taken into account during teaching and learning processes. Therefore, it could be said

that the style and the pace of handwriting which best suits learners' individual learning characteristics need to be chosen by the learners themselves.

Pupils' strategies for overcoming their difficulties in spellings were various. For example, Robert mentioned that he tried to remember the spellings, which illustrates that his decoding skills were limited, whereas Matthew's strategies about unknown words or spellings were the following: 'I know someone will tell me if I don't know what this word means, I will just ask someone to tell me the letter […] I just ask the teacher'. On the other hand, Thomas explained that he considered some spellings difficult 'because they are hard to break them down'. Therefore, his strategies for learning spellings were 'to break them down or […] take a guess or […] ask someone', while sometimes he used a dictionary at his home or he tried to memorize them. Only Thomas applied decoding strategies by separating the words into their syllables, which is one of the important methods for learning spellings (Pollock et al., 2004). However, the frequency of this strategy's use can be questioned because he also resorted to guessing or asking others when he found difficultly with particular spellings, which suggests that he had not acquired it deeply.

Relying mainly on others' support for spellings and complex comprehension questions demonstrates that the pupils' metacognitive skills, including various strategies and approaches to overcome their difficulties, had not been developed in those areas. The absence of an official diagnosis which allows them access to intervention support and precise teaching of decoding and reading approaches suggests that teaching and learning strategies related to decoding do not need to be exclusively part of special intervention programmes, but do need to be included in the teaching within mainstream classrooms.

Although Thomas and Robert were supported within their classrooms despite the absence of an official diagnosis for their learning difficulties, the development of their reading approaches through precise teaching was found to be poor based on their difficulties in answering complex comprehension questions.

Special Provision

The school in the context of inclusive education provided intervention groups to its pupils according to their attainment and progress (head of inclusion). The three pupils also received intervention programmes with respect of their individual learning needs, although Robert and Thomas had not been officially diagnosed. In particular, based on the school's initiative, a 30-minute classroom support during literacy lesson by a specialist teaching assistant once per week was offered to Thomas, which aimed to improve his planning skills for writing. During the classroom support, Thomas and four of his classmates engaged with their teaching assistant through group and/or one-to-one discussion. The process allowed children to articulate their ideas to their teaching assistant concerning the requested topic before they started writing and then the teaching assistant through questions supported them in the planning, structuring and presenting of their ideas. That kind of support was offered to Thomas because he needed to think about his topic in advance and 'to plan his work before he writes it, because if he just writes it, it doesn't make sense, he needs to plan it first', as his teacher suggested.

Through guided discussion, either one-to-one or within groups, pupils can become active in their learning process by reinterpreting, interrelating and understanding new ideas (Barnes, 2008). Scaffolding of new experiences are enhanced via exploratory talk, where learners associate new information with their existing experiences attempting to construct a new form of understanding with the teacher's support (Barnes, 2008). Especially, in the early stages of a new literacy topic, pupils can benefit from exploratory talk and writing so as to reconstruct their older ways of thinking and to understand new ideas. This process, however, requires children's presentational talking before starting writing, facilitated by the teacher's questions, which allows them to check their understanding concerning new topics and aims to avoid pupils' misconceptions and misinterpretations that result in non-comprehension, especially when confusion is observed in their ideas by their teacher.

In contrast, Robert was supported in having additional time for thinking on his topic because as his teacher suggested, 'he just needs to make sure that he is taking his time, he slows down when he is thinking about it, he actually gets his ideas down, if he rushes he cannot put this down to writing when he is thinking'. Planning an essay can be a difficult task for pupils who experience difficulties in their learning and they have a different learning pace because it presupposes time to think about how ideas are organized and presented in a well-structured text. Deficiencies in this skill have the potentiality to result in pupils' deterioration of their learning process, low self-confidence and challenges in self-organization due to their failure to achieve the expected learning targets (Pollock et al., 2004). Additional time is considered as a crucial support for pupils' processing information allowing them to present their skills without being under the pressure of fast pace writing.

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Extra support for difficulties in spelling and handwriting was also provided to Thomas and Robert. More specifically, the two boys participated in a small group of four pupils outside the classroom once per week, where they were practising through various activities their handwriting and spellings under the supervision of Matthew's teaching assistant. Photocopies were offered to them with tasks, namely copying new words and/or their weekly spellings by heart, and handwriting exercises with joined-up letters.

Matthew's special provision was based on his diagnosis which suggested a daily support by a teaching assistant in the classroom for literacy and mathematics. The teaching assistant's role was to differentiate the taught materials, to provide him with further explanations when it was necessary during the lesson and to ensure that he was completing his tasks by ensuring his attention was on his activities due to his low level of concentration (Matthew's teaching assistant). For instance, questions during his writing by his teaching assistant which encouraged him to find synonyms of the verbs he suggested and to set the right punctuation allowed him to improve his sentence structure and vocabulary.

Matthew also had additional differentiated activities, including spelling of basic words, namely 'house', 'boy', 'school', and making sentences with them aiming to compensate for his weaknesses in spelling, grammar and writing sentences. Furthermore, he received daily a 30-minute one-to-one session to enhance his comprehension skills. During those sessions, a text was supplied to him with comprehension questions (Matthew's teaching assistant). Matthew tended to read it word by word several times so as to answer the questions, as one reading was not enough for him to understand it (Matthew's teaching assistant).

Marked difficulties in processing a lot of information simultaneously characterize people who experience autism, although every autistic person has different learning characteristics (Jolliffe et al., 2001). Therefore, processes required during reading comprehension, namely summarizing, interrelations among facts in the text, which are inhibited by pupils' weak memory and poor concentration can be facilitated through teacher's guidance enabling the development of these skills (Pollock et al., 2004).

Matthew also received support for his emotional well-being which encouraged his socialization and independence. Difficulties in those areas are sometimes thought to reflect a person's shaky grasp of reality and consequently their ability to form social relationships (Jolliffe et al., 2001). Accordingly, as learning is achieved through various modes, namely peer interaction and teacher-pupil interaction (Falchikov, 2001), acquiring social and emotional skills is considered crucial for Matthew's development. For instance, peer learning is claimed to enable pupils to learn from each other and this interaction is of benefit to the development of intellectual and cognitive skills as well as it facilitating knowledge and understanding. In this way, the development of Matthew's social skills appears to allow him to form relationships with his peers and to recognise various social contexts where he can apply his knowledge.

The three boys also belonged to their teacher's target group ensuring her daily support to them in the context of the school's inclusive practices: 'each teacher has a target group which is the lowest achieving children in each class because that used to be the TA *(= teaching assistant)* but those children are the most needy children and often have the greatest need' (head of inclusion). That measure aimed to meet pupils' individual learning needs, especially of those

who were categorized as low achievers based on their standardized levels. The teacher's attention and time during literacy activities was offered to them constantly by sitting next to her. In this way, the teacher was also able to check frequently their progress on their tasks, regain their concentration when it was necessary and provide to them further explanations about the required tasks. Consequently, it was observed that her target group was more disciplined in comparison to the other groups and more focused on their activities, as their teacher's continuous presence did not allow them to be distracted from their learning focus. I will discuss further this practice later in the chapter.

Other school inclusive practices involved intervention groups for 'phonics and high frequency word practice going on in every Year', reading comprehension support and 'for writing it's normally teaching assistants in every class to support with writing' (head of inclusion). The design of these special provisions was based on pupils' individual learning needs and on the requirements of the National Curriculum. The head of inclusion emphasised that they follow the curriculum which was applied in the classroom because 'there is no point doing an intervention which is totally different of what they are doing in class' allowing the pupils to build and develop what they learn in the classroom according to their learning needs. This suggests that the scaffolding process was prioritized in the school as an important method for children's learning development. In this way, pupils are encouraged to build on their previous knowledge with the teacher's assistance and to construct meanings from new information clarifying potential misunderstandings and confusions during the learning process (Wood and Wood, 1996).

Classroom support as an intervention practice appears to limit children's isolation because they are attending intervention classes outside their main classroom in a less intimidating environment and away from their peers and friends. Additionally, it facilitates pupils' scaffolding process as they are given further explanations and differentiations frequently about their tasks related to their individual learning profiles (Galton and MacBeath, 2008). It was notable that the role of teaching assistants in the school was crucial for the improvement of pupils' writing during the classroom support. However, the constant presence of the teaching assistant can cause more dependence of children on his/her support when they cope with difficult tasks, preventing in this way their autonomous learning (Galton and MacBeath, 2008; Reid and Came, 2009). Consequently, pupils seem to avoid taking risks in their learning without asking for their teaching assistant's confirmation, especially when they experience difficulties with the required tasks resulting in a limited active engagement in their learning (Galton, 2007). This can explain the tendency of the three boys, as it has been mentioned previously, to ask for their teacher's or teaching assistants' confirmation of the correctness of their answers when they were unsure about them.

In addition to this, children's performance differs significantly with and without the teaching assistant. For instance, Matthew's writing presented qualitative differences when he wrote on his own due to his teacher assistance's absence. Image 12 is an extract from his writing with the teaching assistant's support and Image 13 shows a piece of his writing without her support:

This is a story of a great green god named Ares god of war. He sent Claybis to earth to save the people from a horrible scary mean monster named Waybis. Claybis was a tall strong / powerful ~~crete~~ and very wise creature. He was a demy god and he had a special sword and shield which gave him power. However he has to unlocn a secret code from the underworld city to find the sword and shield. When Ares talked Claybis to save the people from earth Claybis said. But Ares Waybs ~~is~~ is a ugly / mean, scary monster I need a sword and shelld to get power. And then Ares said. Claybis your sowd and shield is in a code in underworld city..

Image 12: Matthew's writing with support
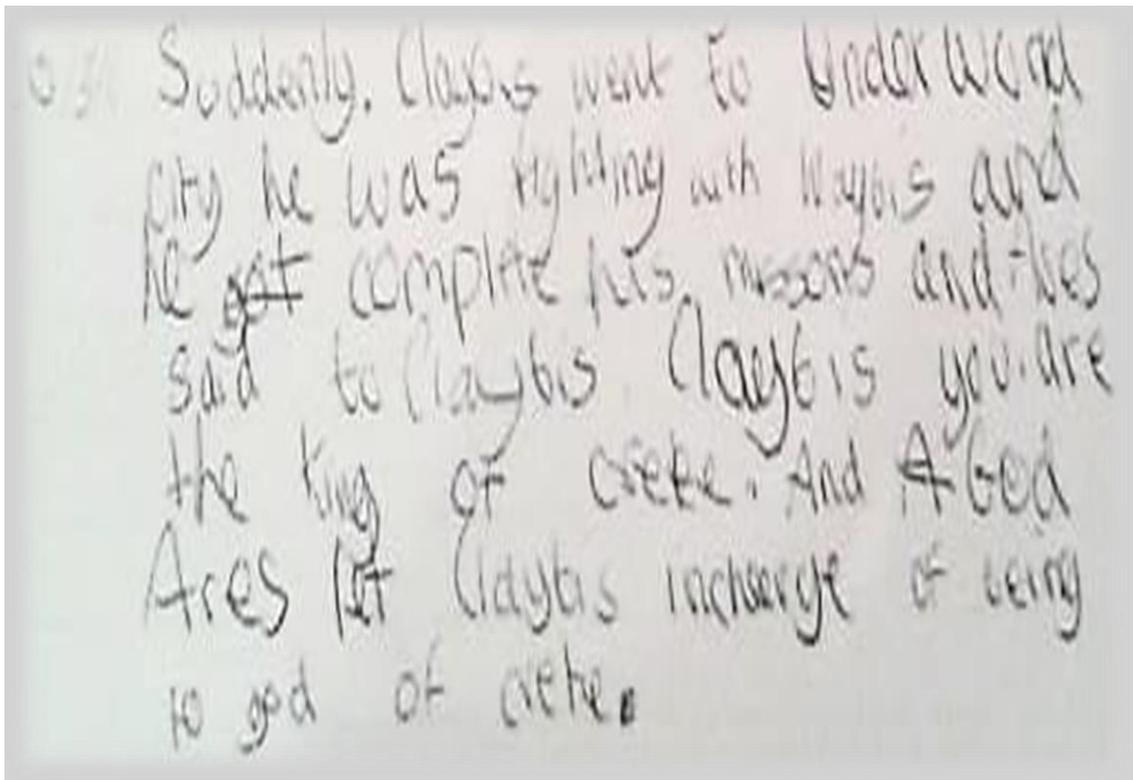
Image 13: Matthew's writing without support

Matthew with his teaching assistant's support was able to write a lengthy and detailed introduction of his myth characterized by complex sentences, including adjectives and connective words, description, well-structured plot and well-formed handwriting (Image 12). However, this was not the case when he needed to write on his own the conclusion of his myth. During that session, he was observed to experience great difficulty in concentrating without the presence of his teaching assistant, which resulted in rushing his work. His sentences were significantly simpler compared to his introduction, with a basic plot and omitting detailed information (Image 13). Furthermore, due to his rushing, his handwriting was not well-shaped causing difficulties in its understanding, and in addition some punctuation was missing.

Moreover, during the absence of his teaching assistant, his teacher gave him little attention and only when she noticed that he had lost his concentration did she ask him to move onto her table. This is a characteristic example of giving almost all the responsibility to teaching assistants for pupils with special educational needs, minimizing in this way the time and interaction of their principal teacher (Galton and MacBeath, 2008). Consequently, their inclusion is considered as problematic when classroom teachers for various reasons, for example, lack of expertise, avoid interacting with them by assigning their learning to teaching assistants. The spatial arrangement within the classroom can also influence the frequency and the quality of the teacher's encounters with their pupils who have been identified with specific learning difficulties.

Literacy: Classroom organization

The classroom of 28 pupils was organized into two lines of tables, three tables at the front and two at the back, with six pupils per table. This kind of arrangement was maintained for most curriculum activities during literacy and reading sessions with little modification. The children were categorized into five groups in literacy and reading according to their performance levels, which had been identified by standardized assessments. Figures 12 and 13 show the spatial arrangements during the literacy sessions:
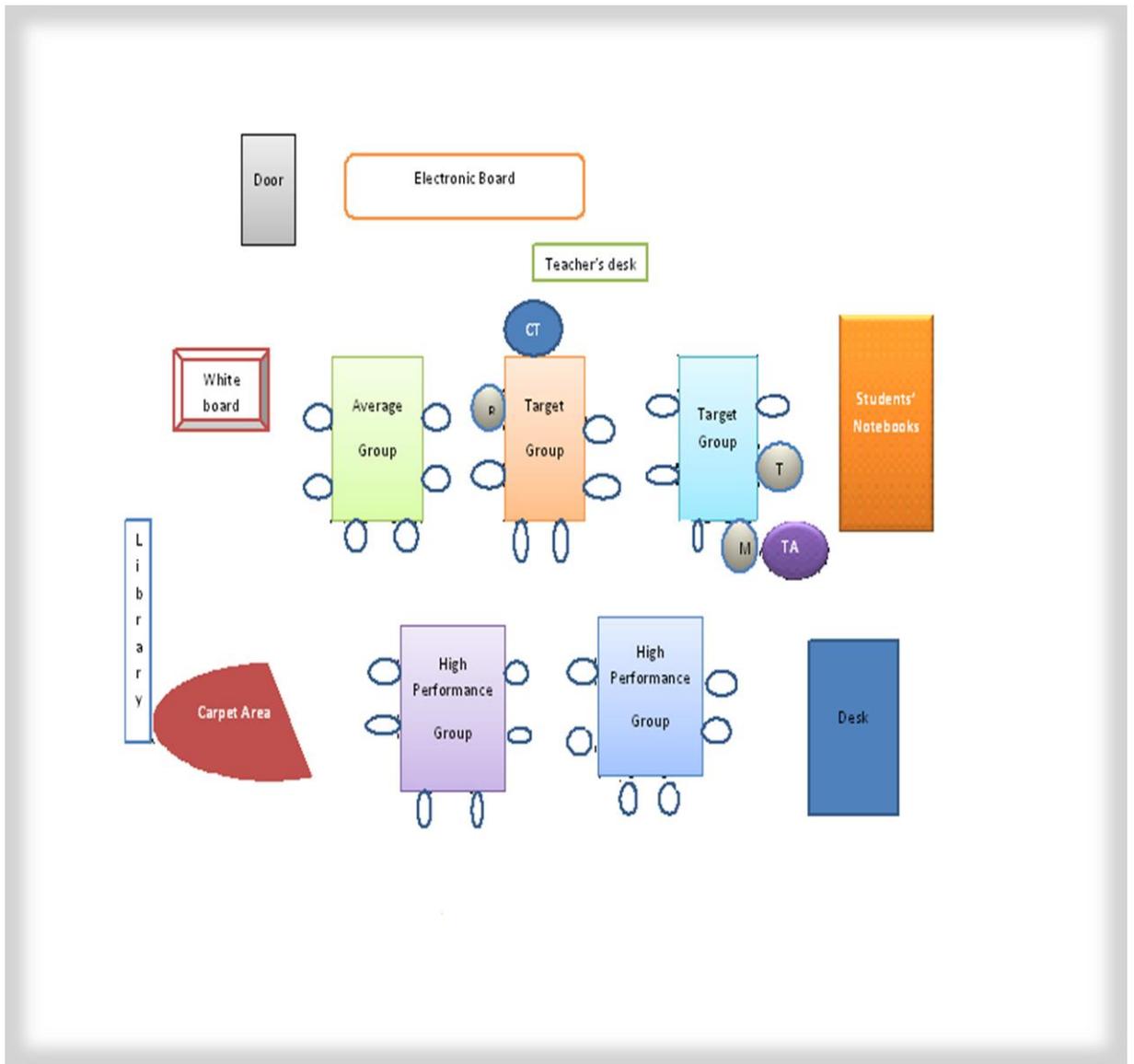
Figure 12: Literacy classroom. CT is classroom teacher, R is Robert, T is Thomas, M is Matthew and TA is Matthew's teaching assistant
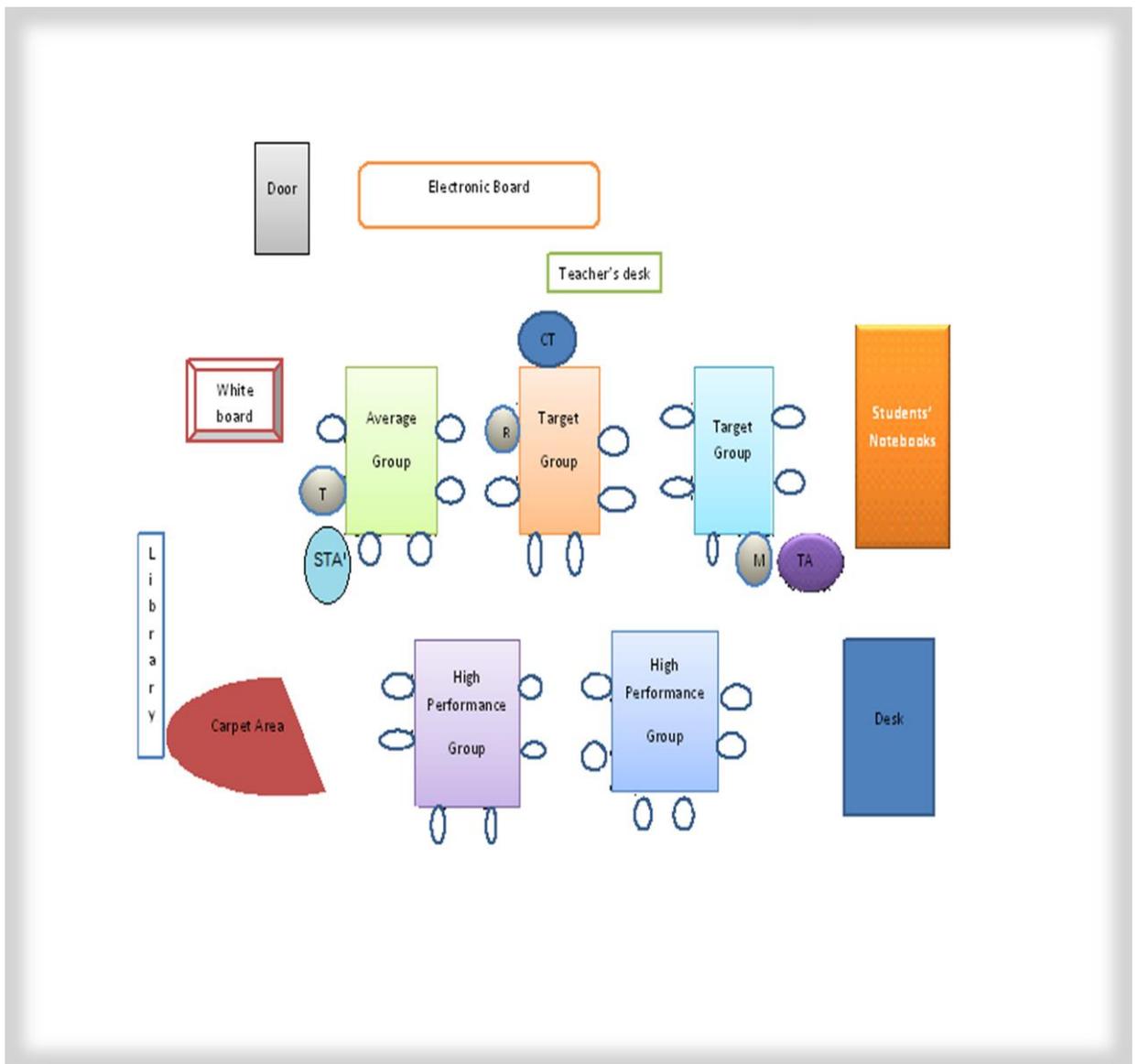
Figure 13: Literacy classroom with classroom support. CT is classroom teacher, R is Robert, T is Thomas, M is Matthew, TA is Matthew's teaching assistant and STA is Thomas's specialist teaching assistant

Pupils' grouping, as it is presented in the above figures, aimed to facilitate teaching differentiation, class management and control, as the head of inclusion explained.

> when it *(= teaching)* is not differentiated […] it is quite chaotic […] it
>
> just makes life much easier when teachers just can focus on specific
>
> resources on specific group rather than have access to separate

groups and rather than have one who is only doing one thing on a table and he does not take the opportunity to discuss it […] that makes differentiation and class management much easier (head of inclusion)

The classroom environment, including seating arrangements, is viewed as an important factor which influences pupils' achievement, their attitude towards learning, and their social and emotional development (Reid and Wearmouth, 2009). The classroom needs to be organized in such a way so as to enable children's skills to be developed as well as allow a differentiation of activities and resources to be achieved, taking into account individual learning needs. However, the differentiation which was provided to the three pupils involved teacher's further explanations and help when they were asked for, whereas additional literacy activities according to their learning needs were given to them after the literacy hour. Matthew's teaching assistant also worked constantly with him allowing the teacher to focus on the rest of the group.

Additionally, the arrangement of pupils' grouping facilitates tasks of problem-solving and reasoning enhancing the development of the relevant skills (Galton, 2007). Nevertheless, pupils tended to work on individual, peer and whole-class literacy activities rather than on group tasks (teacher), which suggests that, despite children's grouping, their interactions with their classmates in terms of group work were limited. Hence, the common practice of categorizing pupils into ability-based groups seems to allow teachers to retain control over the learning environment instead of encouraging group tasks (Comber and Wall, 2001; Galton, 2007). In this way, pupils' discipline and engagement with their tasks are

ensured as it allows teachers to move around their groups and check their progress at frequent intervals.

Pupils, though, tend to present lower levels of involvement in individual activities within groups, especially children who are more vulnerable to distractions, due to non-task-related group discussions. Indeed, the three pupils were often distracted by the chatting of their group members during their individual literacy activities when the teacher was assisting pupils on the other tables. Consequently, disruptions of children's concentration appear to occur more likely within groups than in other seating arrangements, namely sitting in pairs, influencing significantly the accomplishment of their tasks and eventually their learning.

Pupils' groups were based on their performance levels, which were assessed three times per year, allowing changes in their seating arrangements, as the teacher explained:

> if the levels go up then they might move tables, if they're improving then they will come off my target group and then I will have someone else in my target group so all depends on their levels and how they're writing is at the moment there is a couple of pupils who are struggling with their story writing so I moved them to my table (teacher)

Ofsted requirements play a decisive role in pupils' categorization into ability-based groups according to their levels, shifting the focus of teaching to improvements in the levels. As the head of inclusion suggested: 'we have to get the children up to certain levels, if we don't get them up to that level then Ofsted will come in and criticize the school […] nobody would want "not improved" or "unsatisfactory", you want to be "good" or "outstanding" of Ofsted requirements'.

The National Curriculum demands for pupils' progress of two levels, though, tends to treat all learners in the same way emphasizing their training in basic skills regardless of their learning pace, while schools' unsuccessful attempts to meet those requirements have repercussions for their evaluation. This demonstrates that the inclusion of children with specific learning difficulties may be problematic in terms of acknowledging their individual learning profile causing them frustration, anxiety and possible academic failure in achieving the above demands.

Being aware that children's ability-based grouping can cause various comments about their performance, the school was highly influenced in deciding that arrangement. As the head of inclusion explained:

> this issue has been introduced telling to children that the National Curriculum levels they are working towards and they're all taking on board really well and they are really well when they get to, it was a really hard decision because it was something we were concerned about because children in lower levels will be teased about where they were, but it doesn't happen (head of inclusion)

Concerns with pupils' inappropriate attitudes towards their classmates, who had been assessed as low performers, illustrates that the teachers believed that ability-based grouping could polarise peers into two competing performance groups. They seemed to fear that the constant emphasis on the standards agenda causes erroneous assumptions to be made about children with regards to their self-concept as learners by attributing continuous academic failures to a lack of ability which affects their self-esteem, self-confidence and motivation (Reid and Came, 2009). The teacher explained about pupils' seating

arrangement in literacy sessions: 'I have the lowest in front of the class and the higher ability ones at the back of the class'. This, however, affected the pupils' learning attitudes and the three boys suggested that they disliked and avoided reading aloud in front of the whole class, whereas their teacher mentioned that their participation in literacy activities was limited. Actual acceptance and respect of individual differences in learning are not always fostered within learning environments which emphasise pupils' competitive performance and consider children's categorisation based on standardized levels as adequate approaches to developing their abilities and skills.

For other subjects the school encouraged mixed-ability groups, as the head of inclusion highlighted:

> it's useful to have a mixed-ability group depending on what you're doing but if you're working on spellings or grammar or punctuation and you have a group working on quite complex punctuation and you've got a group struggling with sentences you've got to have that level up differentiation (head of inclusion)

This practice, though, seems to encourage the existence of two-speed groups within classroom, where children need to choose between the fast pace and the slow pace. Two issues have emerged from this: first, children appear to be viewed not as individuals but as group members sharing the same level, which wrongly leads to the assumption that they have the same learning profile and needs, and second, teaching differentiation tends to be addressed only to pupils who are considered as low-achievers causing feelings of inferiority for them and reproducing bias and inequalities among classmates. For instance, the teacher mentioned that she supported daily her target group of two tables, including

pupils with certain difficulties in learning, like Robert and Thomas, while Matthew was supported mainly by his teaching assistant even though he belonged to his teacher's target group.

Placing children with learning difficulties or low attainment at the front tables can serve various teaching and learning purposes, as for example, it facilitates some literacy activities, especially those which involve copying (Pollock et al., 2004). Indeed, the front tables in the classroom had a better view of the electronic board, which allowed pupils to read the exemplar texts or to copy their grammar exercises, when it was required. Teachers also prefer to have close to them pupils who experience concentration difficulties so as to encourage them to regain their focus. Concentration is directly related to the well-functioning of working memory which plays an important role in learning (Gathercole and Alloway, 2004). Especially for children who experience specific learning difficulties, their working memory capacity is considered as weak or limited, which can create difficulties in their learning process. For this reason, in order for their working memory to be enhanced, it needs attention and concentration on the task, which presupposes that the levels of noise and disruption in classroom are relatively low. Accordingly, sitting near to the teacher the noise limits are likely to be low, allowing pupils with specific learning difficulties to concentrate easily on their tasks.

However, this arrangement can have negative effects on pupils' concentration when their classmates bring their writing to their teacher during the session, and in the process disturbing them (Pollock et al., 2004). Characteristically, it was observed in the classroom that the pupils from other groups tended to queue around the teacher, when she was working with her target group, so as to ask

her about their writing. This in combination with other pupils' habits of wandering around the classroom during the lesson so as to find pens, pencils or erasers and taking the opportunity to chat with their classmates transformed the classroom into a noisy environment causing problems to the three boys' concentration.

Furthermore, pupils' autonomous learning can be impeded by placing children with learning difficulties or low attainment at the front of the classroom and near to their teacher as it sends a signal to them that they are in need of extra support daily and are being constantly compared to their high-performance classmates who were sitting at the back of the classroom. This results in pupils' tendency either to seek more independence on dealing with literacy tasks or to become more worried about their difficulties and eventually, more dependent on extra support without developing the appropriate learning strategies. For instance, Matthew and Robert expressed their preference to write and read by themselves without someone next to them. As Robert explained: 'if I read on my own I can develop self-confidence of reading in front of the class and sometimes I can learn new words as well'. Thomas preferred to have someone next to him so as to ask him/her for help with spelling mistakes: 'if I make spelling mistakes if it is wrong I can ask them', which demonstrates his continuous need for support when he experiences difficulties with tasks, resulting in more dependence on his teacher or teaching assistant (Reid and Came, 2009).

Additionally, it could be said that children's choice of their seating arrangements can benefit self-regulated learning as they know better which kind of placement helps them concentrate and develop their self-confidence. Nevertheless, their opinion about this crucial issue tends not to be asked for in literacy activities.

Consequently, their self-confidence and their motivation for self-regulated learning can be influenced significantly because they may consider themselves as slow learners, while opportunities of positive interaction with their peers who have already attained the expected learning targets tends to be restricted through ability-based grouping (Pollock et al., 2004). Hence, the pre-arrangement of pupils' seating in ability-based groups affects their learning progress, attitude and social relationships by highlighting their learning weaknesses and minimizing in this way their active participation in learning and their self-regulated learning strategies. Paradoxically, in practice differentiation seems to impact on groups' learning needs according to questionable standardized levels instead of individual learning needs. Similarly, differentiation through pedagogical and assessment approaches can highlight pupils' weaknesses instead of ameliorating them.

Literacy: Pedagogy and Assessment

At the school, literacy was scheduled for an hour daily and it was the first subject on the timetable. As the teacher explained, the literacy session was structured in the following way:

> when they come in they either quiet read or they do some sentences
> work and then we will work on sentence starters because we have
> been writing stories, they need to look at sentence starters and
> connectives so joining two sentences together, how to make it more
> exciting, so they are doing a quick 10-minute activity looking at

adjectives or similes or things like that and then we look at a piece or

writing together as class and then they will go to do their piece of

writing and that's how a lesson will be done (teacher)

This arrangement aimed to meet the National Curriculum requirements for

developing children's competence in transcription (handwriting and spelling) and

in composition (structuring and expressing fluently and coherently ideas in

writing and in speech) (Department for Education, 2013a), applying it in different

contexts. For instance, children were encouraged to identify and understand

essential characteristics of various text genres through practice, namely

transforming a fairy tale into a newspaper article.

Scaffolding processes, as I mentioned above, facilitated the introduction of a new

topic or a new grammatical rule or new vocabulary involving modelling,

questioning, instructing, providing explanations and demonstrating the

components of the task. In particular, a piece of writing either written by the

teacher or by older pupils allowed children's understanding of the requested

writing model through guided whole-class discussions. Links to previous

knowledge were also realised through that process enabling pupils' planning of

and writing up their topic, which took place for half an hour. At the end of the

literacy session, the children usually watched the BBC news for five minutes in

order for them to practise their listening, verbal and comprehension skills

replying to their teacher's questions. The main working styles within the literacy

classroom comprised individual, peer, group and whole-class learning. The

teacher, though, suggested that the preferred working styles were peer and

individual work rather than group work encouraging frequently whole-class

discussions. The available resources to support literacy lessons included Power

Point presentations and photocopies, while assistive technology, namely electronic notebooks, was not used in the classroom by pupils identified with kinaesthetic difficulties.

Planning their writing was an essential requirement for pupils, which aimed to motivate them to organise their ideas in a logical order, allowing their teacher to forestall possible problems in their organisational skills. As the head of inclusion emphasized, the mind map assisted pupils 'to organize their ideas so sometimes they draw what they want to write so the focus is not always on the writing', and especially Robert and Thomas who 'find it more difficult to write or their ideas come quickly to their head sometimes they just draw very quickly or just write few notes on a mind map'. Indeed, multi-sensory methods for writing and visual ways are usually recommended for pupils' learning when experiencing difficulties in organizing and articulating their ideas (Pollock et al., 2004). Thomas considered it useful to have a mind map and to discuss his topic before he started writing 'because sometimes it takes me longer to think'. Hence, through this practice he learned to organize and explore further his ideas by discussing them with his teacher or teaching assistant. On the contrary, Robert mentioned that 'I like picking my ideas from the head' without planning in advance, although he admitted that planning could help in clarifying his next steps.

Pupils' understanding of a well-structured and well-written text was also supported through reading aloud their writing in front of the class for modelling and feedback purposes. However, the teacher noticed that the three boys tended to avoid reading their work in front of their classmates: 'Matthew sometimes if he is confident and if he is in a good day will, Robert can be very shy when he comes to his work, he won't read his work out to the class or Thomas he won't

read his work out to the class neither'. The three boys all suggested that they did not want to participate in this activity, illustrating their low self-confidence with regards to writing.

This approach to their learning is an example of their limited participation in literacy activities. As their teacher argued:

> Robert is very good at talking, he likes to talk so he gets his ideas across about talking, Thomas is very quiet in literacy, he doesn't like to speak, to hand up, to answer questions […] Thomas is quite good at working in groups, he can do the group work and get the activity done, Matthew is still kind of looks around sometimes if he does group work, I am not sure, they are all very quiet when it comes to literacy (teacher)

Classroom observations also supported the teacher's comments. Robert was mainly quiet during literacy activities and he only participated in verbal tasks after his teacher's encouragement. Thomas remained silent in literacy lessons more than the other two boys, and he was actively involved in group discussions with his teaching assistant. Matthew worked efficiently with his teaching assistant rather than in group discussions where he could lose his concentration on tasks more easily. However, he was more active in answering the teacher's questions addressed to the whole class, as he raised his hand more often than the other two boys. This approach seems to be influenced by their placement in the teacher's target groups, which underlines their need for constant support due to their learning difficulties, resulting in their embarrassment and subsequent avoidance of active participation in classroom activities.

Spelling was also part of literacy activities where the pupils practised in the classroom weekly the spellings of twenty words chosen from the list of the most frequent English words. Two principal methods were observed: first, the children who were set in groups during guided reading copied the spellings from the board into their notebooks twice (the second time was by heart), and second, during the literacy hour the teacher played with her pupils orally a classroom game called 'ping pong', where two children stood up and said alternately letter by letter the spelling of the given word. As the teacher emphasised during this game 'they've got to be listening and then they've got to be thinking what the next letter is in that spelling and it has helped them with their spellings actually'. Indeed, the friendly environment in the classroom and the teacher's comments about children's potential errors, namely 'you were unlucky today' allowed the three boys to enjoy this activity, developing further their verbal and memory skills.

Additionally, through this approach the three learners became aware of their spelling mistakes, for example Robert said that during the game 'I got "discussion" wrong because I forgot one letter […] I remembered it when I sat down […] I said "c" instead of "s"'. This illustrates that his memorization skills can be enhanced through constant practice, although he mentioned that sometimes he found the spelling game hard 'because I did practise my spellings but I just forgot them on the day'. This example demonstrates that despite pupils' practice and efforts to meet the National Curriculum expectations for spelling, their weaknesses in memory tended to prevent them from achieving the expected outcomes raising questions about equality in assessment.

According to the English Programme of study for the Upper Key Stage 2 (Years 5 and 6) for Spelling, the children's ability and accuracy to spell unknown words is demanding, while a list of the hundred more frequent words in English are offered for teachers' guidance (Department for Education, 2012, 2013a). Furthermore, it suggests that there should be an emphasis on the development of pupils' decoding skills, when they are assessed as poor, through 'a rigorous and systematic phonics programme so that they catch up rapidly with their peers in terms of their decoding and spelling' (Department for Education, 2013a, p. 42). As a result at Rose Garden School, teaching phonics was emphasised as the principal way that can enable pupils to develop their skills in phonological awareness.

Nevertheless, this method appears not always to be successful due to children's confusion in combining letter with sound. Characteristically, Robert explained that 'sometimes it doesn't help me and sometimes it does because when we have to pronounce them in a different way it's hard, it's confusing'. For this reason he considered that the big letters in the spellings were easier for him because 'when you see the big letters you can guess the letters as they are really so big because you know the way they are pronounced sometimes'. Hence, disassociations of letter-sound caused him difficulties in spelling requiring additional time and practice for them to be overcome. However, the above emphasis on fast acquisition of decoding skills in order for pupils to be synchronized with their peers appears to provoke in them feelings of stress and frustration and potential failure in meeting this target. The focus also on pupils' sameness in learning does not acknowledge individual learning profiles perceiving children's differences in learning pace as a problematic issue. Consequently, the above requirement seems to press children with learning

difficulties to achieve at a faster rate the National Curriculum demands influencing significantly their self-esteem, confidence, motivation and learning progress.

Dictation of twenty words, which were given as homework, was set once per week as part of literacy activities. However, pupils tend to perform well in these tests but they are likely to have forgotten them the following week when other words are dictated (Pollock et al., 2004). Therefore, this kind of standardized measures seems sometimes to fail to progress children's individual spelling proficiency and skills as well as their decoding performance and understanding of spelling patterns (Malatesha Joshi and Carreker, 2009). Children in their efforts to perform well in these tests tend to rely on short-term memorization instead of developing long-term strategies. An additional problematic issue of single words' dictation concerns pupils' difficulty in their application in other contexts. For example, the head of inclusion emphasized that 'they learn their spellings quite well for test […] but when they have to apply that in their writing they find that much more difficult'. This illustrates the inefficiency of this kind of assessment for spelling. Consequently, pupils appear to end up without remembering words' spelling for the long-term and without learning to use them in context, namely in sentences.

Pupils' self-assessment in spelling tests, though, influenced their learning and self-awareness. In particular, children through their self-evaluation could identify their errors assessing the significance of their mistakes. For example, Robert referred to his spelling mistakes in the dictation: 'I got silly mistakes […] like when it was "disappear" I forgot to add the double "p"'. In this way, pupils regulate their learning, becoming more independent learners and more actively

involved in their learning process. Nevertheless, making too many mistakes in dictation can cause frustration to pupils with learning difficulties resulting in their efforts to change their marks through the self-assessment process to avoid embarrassment, as was observed in the three boys on occasions. For example, Thomas explained that he feels nervous during the tests because he might forget how to spell one word or to forget a letter, while he feels sad about his scores when he has four or five mistakes in the spelling test rather than one or two errors. Although their teacher explained that 'Robert and Thomas are quite good at the spellings', spelling tests do seem to worry children due to their influence on their grades.

Pupils' meta-learning was also valued at the school through the setting of their own learning targets according to their learning needs, apart from the above practice of self-assessment. In particular, the children were encouraged to set out their personal learning goals on the first page of their notebooks in the context of self-regulating learning. Image 14 presents Thomas's individual learning targets:

Image 14: Thomas's learning targets

Thomas's priorities concern the improvement of his handwriting and writing through correct punctuation, complex sentences and connectives as is required for Key Stage 2 literacy. The articulation of his ideas in a logical order for the purposes of improving the structuring of his writing was also set as a target goal. However, these learning targets, derived from his standardized level in literacy, were placed at the back of his notebook (see Appendix 9) and not from his self-awareness, raising questions about the acknowledgement of his individual learning profile. Similarly, the other two boys' learning targets were copied from the standardized levels at the back of their notebooks. Images 15 and 16 present the personal targets of Robert and Matthew respectively:

Image 15: Robert's learning targets

Image 16: Matthew's learning targets

Robert (see Appendix 10) sets only two targets about his writing concerning his sentences' extension by using descriptive phrases. On the other hand, Matthew's learning targets (see Appendix 11) refer to punctuation (e.g. full stops), vocabulary and grammar (e.g. sentence starters and advance vocabulary) and structure (e.g. logical order) based on his standardized levels. Although pupils' levels were not placed on their group tables and their teacher did not mention them during classtime ensuring a less competitive and stressful learning environment, their influence on children seems to be a determinant concerning their self-image as learners. The only reference to them was made by Matthew's teaching assistant during the extra support given to Robert and

Thomas outside the classroom which aimed to encourage them to improve their levels through the completion of the tasks. Nevertheless, setting individual learning targets can be an effective way of learning for pupils when it is based on their exploration and understanding of their weaknesses with their teacher's support. In this way, they develop their metacognitive skills for regulating their learning process, which does not happen when they conform to standardized requirements that are addressed to all pupils.

Furthermore, meta-learning was fostered by setting homework according to the school's policy. In particular, the teacher provided mathematics and literacy activities for homework, including the weekly spellings, once per week aiming 'just to help with their grammar and their punctuation and just get them to write stories […] to make them practising at home'. The head of inclusion also suggested that although in Year 6 the pupils had daily homework which could prepare them for the demands of secondary education, in Year 5 it was set only once per week. This approach illustrates the school's effort to link primary and secondary education ensuring pupils' smooth transitions between the two. The type and amount of homework also seems to contribute to pupils' learning when the aim is to reinforce and revise taught materials (Jha, 2006). Therefore, lengthy homework, which can cause pupils tiredness or demotivation tends not to be recommended for children with learning difficulties. For example, Robert highlighted the difference in its amount: 'we get every week, but I get two sheets a week'. The children's additional time and effort for the accomplishment of their homework has the prospect of demotivating them to complete it. A routine, though, of practising and revising at home frequently through a manageable homework allows them to overcome their difficulties in learning and to cover their learning gaps.

Matthew and Robert were not consistent in completing their homework every week, while 'Thomas' homework always is good, I think he's got a lot of help from his parents', their teacher suggested. Both Thomas and Robert practised their spellings twice at their homes, and they were tested by their parents. In contrast, their teacher commented that 'Matthew still needs help with his spellings but I don't think he practises at home, so he gets quite low scores when he has spelling tests' underling the positive outcomes in his performance when he was doing his homework. Homework has the potentiality to facilitate and enhance learning through activities related to pupils' individual learning needs. It seems to enable personalized learning offering the opportunity to children to process information at their own learning pace and in their own learning way or to revise knowledge so as to improve their skills. Parental guidance and support also play an important role in learning, although homework is more effective when it is set in a way that allows children to accomplish it without additional help (Jha, 2006).

Feedback during literacy sessions was provided to pupils daily and frequently. The teacher mentioned that 'generally I go around and I have a look and tell them what they need to change', while when the children were writing stories she was giving them 'two things that it is good about it and then two targets and then they need to go back over to their work and then they need to correct themselves'. Constant feedback in combination with specialized individual feedback is usually assumed to enable pupils to improve particular areas in their writing. Acknowledging their progress with positive feedback seems to encourage their active involvement in their learning by allowing self-correction of their mistakes. In this way, their understanding and their skills to identify errors in

their writing can be enhanced instead of just reading their teacher's corrections in their writing.

The pupils who participated in the study also used peer and self-assessment of their writing, as the teacher suggested: 'I say to read to their partners and say what they like or they need to improve or read over your own work and assess'. Robert tended to be quite good at reading and marking his classmate's work, which can demonstrate that he had developed his ability to identify mistakes. Hence, pupils' self-regulated learning and peer learning appear to be enhanced through these two methods of assessment. For the three boys, the best feedback according to their teacher was the following: 'I think they need to hear it so instead of me taking away their book to mark it and then to read it by themselves they need to hear it from me straight away and they can correct it straight away'. Immediate verbal guidance on their mistakes is generally beneficial.

Similarly, the best assessment method for them according to their individual learning characteristics was considered by the teacher to be the following:

> I think the boys need to read over their own work because if I get
> them to read it to me they cannot see where the mistakes are, so if
> they are reading it by themselves out they can see what things they
> need to include […] I would say overall they need to read it out loud
> so they can mark it that way (teacher)

Self-assessment is emphasised by the teacher as an appropriate way for pupils' improvement illustrating the importance of a multi-sensory approach, namely both visual and audio. Reading aloud can enable them to recognize their errors through the familiarity of the sound and to check whether their writing makes

sense, and at the same time acquiring a deeper awareness and understanding of their weaknesses. Being aware of the criteria, they can self-evaluate the outcomes of their writing without feeling frustrated and embarrassed, while they have the opportunity to use their strengths in verbal expression to assess themselves. In this way, pupils can become more independent in their learning.

However, the principal form that pupils' assessment took was standardized written tests within time limits. This summative assessment, though, which aims to assess the basics does not acknowledge children's diversity in their literacy skills (Johnson and Kress, 2009). For instance, the three boys experience difficulties with tests, which can damage their learning, motivation and self-image as learners. As their teacher emphasized:

> they do struggle with their tests, Robert and Thomas did not complete the test because they ran out of time, so they feel under pressure sometimes, so yes, I think they get a bit scared by tests and then they think they can run out of time. Matthew does not finish a test anyway because he gets a little bit distracted so that influences his learning as well (teacher)

The implications of uncompleted tests due to time restrictions also influences their emotional state, like Robert who tended to become angry when he had not finished his work, according to his teacher. Additionally, in Matthew's case, his significant difficulties in concentration affected his performance in tests potentially giving a wrong impression of his actual abilities, skills and knowledge. Under other assessment conditions, namely oral examinations, the three boys have equal opportunities with their classmates to present their actual level in literacy without being restricted by their difficulties in writing and concentration.

The influence of tests on pupils' levels also caused them problems in their emotional well-being. Thomas expressed his feelings about tests: 'I hate tests, because they make me feel weird, because if I make a mistake my grade is going to be a little bit lower'. Furthermore, Matthew highlighted that he felt sad when he made a mistake in spelling tests because 'they make your levels go down'. The boys' reaction to examinations illustrate that their self-perception as learners is influenced by their scores. If pupils experience more failures than successes then they may ascribe it to their lack of ability and this creates a sense of low self-esteem (Reid and Came, 2009). Hence, an emphasis on grades appears to slow children's progress by diminishing their self-confidence which is essential for the learning process, leading to erroneous self-perceptions as learners. A similar situation was observed in reading sessions too.

Reading: Classroom arrangements-Pedagogy-Assessment

According to the National Curriculum, pupils' encouragement to read fluently, to comprehend fiction and non-fiction extended prose, and to read for pleasure is considered essential for the development of their literacy skills (Department for Education, 2013a). Based on the above requirement, a 30-minute reading session was scheduled daily after the lunch break where pupils were categorized into groups according to their standardized levels in reading. In particular, each group engaged with the following tasks once per week: reading with the teacher, practicing spellings for the weekly test, completing an activity from their guided

reading session with their teacher, and independent reading of a book of their choice.

Pupils' independent learning was encouraged through silent reading and answering written comprehension questions after the guided reading with their teacher, as the questions were based on that reading material. This reflects the necessity of thinking on their own about their answers' articulation and expression without their teacher's support, while silent reading for pleasure allowed them to use the carpet area which made this activity more informal and relaxing. The four activities' purposes also influenced the classroom's spatial arrangements, as they are presented in Figures 14, 15, 16 and 17:
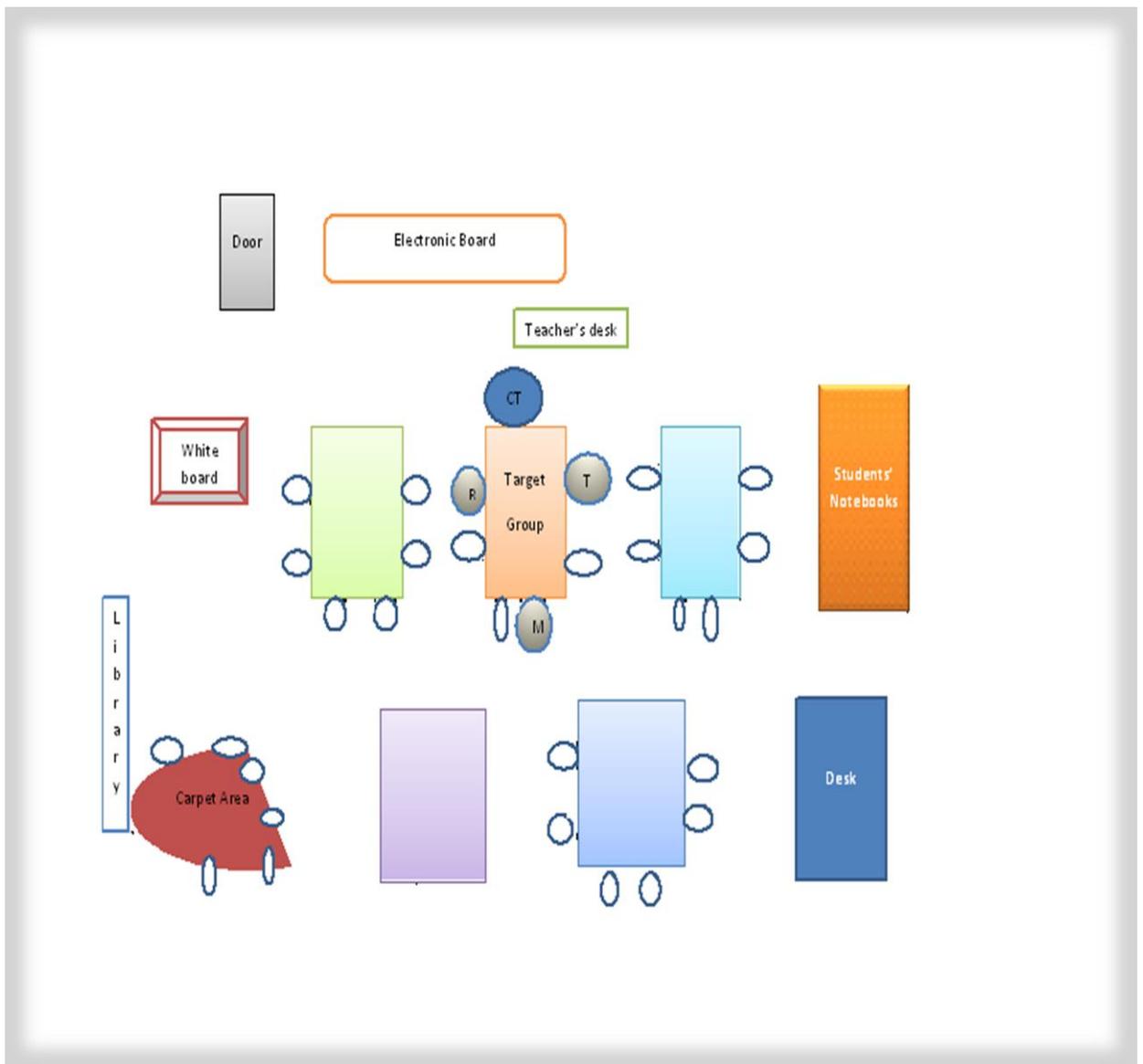
Figure 14: Guided reading with the teacher. CT is Classroom Teacher, R is Robert, T is Thomas, M is Matthew
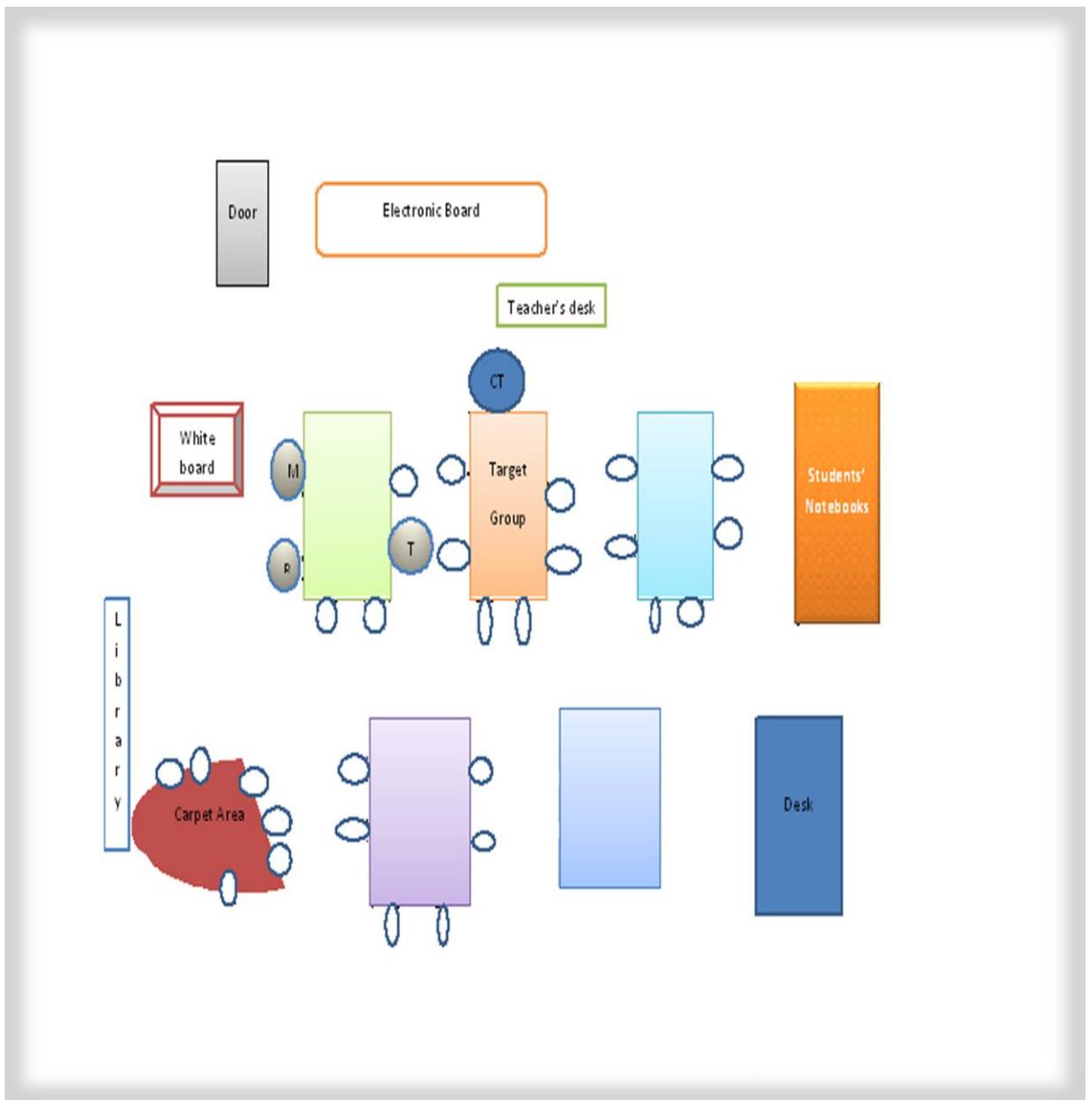
Figure 15: Spelling practice. CT is Classroom Teacher, R is Robert, T is Thomas, M is Matthew
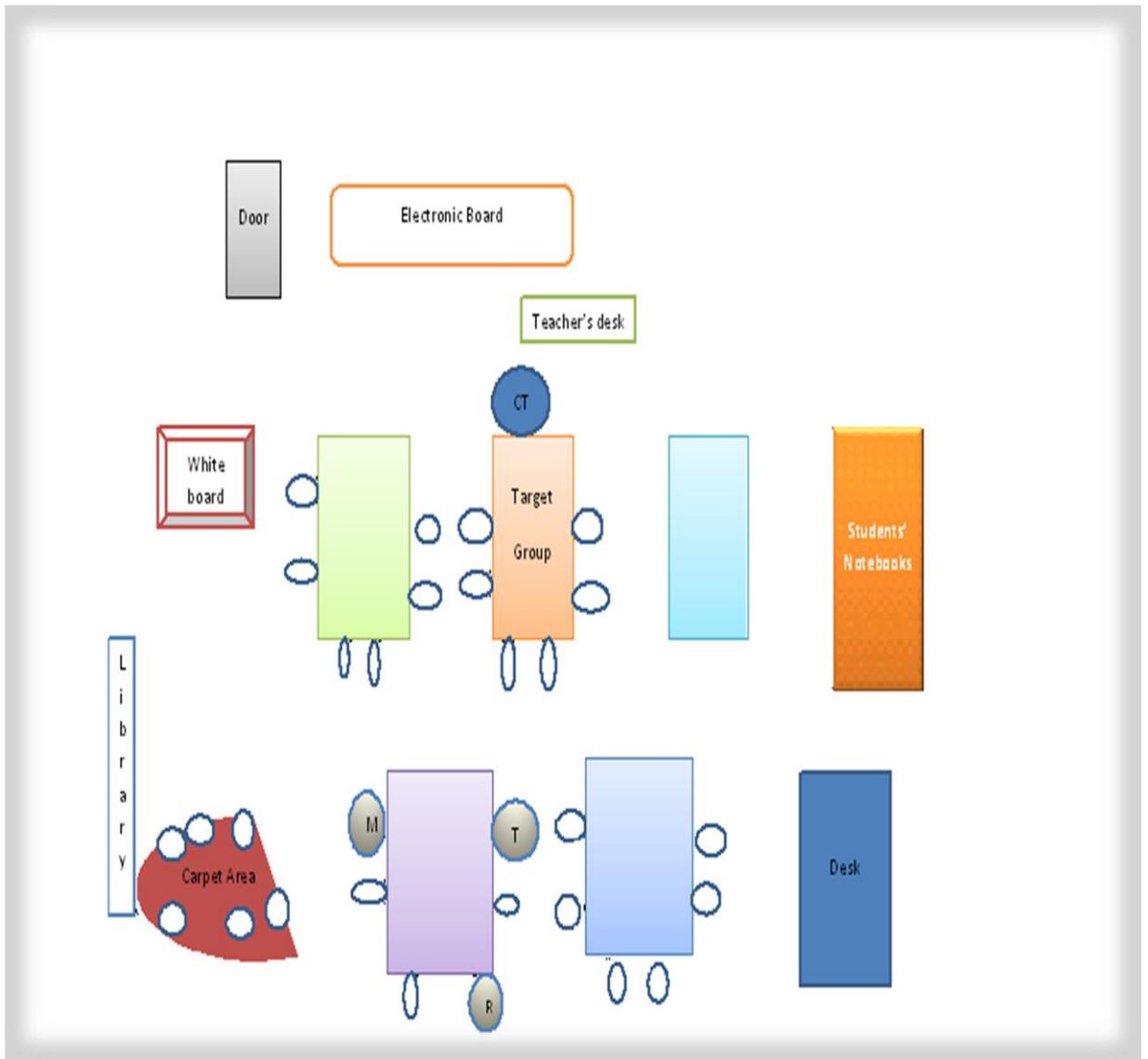
Figure 16: Activity from the teacher's session. CT is Classroom Teacher, R is Robert, T is Thomas, M is Matthew
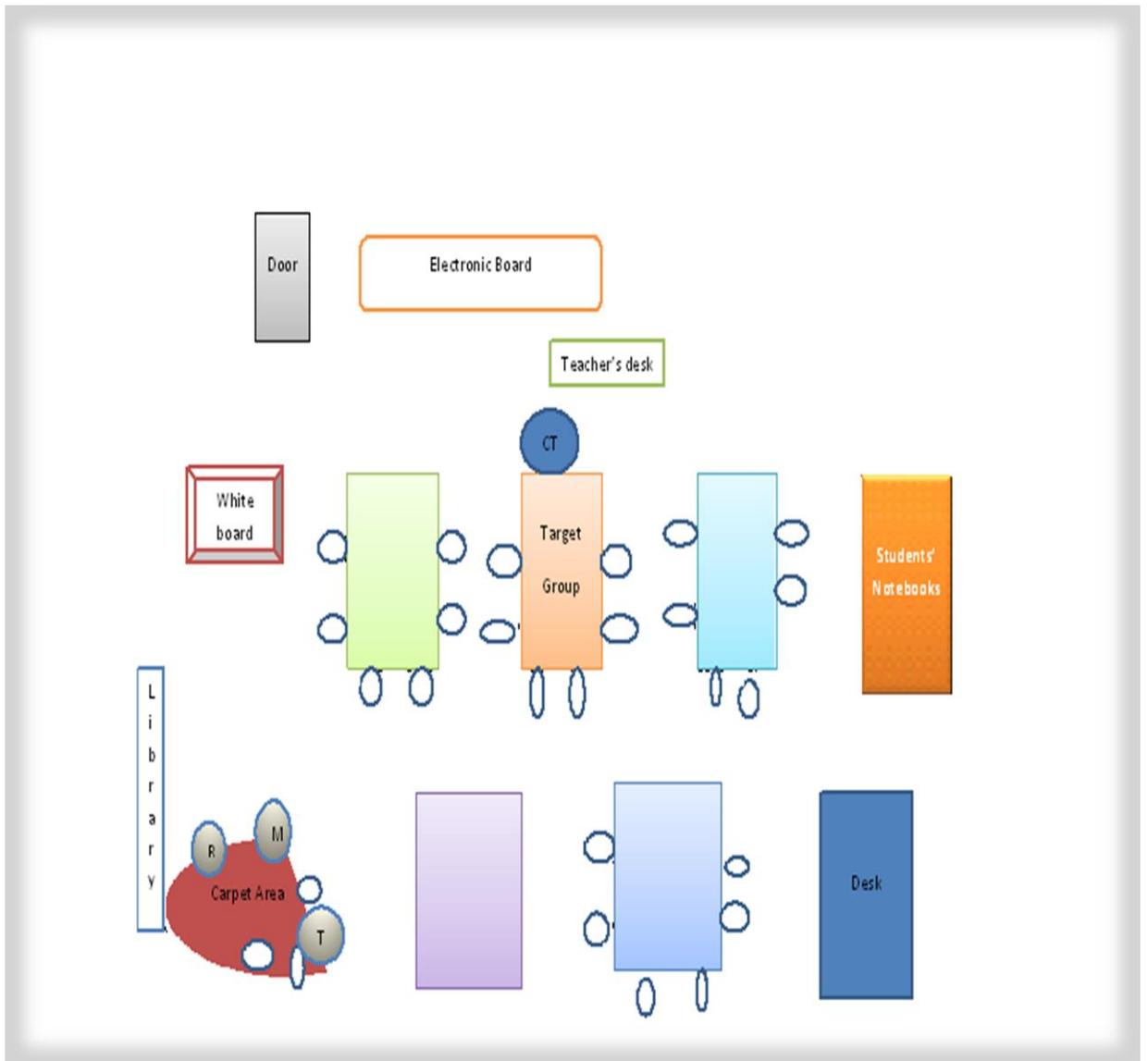
Figure 17: Silent reading. CT is Classroom Teacher, R is Robert, T is Thomas, M is Matthew

Pupils' movement in the classroom during reading sessions was encouraged compared to literacy lessons where the children were sitting constantly at their group-tables. This can be justified by the various aims of the reading activities. For instance, when the children were working with their teacher on reading material chosen by her according to their learning needs, they were sitting at her target-group table for concentration and discipline reasons, allowing her to maintain control of the classroom from her central place (Figure 14). In this way,

privacy and silence were ensured for children's concentration, enabling their reading comprehension through guided discussion. Similarly, children were placed at the front of the classroom for spelling practice because they could copy efficiently from the board illustrating those two activities' importance (Figure 15).

The pupils' ability-based groups aimed to meet the National Curriculum requirements for reading, which were addressed to the development of children's skills of word reading and comprehension (Department for Education, 2013a). Word reading of known and unknown printed words presupposes developed skills of decoding and fast recognition respectively. Good reading comprehension derives from linguistic knowledge, including grammar and extended vocabulary in combination with pupils' experiences about the world. Hence, various mechanisms are activated simultaneously when children are engaged with reading based on their individual learning pace. Additionally, learners' backgrounds play an important role in constructing their experiences influencing the development of their reading comprehension. For instance, pupils who have never seen a balloon are likely to be confused by a text which refers to balloons. For this reason, discussion of the text with the teacher is considered as an essential teaching method for reading as it contributes to filling gaps in children's knowledge. This was the main teaching approach at the school for reading sessions, limiting, though, peers' interaction within their ability-based groups for differentiation purposes.

In particular, concerning the learning difficulties of the three boys in reading, differentiation of reading materials was adopted for their session with their teacher. For instance, photocopies were provided for them instead of books because they were considered more accessible to their level and learning needs.

Nevertheless, the children did not practise their reading skills with their teacher but only their comprehension skills, as they read silently the text and then they answered the teachers' questions which included the meaning of words. Reading aloud, though, a part of the text enabled them to hear words' pronunciation from their peers or teacher through the practice of modelling, to feel motivated and confident to face their reading challenges by attempting to read on their own, and to learn through their mistakes, and in the process develop their metacognition. Phonological awareness, decoding skills and self-esteem seem to be supported through the development of scaffolding processes, motivation and metacognitive skills.

During the session of silent reading, Robert, Thomas and Matthew were observed choosing either books with big images and less texts or joke books. Additionally, on many occasions Robert and Thomas avoided reading a book by changing books constantly in their classroom's library. The two boys tended to spend all their silent reading session by changing books and looking only at the pictures without reading, demonstrating that this activity was not designed in such a way that could ensure their active engagement with reading. Similarly, Matthew when his teaching assistant was absent presented the same learning attitude due to his concentration difficulties. This evidence from the case study classroom is reflected in some of the research literature which suggests that the avoidance of reading challenging books independently influences negatively their learning progress, namely acquiring a limited but advanced vocabulary. As the development of robust vocabulary is considered crucial for reading comprehension, it has been observed that readers with learning difficulties prefer to read books with easy and simple words (Malatesha Joshi, 2005). As a result, they lose the opportunity to become skilled readers because they choose to read

fewer and less challenging books in order to avoid unfamiliar words with unknown meanings that make their engagement with them difficult.

The implications for the three children's learning due to their tendency in silent reading and differentiation in guided reading were to present difficulties in replying to complex comprehension questions as advanced vocabulary and critical skills of texts' analysis are required. This also explains their strategy to ask their teacher to compensate for their lack of skill in answering this kind of question. As Robert mentioned 'I go to the teacher, I ask her, I tell her that it's confusing and I ask her if she can help me with that question a bit sometimes'. The above example illustrates that comprehension skills did not appear to be enhanced through these teaching arrangements.

Increase of time and frequency of reading sessions with the teacher within the week and whole-class discussions about the same reading material have the potentiality to benefit significantly children with learning difficulties as they can allow peer learning and children's engagement with various texts and reading methods through their teacher's guidance. For example, they learn to reply to reading questions through various strategies, namely scanning (e.g. searching the text for specific information), and skimming (e.g. reading selected texts' items, namely introduction), while critical reading which demands advanced comprehension skills, like analysis, and light reading which concerns reader's pleasure without time and facts' recall requirements can be encouraged (Pollock et al., 2004). Furthermore, scaffolding processes for answering these kinds of questions based on verbal instruction and modelling of answering can facilitate learners' deeper understanding of how texts are analysed. However, the domination of standardized levels, which set relevant requirements, and

eventually of ability-based groups, tends to limit pupils' guidance in the development of their basic skills, especially those who are viewed as low achievers.

Consequently, standardized testing, which was the principal assessment approach at the school for reading, seems to assess pupils' basic skills without providing effective feedback to them (Johnson and Kress, 2009). However, feedback which informs them about their comprehension skills without strict time limitations tends to benefit their attainment, while verbal feedback through guided questions can also enhance their skills and understanding when it takes the form of dialogue and it happens simultaneously with the reading of the text.

Concluding this chapter, the Rose Garden School can be considered as a typical case of a school which attempts to balance financial constraints which limit the number of diagnostic assessments for its pupils with pedagogical initiatives so as to support their children in learning. Practices of additional classroom support without an official diagnosis and constant assistance by the teacher or teaching assistant have the prospect of ensuring that the children who are not diagnosed officially can be supported in learning. Furthermore, pedagogical methods with an emphasis on their verbal skills enabled pupils to feel more confident and equally valued in classroom activities exploiting their strengths to fulfil the required tasks. Assessment approaches, also, such as self-assessment, encouraged pupils' metacognitive skills by identifying and correcting their own mistakes, while meta-learning was encouraged through the setting of homework. Nevertheless, time limits in writing, emphasised the achievement of standardized learning targets, spatial arrangements highlighted pupils' weaknesses and summative assessments had negative implications for pupils' self-confidence

and eventually for their learning. Avoidance of participation in classroom activities, feelings of anger, inferiority and anxiety due to uncompleted tasks or making too many mistakes that affected negatively their grades tended to be experienced by these three pupils with significant difficulties in learning. Less focus, though, on elements which transform literacy lessons into technical sessions, namely timeframes and spellings out of context, have the potentiality to allow pupils to reach the highest levels. Finally, support by the teacher or teaching assistant needs to be provided in such an amount and with such frequency that it does not prevent learners' independence and self-regulated learning.

In the next chapter I will discuss the findings from the third case study, the Sunlit River School.

Chapter 6: Sunlit River School

'I suppose selfishly as a teacher I like assessments […] because I can see exactly where they (= pupils) are' (Amanda's teacher)

'I just feel like I try to spell it and I can't, that makes me feel really stupid' (Peter, 10 years old)

The Sunlit River School is a mainstream primary school which accommodates roughly 400 pupils. Approximately 39% of its pupils have English as a second language and 9% of them have SEN statements (Department for Education, 2013b). The last Ofsted inspection assessed the school as good for its overall effectiveness and referred extensively to its specialist dyslexic centre. In particular, Ofsted mentioned that pupils with a range of difficulties and/or disabilities received outstanding support and special provision which resulted in their exceptional academic progress, well-being and personal development due to the school's specialist teachers and their high-level of training. In addition, the general quality of pupils' learning and progress with special educational needs was assessed as outstanding. The school's curriculum was evaluated as outstanding in terms of meeting its pupils' needs because it encouraged their learning and creativity through various innovative activities, an example of which is the operation of a school radio station which had positive implications for the development of their speaking and listening skills.

The four pupils who participated in the study were born in England and they were native English speakers. Betty and the twins, Amanda and Peter were 10 years old and attended Year 5, whereas Gregory was 9 years old and a pupil in Year 4. Amanda and Peter had been diagnosed with 'very severe' dyslexia, Betty with 'moderate' dyslexia and all were supported with special provision at the specialist dyslexic centre. Gregory, who was a new pupil at the school, although he had not been diagnosed officially at the time of the research, was also receiving special support at the specialist dyslexic centre. His diagnostic assessment was planned for that academic year.

At the Sunlit River School the four pupils and their parents were interviewed as well as their specialist teacher for dyslexia, their teachers, the radio operator, the head teacher and the manager of the specialist dyslexic centre. During the interviews, two staff members revealed that they were dyslexic learners offering their own perspectives about their learning and social difficulties. Due to changes in staff members, Betty and Peter had different teachers for literacy, although they were classmates for the rest of their subjects. Specifically, Betty had the same literacy teacher as Amanda, Peter had another literacy teacher, and both Betty and Peter had the same reading teacher.

Principles and Curriculum

The school's mission statement was to be inclusive for all children regardless of their learning difficulties, or ethnic or socio-economic background, and to have 'the same expectations for all the children' of making good progress, avoiding in

this way 'stereotypes' and 'lower expectations' for pupils coming from specific backgrounds (head teacher). Equality in learning opportunities between pupils seems to be encouraged through realistic and unbiased expectations for their learning progress and this constitutes a pedagogical tool that aims to motivate them in their learning (Corbett and Norwich, 2005).

This intention was realized according to the head teacher through the school's teaching approaches to those of its pupils who were identified with learning difficulties/disabilities in collaboration with the dyslexic centre. As the head teacher emphasized, a range of activities and teaching methods were encouraged acknowledging that learners can have different learning styles. For example, according to the manager of the dyslexic centre, the learning profile of pupils diagnosed with dyslexia can be facilitated by multi-sensory teaching and breaking down knowledge into achievable targets. Based on this concept, the school's radio station operated as a significant pedagogical tool, offering the opportunity for 'dyslexic pupils, who bound by the barriers to spell, never expressed themselves because of that difficulty' to develop their skills through other ways, namely technology, and to have a 'live chat' concerning their experiences in literacy (head teacher). These radio activities involved the writing of a story according to pupils' choice following various steps, namely children's discussions with the radio operator, recording their narratives, transcribing and editing them online and finally producing films and animations (head teacher, radio operator). In this way, pupils worked in pairs exploring alternative and creative ways of practicing their literacy skills and enhancing their verbal and collaborative skills.

In parallel with these activities, the school teaches the National Curriculum, measuring its pupils' progress based on standardized levels. Nevertheless, the head teacher emphasized that:

> the new National Curriculum could be viewed as a nightmare really because it's not process-driven it's too knowledge and stuff like that children are required to learn and memorize facts and we force our children to be successful learners by teaching the skills to learn and research by themselves (head teacher)

The head teacher mentioned that in general the schools' problem 'at the moment is the methodology of assessment determining the methodology of teaching'. In this way, children tend to be channelled into precise and narrow frameworks in terms of knowledge, skills and capacities, since schools focus almost exclusively on teaching to the examinations' content and requirements. However, the head teacher suggested that at the school they do not teach to the tests but 'we only prepare the children for the tests in Year 6 from February to May, in February we do revision and basically we look at gaps, not necessarily teaching the tests, that they understand really well and if they don't then we support their areas of weakness'.

The manager of the dyslexic centre emphasized that:

> education is not linear and it's only recently that people have said that a 7 year old must be able to read this, a 9 year old has to be able to read this and I will use my example that I didn't really read anything until I was 16-17 *(years old)* and look where I am now […] sometimes I feel it's a race and no one asks a 20 year old when they learned to do multiplications, does it matter if you learned it at 12 or 6? By the

time of your 20s as far as you can do it you are fine, and life is not

linear and learning is not linear (the manager of the dyslexic centre)

An intensive focus on children's standard development in the learning process reflects those socio-economic demands which determine whether pupils are diagnosed with a disability or handicap based on standard academic expectations concerning their performances, although these requirements are subject to change throughout the years (Elbro, 2010). For example, if high aims have been set for reading skills, then pupils who cannot meet these expectations tend to be viewed as poor readers and be diagnosed with a handicap. Norms are constructed in terms of pupils' knowledge, abilities and skills, framing education and public opinion about learners' progress based on their standardized performance (Gore, 2011; Wearmouth and Open University, 2001).

Reflecting on the above situation, the radio operator, based on her experience of being a dyslexic learner, underlined that in the current educational system 'everybody needs to learn this by this time so for me I didn't really learn to read books at until age of seven […] if you are taken a different time to learn […] you are already behind because the educational system is heading and you should be going in this way and that's really hard to negotiate'. However, it tends to be forgotten or underestimated that 'in the outside world' there are different professions which value other skills than the school system (radio operator). In practice, though, pupils' linear progress in learning seems to be a major structuring principle in the educational system as 'the progress made from children when they come to us from other schools in level 1 and we've taken him in level 3 in two years that's not recognized by Ofsted' (head teacher).

Accordingly, there was unanimity among all the teachers and the pupils' parents that SATs examinations did not provide equal opportunities to children with specific learning difficulties, since their starting point is not acknowledged as well as time limits and overemphasis on writing can present an erroneous image of their actual skills and abilities. Characteristically, Gregory's parent emphasized that:

> there is no way he will have the same opportunity as other children unless he can make a contribution verbally, if he has to write, it's not same opportunity, because it's such a struggle for him to actually write it because the amount of effort he has to put in to the process of the writing will distract him of thinking about the answer and taking the exam (Gregory's parent)

Nevertheless, an oral examination for pupils who experience significant difficulties in their learning, and especially in writing, is not considered to be an adequate measure for their assessment although it can contribute to equal opportunities for all children. All learners are assessed by the same criteria and requirements regardless of their individual learning needs, leaving behind pupils who present developed verbal skills as opposed to writing skills. As the radio operator characteristically argued, children's socio-economic background, learning and emotional needs, tend not to be taken into account in this kind of examination, although they play an important role in children's learning and their ability to learn, reproducing inequalities within education. Even though individual learning characteristics seem to be acknowledged in educational policies, in practice the educational system through the National Curriculum requires the same performance by all the pupils.

Pupils' learning characteristics and strategies

The four children experienced significant difficulties in memorizing and recalling information. In particular, based on diagnostic assessments of memorization abilities at the dyslexic centre, namely Digit-span test, Gregory's score showed a low average performance illustrating his difficulties in remembering his ideas and expressing them in written form (specialist teacher). Additionally, Gregory had memory difficulties when he was reading long words: 'if it is a long word even though Gregory could sound it out letter by letter he would have forgotten the beginning at the end' (specialist teacher). Similarly, Peter's speech and language difficulties were caused 'partly' by his poor memory skills, as 'he finds it difficult to remember longer words in the right order and it's the same with his spelling so he has to really focus and concentrate to remember stuff in the right order' (specialist teacher). When speaking, Peter tended to 'muddle up' the long words, while reading them aloud was 'difficult because he thinks them in his head but he can't say them as fast or as accurately' (specialist teacher). The right order of long words seems to present difficulties for learners identified with dyslexia because they need to retain in their memory the letters' sequence over a long-term period.

Furthermore, the four pupils' memory difficulties influenced the memorisation of 'time tables, alphabetical order and months, all the sort of sequential things' because 'it's hard to use visual images to remember them' (specialist teacher). Difficulties in recalling sequences characterise dyslexia and this can prevent the flourishing of pupils' learning as they need to rely heavily on their working memory and on storage capacities in their long-term memory (Reid and

Wearmouth, 2002; Snowling, 2000). Children's visual memory seems to function better than their working memory for memorization of information; however, they may not be able to use it in learning. Accordingly, difficulties in working memory not only can influence pupils' speed of processing in reading and writing, but also their speed of information processing, allowing them to only maintain a small amount of information in their short-term memory each time (Catts et al., 2002).

Recalling phonic rules or spellings created difficulties for Betty, although she was good at remembering shopping lists or her homework, as her specialist teacher explained. Her literacy teacher considered that Betty had a 'poor' memory and 'that is reflected in her spelling, she can't remember to spell even simple words, the words that we are meant to know, like "went" […], the frequent words'. Her parents also mentioned that she was quite 'forgetful' and for that reason they used to avoid giving her 'too much information all in one go'. Working memory can be responsible for coding phonologically and pairing names with objects or situations in vocabulary acquisition (Berninger et al., 2008). Therefore, pupils when spelling and reading words need to match phonological and orthographic codes as well as to process word-forms and their parts, which seems to be difficult for learners identified with dyslexia.

In contrast, Amanda did not experience marked difficulties in her memory skills, as unanimously her teacher, specialist teacher and radio operator explained. Peter, though, due to his memory difficulties tended to work fast at his tasks, especially in writing, 'because writing is difficult […] he processes very quickly' (Peter's reading teacher). However, his reading teacher considered that Peter had 'good' memory skills which enabled him to read through a text and then to answer the questions: 'that's probably the reason why he is so much to get

things done so quickly, because it's a strength of him to remember "where is that"'. His specialist teacher, though, ascribed Peter's tendency to the fact that 'his brain is going faster than his muscles can go with, so he can't write fast enough to keep up with his ideas'. Therefore, when Peter thinks about 'handwriting and the ideas and the spelling all at once he finds it really difficult', while in spelling of single words he was performing well (specialist teacher).

The difference between the thinking process and writing pace in pupils who experience dyslexia tends to be associated with working memory limitations that influence significantly pupils' performance in activities of sequencing, information storage and processing (Banai and Ahissar, 2010; Gathercole et al., 2004). For example, Peter's explanation for not saying slowly the sequence of months to his specialist teacher during the one-to-one session, although he was asked to do so, was that he would 'lose them' from his memory, which was in tension with his teachers' opinions about his memory skills. Consequently, he developed the strategy of working rapidly with the purpose of maintaining important information longer in his memory for the attainment of his current tasks and to overcome his memory difficulties.

The scaffolding process was also affected by the pupils' difficulties with their working memories. For example, Betty attempted to learn patterns so as to enhance her memory skills, but 'she finds it hard to link new learning on to what she's got and if she starts delving underneath that's quite hard for her' (Betty's reading teacher). This difficulty can be caused by limitations in short-term memory that do not allow pupils to process and link new information to their acquired knowledge (Berninger et al., 2008). As the manager of the dyslexic centre underlined, dyslexic learners seem not 'to be able to remember and

generalize, for example from text into general, so they need to have it explicitly pointed out' due to their difficulties with working and short-term memory. Therefore, 'even though they might have learned it once and be able to reproduce it on a given day, the next day that information seems to have been forgotten so they can't recall it and they can't build on their previous learnings' (the manager of the dyslexic centre). Children's capacity for storing and processing simultaneously temporary information is affected by a dysfunctional working memory (Lee Swanson et al., 2010). Accordingly, activities that demand memorization do not represent pupils' actual abilities in literacy since they refer to a learning area where children experience the most difficulties, preventing the scaffolding process from working in an effective way. Pedagogical and assessment approaches, which also rely heavily on pupils' memory, without encouraging frequent practice and revision, are generally not considered to be effective pedagogical strategies.

Following instructions was also a demanding task for the four pupils related to their memory difficulties. For example, Gregory's teacher mentioned that through repetition of instructions 'in an organised way' and breaking them down into tasks Gregory was able to process them. Similarly, his parents emphasised that he could follow instructions 'but only simple direct one or two at a time, if you talk too much or make three, none will happen'. Betty, Amanda and Peter also had difficulties in following more complicated instructions. For this reason, their teachers avoided giving 'too many instructions one after the other', while explicit written explanations were given to them (Betty's reading teacher). Characteristically, 'Betty needs to write it down and she needs me to write it down and sometimes she can kind of understand and then forgets' (radio operator), whereas Peter worked 'better with having a list of things to check for rather than

tell things' (Peter's literacy teacher). Furthermore, the parents of Amanda and Peter argued that 'actually they are better with the instructions, they know that this is happening and then this […] they work well with the instructions'. Explicit and simple instructions in combination with efficient teacher-pupil communication can benefit significantly pupils who struggle with their learning and need additional modelling and support (Bosson et al., 2010; Rupley et al., 2009).

Remaining focused on their activities within their classrooms was a real difficulty for the four pupils. Gregory had the most difficulties in concentration as 'he just finds hard to settle and focus' resulting in his constant movement within classroom and in uncompleted tasks (Gregory's teacher). In contrast to Gregory's limited concentration in his classroom and at home, during the one-to-one sessions he was able to focus. Betty was able to focus on tasks when she was calm (specialist teacher), while 'staying on task and […] keeping going […] keeping focused' was considered as a challenge for her (radio operator). Her parents also suggested that 'she lacks concentration so she tends to try to concentrate'. This situation influenced significantly her processing pace which was viewed as slow by her teachers. Her literacy teacher highlighted that 'sometimes her mind switches off', while her reading teacher emphasized that 'the way which she processes is slower in terms of what she can get as much done'. Difficulties in concentration seem to influence pupils' learning and processing pace, whereas their progress tends to be consistent with their verbal reasoning ability, reading and writing pace (Berninger, 2001). As a result, they are considered as slower learners and with lower potential learning outcomes than their peers.

In contrast, Peter had good concentration skills and he could focus on his activities despite distractions within his classroom, namely excessive noise (Peter's literacy teacher). The parents of Amanda and Peter also emphasized that 'they do concentrate when they're engaged with something that they really love, they don't have problems with concentration' at their home illustrating the relationship between concentration and interest in learning. Amanda's difficulties, though, are caused mainly by 'her emotional state that affects her concentration, so if she is upset or worried or frightened then she loses her ability' and then she needed to use strategies that she was taught to keep herself calm (specialist teacher). Distractions, namely her classmates or 'things that have happened during the playtime and she is upset about it can influence her learning because her mind might not be on her work' (Amanda's teacher). Difficulties in controlled attentional processing which are associated with keeping in mind relevant information for the task under conditions of distraction or interference seem to affect children's focus on tasks (Lee Swanson et al., 2008). Pupils with such difficulties appear to fail to apply memory strategies efficiently and spontaneously resulting in uncompleted activities or low achievements.

In practice those difficulties influenced their performance in literacy and eventually their learning progress. Characteristically, Gregory's teacher suggested that Gregory had 'great vocabulary', 'great ideas' and 'he can contribute really well' in class discussions and drama activities. Nevertheless, his major difficulty was to express his ideas in written form and as Gregory mentioned 'to get my ideas in my head to a sheet of paper, it's just too hard for me to explain'. The specialist teacher ascribed his weakness in writing to his 'huge difficulty with words' in terms of recognizing symbols in them which influenced significantly his spelling and reading skills. Specifically, Gregory can:

sound out words phonetically regular quite easily and methodically but if there is more than three letters in the word then he tends to jumble around, so sometimes he reverses words, sometimes he just reverses his letters within a word and sometimes he reverses chunks of the sentence because he just loses his tracking (specialist teacher)

Pupils identified with dyslexia may experience a type of visual stress, sometimes known as Irlen Syndrome, and this refers to their difficulty in reading black and small size printed letters on white paper (Irlen, 2005). It seems to be derived from inadequate control of eye movements resulting in the impression that the letters in the text are moving around constantly. Reading can be difficult for children diagnosed with dyslexia, especially when the word has more than two syllables.

Apart from this, insufficient 'explicit modelling of how to decode, for instance, where to split it into two syllable words and knowing the rules for that' is neglected as a pedagogical strategy in classrooms, so that 'decoding is not taught in a very explicit way and it's just by practice the children seem to pick it up, the lucky ones' (the manager of the dyslexic centre). Consequently, reducing the amount of time for decoding instruction in reading and for explicit and systematic spelling instruction in literacy can result in pupils having significant difficulties in developing their decoding skills (Berninger et al., 2008). This suggests that the learning environment has an influence on pupils' learning process and progress.

Betty has 'some really good ideas but she struggles in putting them into a logical sentence sometimes, into a structured sentence and she sometimes misses words out', while 'poor' spelling characterised her writing (Betty's literacy teacher). However, the specialist teacher argued that her 'general intelligence is

not so high, she's got an average and so in some ways her reading and writing matches that', demonstrating that erroneous assumptions can be made with regards to pupils' cognitive abilities when they are assessed by tests of intelligence. Indeed, general intelligence tends not to be associated with learning difficulties, as IQ measurements for identifying specific learning difficulties can stigmatise children significantly, resulting in teachers' low expectations about their progress (Frederickson and Reason, 1995). In practice, though, as it has been mentioned above, the pupils' general intelligence appeared to be used as an explanation of their learning difficulties at the case study school. Image 17 presents an extract from her writing:
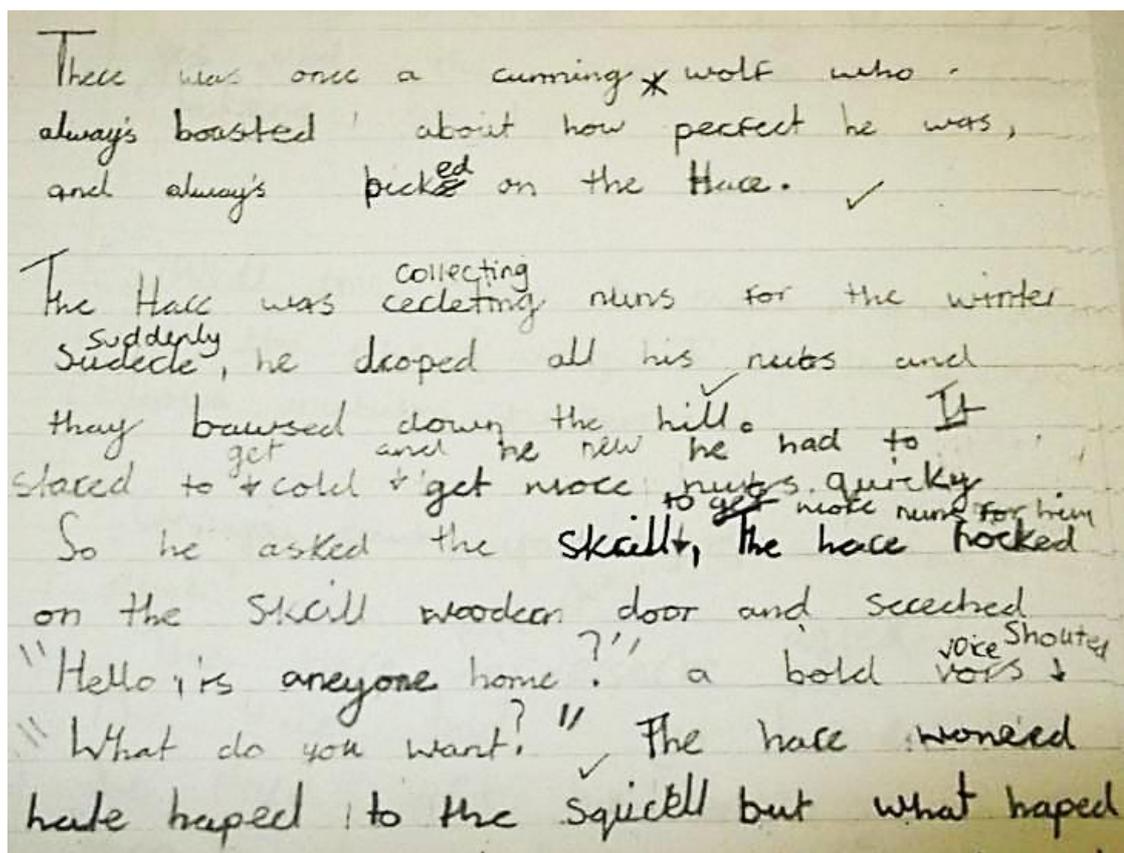
Image 17: Betty's writing

Betty's handwriting allows us to read it. Her punctuation and grammar are generally accurate, while her vocabulary and the sentences' structure tend to be simple. She has also made a number of spelling mistakes, namely 'aneyone' and 'squirell' instead of 'anyone' and 'squirrel' respectively. Additionally, she omits words affecting the logical order of her writing and its understanding, namely in the second paragraph the two words 'get' and 'shouted', which her literacy teacher has added with arrows.

Peter had good ideas and 'really lovely language' in writing, whilst his grammar was generally correct (Peter's literacy teacher). However, his literacy teacher suggested that Peter experienced difficulties in his spelling and punctuation, namely with capital letters and question marks, which kept him at a lower level of literacy than he should have been. Handwriting, though, was Peter's major difficulty caused by his motor coordination problems influencing his self-esteem and eventually his motivation to learn (specialist teacher). An electronic notebook without a spelling checker was allocated to him in the context of special provision in order for him to write during literacy sessions, to print his text and include it in his literacy book, because 'it's very difficult to understand his handwriting' (Peter's literacy teacher). Image 18 shows Peter's free handwriting in his literacy book, while Image 19 illustrates the same extract written with additional care by him for display reasons:
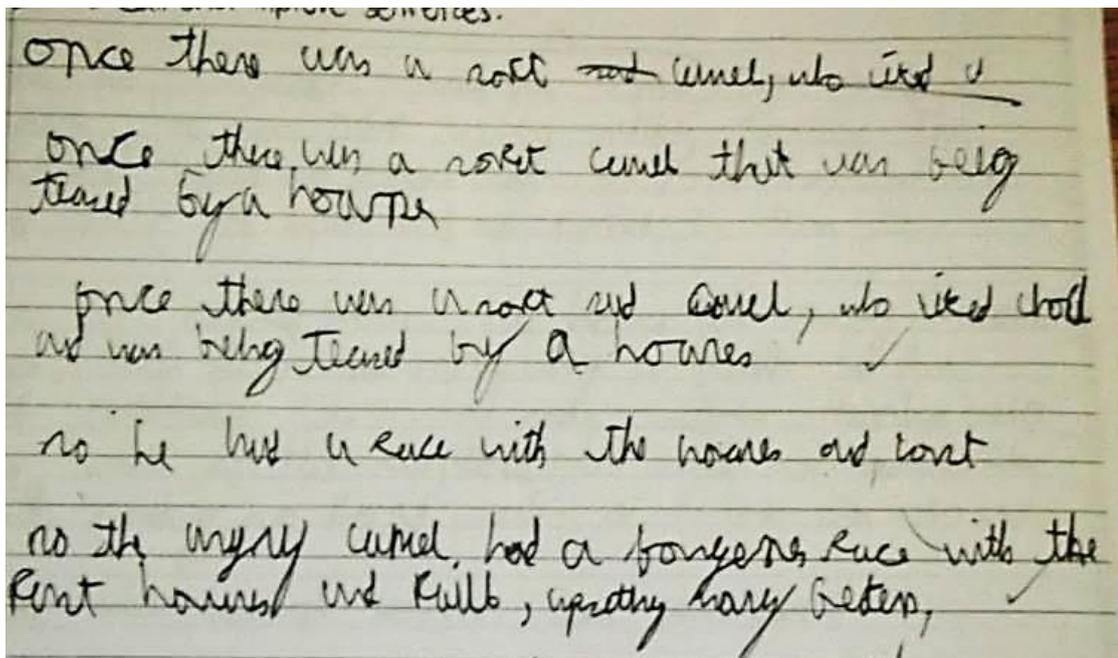
Image 18: Peter's free handwriting
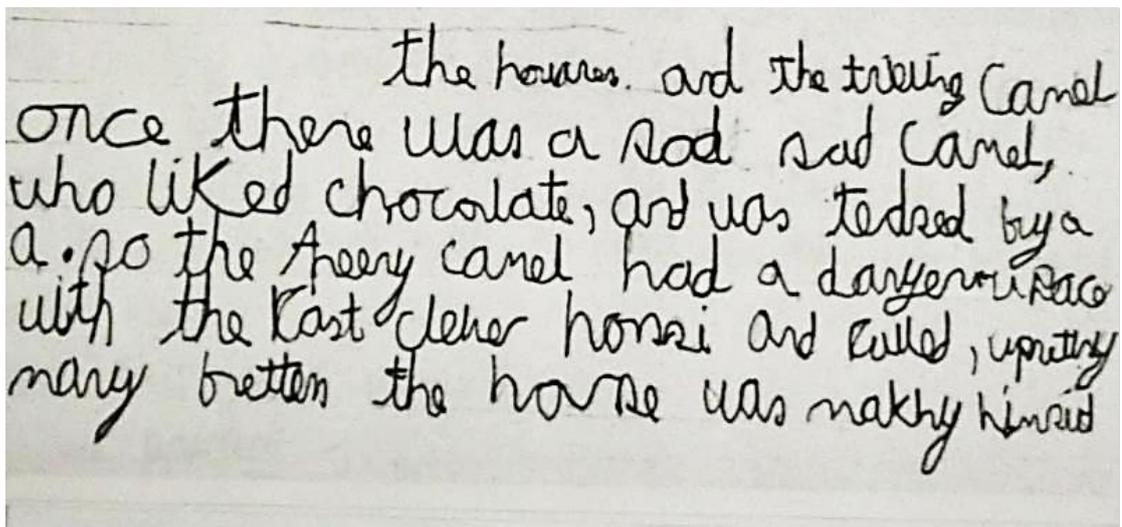
Image 19: Peter's handwriting with extra care

Peter's poor handwriting has the prospect of having negative effects on his reading and comprehension skills (Image 18) and despite his efforts to improve it, the outcomes seem not to be satisfactory as only some of his sentences can be understood (Image 19). His poor punctuation, namely, with full stops and

spelling mistakes, can have the effect of worsening the text's understanding. Overall, Peter's writing is not representative of his literacy abilities and for this reason assistive technology can be an effective tool for its presentation and the expression of his ideas. Peter, being aware of his difficulties, suggested that 'I love writing, I am just not really good at all', while for spellings he mentioned that 'I don't really like spellings, it's hard'.

On the other hand, Amanda, despite her minor spelling and punctuation difficulties, was considered as 'probably the best speller and writer, the best in literacy in her class and because she is so good at strategies her spelling is really pretty good' (specialist teacher). In particular, the specialist teacher suggested that Amanda is 'very bright so her verbal and non-verbal reasoning is 98% up […] actually hardly has any difficulties now'. Image 20 shows an extract from Amanda's writing:
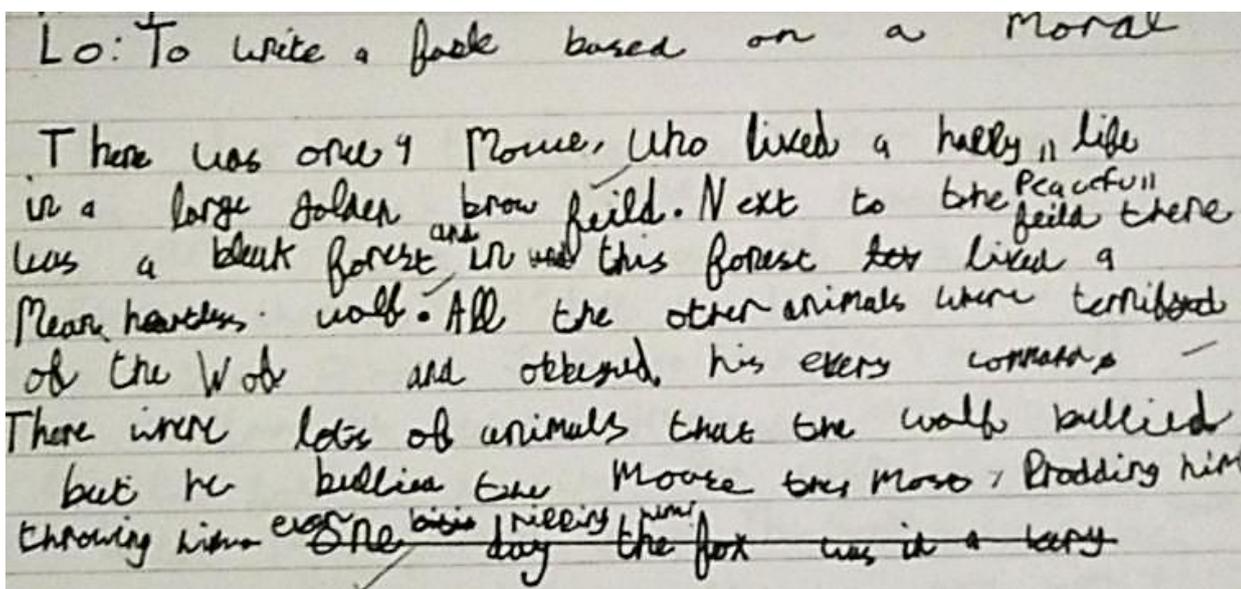
Image 20: Amanda's writing

Amanda's writing is characterized by correct grammar and syntax, and she uses advanced vocabulary. She makes few spelling mistakes, namely 'obbeyed' instead of 'obeyed' and she tends to use limited punctuation, just full-stops. Her sentences follow a logical order, although her handwriting does not make it easy for the reader. Nevertheless, her writing does reflect the progress she has made in literacy despite her diagnosis with 'severe' dyslexia.

The four pupils' reading comprehension skills were mixed. For example, Amanda was 'the top of guided readers' in her class and 'her actual reading, her actual decoding is fantastic, her understanding […] is just amazing, she can relate what she reads to other things that she's read […] her reading comprehension is phenomenal', as her teacher emphasized. Similarly, Peter was considered as an 'able' and 'fluent reader' due to his good comprehension skills and his ability to understand the context of his reading books (Peter's reading teacher). As a result, Peter engaged with complex reading questions and challenging reading activities due to 'his flexibility with the language' (Peter's reading teacher). The cases of Amanda and Peter illustrate that despite their diagnosis with dyslexia they were able to comprehend and reply to complex reading questions using particular reading strategies and in the process challenge relevant stereotypes of their cognitive abilities.

Gregory also had good comprehension skills as he understood 'what he reads really well' (Gregory's teacher). Furthermore, he used 'a lot of sort of things like context clues to help him' during his engagement with reading materials (specialist teacher), which demonstrate the importance of adequate teaching approaches in the development of his reading skills. This also has the potentiality to enhance children's self-esteem due to their successes in comprehension

tasks, raising significantly their motivation and engagement with difficult activities (Chapman and Tunmer, 2003; Schunk, 2003). In contrast, Betty was categorised in the group of 'less able readers' because of her difficulty with answering complex comprehension questions and especially 'to structure answers if it is a written task, if it is verbal she's much better' (Betty's reading teacher). Nevertheless, Betty's ability to answer verbally complex comprehension questions indicates her potential to understand her reading materials; however, the great emphasis on written form for her answers categorises her as a dyslexic learner and limits her opportunities to show her actual abilities. If writing was not an overvalued assessment form, Betty and her peers would not be labelled with dyslexia.

Based on their difficulties in writing, Amanda, Gregory and Peter expressed their preference for reading rather than writing. In particular, Peter mentioned that 'I enjoy reading a lot more because it is easy for me and also I like reading stories a lot'. Amanda made the point that 'definitely I like to read more than to write' because 'you have your own story, you go into this magical world of yourself'. Gregory expressed the same opinion too: 'I prefer to read […] I think for me reading it's like this magical kind of place where and when you're reading. It's just all the sounds kind of blocked down and just think about it'. Although dyslexia is considered as a reading deficit with implications for writing (Berninger et al., 2008), pupils' daily practice through reading books can enable them to overcome their difficulties and eventually to enjoy reading. This is evidenced in the three pupils' enjoyment of reading books despite their difficulties in that area.

Betty, though, suggested that she prefers to write because:

writing is not as difficult for me because in reading I usually say "oh! What this word says?" or "can you help me on this word because I really don't understand it?", writing is just I have to ask teacher for spelling or something quick because I usually have a mini word because I don't use long words as usual (Betty)

Betty's preference was also commented on by her specialist teacher: 'she is one of those few people who finds writing easier than reading, spelling easier than reading' but because 'she is really well-motivated […] she doesn't mind making mistakes' and she tried hard to make improvements. Her marked difficulties in actual reading and comprehension, which involve word recognition, good vocabulary, reading accuracy and fluency for textual understanding (Chapman and Tunmer, 2003; Hudson et al., 2008; Schunk, 2003) can explain her choice. Additionally, pupils' major difficulties in reading may affect their self-confidence because they are seen to constantly ask for support. Betty's engagement, though, with writing made her feel successful in meeting her learning targets and motivated her to improve her performance.

The four pupils' strategies in reading difficult words involved dividing the words into syllables, reading the word letter by letter and using a coloured overlay that isolates text's one line or a paragraph each time. Coloured overlays can benefit children's reading skills, comprehension and accuracy by controlling their eye movements (Noble et al., 2004). In this way, pupils focus on the line that they want to read, avoiding confusion with the next lines. For memorizing their spellings, the four children visualized the words by writing them on a big piece of paper with a coloured marker, to repeat and revise the relevant phonic rule, and to read aloud the letters separately. With these strategies, Amanda, Gregory,

Peter and slightly less so with Betty are able to recognize their own mistakes in spelling by 'looking at the word and they recognize what is wrong and then they might have a technique where they write it, look, cross it out, write it again and then they wait to get to the image and it looks right' (specialist teacher), illustrating a visual way of learning to spell.

Pupils' diagnostic assessment and self-esteem

Specific learning difficulties can be identified by pupils' 'unexpected inability to learn' in particular areas of literacy and mathematics, although they are considered 'capable socially and academically and in general intelligence' (the manager of the dyslexic centre). Therefore, even though children receive 'appropriate teaching' they do not make 'the progress they would expect' and this influences 'how they view themselves as normal', their self-confidence and behaviour (the manager of the dyslexic centre). According to the official policy, children who experience significant difficulties in their learning compared to their peers can receive special provision in respect of their individual learning needs through their diagnosis (Department for Education and Skills, 2001a). Hence, potential delays in diagnostic assessments prevent children's additional support in their schools setting up barriers to their learning progress. As the manager of the dyslexic centre suggested in relation to diagnosis: 'it's sad really […] all children should get the support they need and don't need a label, a diagnosis to get that, but that's the common situation so it's really important'.

Difficult access, though, to relevant services can prevent pupils' equal opportunities in support and learning. The manager of the dyslexic centre emphasized that 'it's really difficult to find access to an educational psychologist specialist for dyslexia, if you have enough money you can get one'. Additionally, in some boroughs different attitudes towards dyslexia are in force, namely 'in X area there is a Local Educational Authority that it doesn't really recognize dyslexia apart from when it is "severe"', creating problems for providing support to children (the manager of the dyslexic centre). In accord with the legislation, pupils' assessment for special educational needs and their special provision are allocated to local educational authorities (Lindsay et al., 2005). However, it seems that different approaches in specific learning difficulties due to a lack of their official and precise definition can cause problems for pupils' inclusion and support.

At the Sunlit River School, the dyslexic centre undertook diagnostic assessments for its pupils following two stages. The first stage involved discussions with teachers in terms of 'their long term observation of a child and his/her progress' in classroom settings, including the child's work compared to his/her expected work 'at a given age', and teachers' perspectives about possible reasons for the child's limited progress. In parallel with this process, a questionnaire was delivered to the child's family concerning the existence of 'at risk indicators or other barriers to learning' (the manager of the dyslexic centre). The second stage referred to all Year 2 pupils' pre-screening assessments every November apart from the summer-born pupils who were assessed later in the year because 'in the past all the summer-born children came out as dyslexics' due to insufficient time for their teaching.

Based on the results of the pre-screening assessments the children who score 'around 90 or less on a standardized score' continue with 'a dyslexia screening'. Then, if the outcomes of dyslexia screening show a 'mild risk', classroom support in collaboration with the teacher is provided for those children, while if the children are assessed as 'moderately or severely at risk', an intervention programme is offered to them for 12 to 15 weeks before their re-screening. After the completion of that programme, 'the children who are moderately dyslexics or severely at risk of dyslexia either they made progress and are called up, so they aren't dyslexic, they just had gaps in their knowledge or they needed extra work' (the manager of the dyslexic centre). Diagnostic assessment, though, is conducted at the beginning of Year 3 for the children who did not show the expected progress despite the 'appropriate' intervention programme. The school's early assessments and intervention programmes before the official diagnostic assessment underlines the importance of adequate teaching approaches in pupils' learning. Precise teaching of the areas of children's weaknesses and classroom support constitute the main special provision which aims to improve their learning skills and eventually their achievements.

The diagnostic assessment included a standard battery of various tests on 'general intelligence, number and reasoning, vocabulary, verbal analogies, making patterns and building blocks […] single word reading test, spelling test, Yarc reading test […] working memory', phonological awareness, verbal processing, comprehension standardized tests and mathematics (the manager of the dyslexic centre). Additionally, criteria-based testing was involved concerning 'high frequency words, free writing analysis […] spelling in free writing, analysis of handwriting and their posture of their hand […] fluency of handwriting' evaluating children's knowledge and skills in terms of 'where they are in relation to their

peers and National Curriculum levels' (the manager of the dyslexic centre). Furthermore, interviews with children about their interests and with their parents concerning 'the background and […] the parents' perception on where their child is, what concerns the parent has' are conducted in the context of pupils' diagnosis. The final stage is the analysis of all the information collected from the tests, children's and parents' perspectives, and the production of 'a written report which would say whether or not the child is dyslexic and the degree of severity of the dyslexia' (the manager of the dyslexic centre). This diagnostic psycho-educational assessment, though, tends to measure children's intelligence and cognitive abilities based on standard chronological ages indicating whether children's chronological age coincides with their mental age (Prior, 1996; Reid, 2005). However, pupils' performances compared to standardized criteria and peers' achievements are in tension with the concept of individual learning profiles.

The assessment results were announced to parents by the manager of the dyslexic centre, namely 'Congratulations! Your child is dyslexic and this means the brain is slightly differently structured and functioned', emphasising that 'it's nobody's fault that the child is dyslexic but dyslexia is a problem and we will attack that problem and have the child overcome it by teaching' (the manager of the dyslexic centre). Perceiving dyslexia, though, as a problem and explaining that pupils' brains are different from their peers reflects the explanations of specific learning difficulties by the medical model. Some of these biological explanations about the causes of dyslexia are emergent from hypotheses about genetic influence; or damage in the left hemisphere of the brain which is associated with language; or abnormalities in the brain's development during the maturation process (Grant and French, 2010; Prior, 1996; Reid, 2005; Snowling,

2000). Additionally, the three main neuropsychological theories highlight visuospatial problems; or auditory memory problems that result in limited memory and perception of any information that children hear; or problems with working memory that is related to the short-term storage of information. Nevertheless, an exaggerated emphasis on biological factors of dyslexia without consideration being given to pedagogical approaches and the socio-economic background of educational requirements in combination with the use of the word 'problem' targets children as being only responsible for their low achievements.

To the children, the manager of the dyslexic centre tended to explain their diagnosis in the following way: 'I generally say that the problem is the problem rather than it's theirs or their parents or their school or their teachers', encouraging them by saying that '"we can't do it yet, but you will be able to do it" to free them from that kind of trapping feeling'. Shifting the focus from pupils and their families to dyslexia viewed as a problematic situation, children's attributions of their learning abilities to lack of abilities might be avoided, which can influence in a significant way their self-esteem and learning attitude. However, this does not mean that pupils stop considering themselves as having a 'problem' compared to their peers due to the highly competitive nature of current schooling programmes.

Pupils' attitudes towards diagnosis involves either its use as an excuse to avoid reading and writing or as an explanation of why they cannot do things. However, it is children's entitlement as to how they intend to use their diagnosis, either to show it off or hide it, as 'having dyslexia is not a barrier to being brilliant' (the manager of the dyslexic centre). This depends on their motivation and self-efficacy which can determine how they view themselves as learners (Chapman

and Tunmer, 2003; Schunk and Zimmerman, 2006). Some pupils hide their diagnosis from their classmates in order to prevent a possible stigmatization and others use it to escape from difficult tasks because they believe that they are unable to accomplish them. Characteristically, as the manager of the dyslexic centre explained: 'some are very risk-phobic because they believe they are going to fail, that's a bit challenging, I think peer acceptance is very important for education and for success in education'.

Peers' social relationships tend to influence pupils' self-esteem and eventually learning. The encouragement of peer and collaborative learning within classrooms has the prospect of enabling children's empathy to their classmates' learning difficulties influencing positively the latter's motivation and self-confidence (Gipps, 2012). Additionally, a misconception about the association of specific learning difficulties with pupils' talents can cause further problems to children's self-image. Characteristically, 'despite popular opinion, not all dyslexics have an outstanding talent, we'll tend to hear about the outstanding ones and it's great for the dyslexic community to know people being successful, not all of students are being blessed with an outstanding talent' (the manager of the dyslexic centre). This reflects society's efforts to counterbalance pupils' learning weaknesses with their talents so as to minimise their potential feelings of inferiority and stigmatisation addressed to children who present marked academic difficulties, especially in literacy and numeracy. Despite these attempts, the standardized developmental levels remain and determine pupils' classifications based on their literacy skills.

Children's learning outcomes and academic performance appear to influence their self-perception as learners, especially when pupils with learning difficulties

have to put in more effort to achieve the required and expected levels and their progress tends to be assessed as slow in comparison to their classmates (Chapman and Tunmer, 2003; Schunk, 2003). For instance, the specialist teacher highlighted that for the four pupils: 'the biggest factor is emotional, feeling upset or feeling stupid and in fact all of them try really hard at school and so if an adult suggests that they're just being lazy it's terrible thing for them'. Feelings of anxiety and stress are often experienced by children who experience difficulties in their learning, perceiving themselves as poor learners unable to accomplish their tasks.

In particular, Peter's attempts to improve his weaknesses did not have the expected outcomes. His reading teacher explained that his low self-esteem derives from 'the fact that his handwriting isn't brilliant and he works for so long to make it nice and still can't do it and it's important for children to see their progress'. Consequently, Peter tended to become frustrated and anxious because 'the way his work looks it doesn't say "here is a really bright boy who can"' (Peter's reading teacher). For this reason, although Peter was highly motivated to learn, his concerns about 'what other people would think about him wanting to do his best' results in 'giving up because it's hard' for him due to 'his default position' (specialist teacher). Accordingly, Peter 'is very cautious, he doesn't like to try new things and he would rather stick with something he feels really safe so he could have read much harder texts than he chose to' (specialist teacher). This learning attitude usually characterises pupils who experience learning difficulties and have low self-confidence because they tend to consider themselves as unable to accomplish demanding tasks (Chapman and Tunmer, 2003).

Additionally, Peter's worries related to 'not understanding something, to not being able to express himself or not being able to understand what the teacher's telling him to do or not being able to do what he's been asking to do and see everybody else is doing it' caused him panic attacks preventing communication with him (radio operator). Similarly, Betty had had numerous emotional outbursts in the past, namely feeling upset and crying in the classroom almost daily for the same reasons as Peter (reading teacher, specialist teacher). Betty was not 'very good at asking for help, she tends to sit quietly and look as she knows what's going on but she doesn't', because 'in a whole class setting, if Betty feels that she might look stupid in front of the other children then she panics and then she cannot do anything' (specialist teacher). Embarrassment about her learning difficulties seems to result in her emotional breakdowns as her classmates' opinion about her performance tends to be very influential. Indeed, pupils tend to construct their self-image as learners through comparing themselves with their peers (Gipps, 2012; Schunk, 2003). Therefore, when children experience learning difficulties they are likely to feel inferior to their classmates and avoid seeking peer support within competitive learning environments. However, since Betty started to use self-control strategies she has limited her breakdowns and improved significantly her concentration on tasks and her emotional state (specialist teacher).

Amanda also experienced panic attacks, because she was 'very governed by her emotions […] so she gets into real panic […] she always is in situations where she feels that she has been bullied or picked on or being isolated partly because of her dyslexia' (radio operator). Accordingly, although Amanda's self-confidence was enhanced because she was considered as one of the best readers at the school which made her not perceive dyslexia as a barrier (Amanda's parent), the specialist teacher emphasized that 'she is still vulnerable on sort of self-esteem

and confidence issues […]. I don't need to work with her anymore in terms of the literacy but she needs the emotional support'. Amanda is a characteristic example of a pupil who despite her diagnosis with severe dyslexia, her determination and motivation to succeed did not allow her learning difficulties to impede her progress. Similarly, Gregory developed his self-confidence since he attended the Sunlit River School and received different support for his difficulties in learning. In particular, his teacher mentioned that 'he is quite a confident person generally, I don't think his dyslexia holds him back as a person, he is very positive about himself' which illustrates that understanding and a supportive attitude towards pupils' learning difficulties can change their self-perception and motivation (Schunk, 2003).

Special Provision

Intervention programmes were provided for the four pupils by the specialist teacher for dyslexia at the dyslexic centre, and they had been designed according to their individual learning characteristics and the National Curriculum requirements (specialist teacher). Each pupil attended two 45-minutes one-to-one sessions per week with a gap day between. This arrangement followed the school's policy of not isolating children from their main classrooms for too long, to encourage their inclusion. As the head teacher emphasised: 'I don't believe in an inclusive school being exclusive, taking the children out and teaching them separately'. Gregory's parents also mentioned that at his previous school 'Gregory felt very separate, he was actually out of his classroom every day for

extra help with reading and he was excluded from things he enjoyed'. As a result, Gregory received special support out of his classroom at 'fun times' and 'he was also being asked to remain when they had playtime or when they were doing sports to finish his work' (Gregory's parent). Intervention programmes seemed to cause him problems in socialisation when they isolated him for many hours.

The one-to-one sessions were held in the specialist teacher's classroom which ensured a silent learning environment. They followed a specific routine for the four children including common and individualised activities. Starting from a checklist with the session's tasks, the children were informed about their learning targets. Then, relaxation strategies and self-control techniques, namely breathing exercises were discussed and practised with the specialist teacher. Their purpose was to facilitate pupils' control of their feelings of anxiety, stress or panic in order for them to concentrate on the lesson and on the activities (specialist teacher). This approach seems to have been taken in the belief that emotional preparation facilitates and enhances children's learning, significantly improving the function of their working memory (specialist teacher). A spelling test was conducted and this related to the words that they had been given for their homework. Specifically, their homework for the intervention programme, apart from reading a non-fiction book of their choice, included five words for spelling every week from the list of the top 300 high frequency words involving their frequency as misspelled words in their literacy activities in their classrooms (the specialist teacher). Only Amanda chose to have ten spellings every week because she found spelling relatively easy.

The four pupils were encouraged to practise their spellings at home 'at least two nights' with one day gap and to 'double check' the words when they felt that they have forgotten them (specialist teacher). Hence, as the four learners mentioned, they were copying the words four times and they were writing sentences with them. Repetition of words for spelling purposes and writing sentences with them for comprehension of their meaning is a common strategy for practicing spelling (Hammond, 2004).

The children during the dictation of the spellings used a board, or a paper to write them on, or technology, namely an IPad, where they had already voice-recorded themselves reading their weekly spellings and they then typed them in. Pupils' metacognition was also encouraged during these spelling tests. In particular, the specialist teacher asked the four pupils how they remembered the correct spelling and they explained to her their strategies or the phonic rules. Furthermore, there was an immediate correction of their mistakes, as the process was paused to allow the learners to develop strategies for the memorization of the misspelled words. Their wrong spellings were also set as homework for extra practice for the following week. Some of the four children's spelling mistakes during dictation are presented in the following Tables 4, 5, 6, and 7:

Words		Peter's Spellings
thirteen	→	therteen
does	→	dose
should	→	sould
eight	→	eigt
Tuesday	→	tuesaday
necessary	→	nessary

Table 4: Peter's spelling mistakes

Words		Amanda's Spellings
description	→	discription
carnivorous	→	carnivorouse
discussed	→	discuse
fault	→	falt

Table 5: Amanda's spelling mistakes

Words		Betty's Spellings
I've	→	I'ev
watch	→	wach/wanch
kitchen	→	kichin
ketchup	→	kechup
stretch	→	strech

Table 6: Betty's spelling mistakes

Words		Gregory's Spellings
saw	→	shor
once	→	onse/ onch/ onus
before	→	bie
made	→	mab
first	→	ferst

Table 7: Gregory's spelling mistakes

Missing or adding letters or syllables seem to be common mistakes in the four children's spellings. For this reason, after dictation a precise teaching of phonic rules took place. Teaching spellings involved phonics-based approaches concerning correspondences of letter-sounds which can be generalized and applied in various words (Kohnen et al., 2010). Additionally, irregular words that do not follow the phonic rules were explicitly identified allowing the development of visualized methods for their memorization. Various activities and games on the computer enabled the practice and revision of the phonic rules, and the children's misspellings in those tasks were added to their homework.

Computers including multi-sensory programmes can allow pupils to use all their senses during learning, namely visual, auditory, kinaesthetic and tactile (Minton, 2002). In combination with the fact that computers repeat rules without judging and commenting on them, pupils in general feel comfortable with the technology. As the manager of the dyslexic centre commented, technology can be a useful tool for learning especially for reading and spelling because regardless of how many times the children ask the computer to repeat a phonic rule 'it always gives you a neutral answer […] you don't hear a tone of voice, a sigh, you don't hear

"we did this yesterday or five minutes or you read that in the paragraph above it"' which makes them feel comfortable.

Furthermore, the specialist teacher emphasized that computer games are 'really good because they're just one person against themselves so they know if they don't do it very well in a particular game they don't have the sense they're losing in relation to other children'. Consequently, children were motivated to build their 'self-esteem and independence', while the computer games limited distractions by keeping them 'focused on the screen and not thinking about other things' (the specialist teacher). Computers tend to contribute to the improvement of children's concentration and allow them to be more active and independent during these activities (Minton, 2002). In this way, autonomous learning can be encouraged, as the teacher's constant presence is not required during those activities (Hardaker et al., 2010; Minton, 2002). Children have the opportunity to choose to work independently on literacy and reading activities enhancing their self-regulated learning.

Assistive technology, though, has limitations as it requires children's fast typing skills for keeping notes or the voice text may not work properly in noisy classrooms because it cannot recognize the individual voice (the manager of the dyslexic centre, the specialist teacher). Additionally, a popular belief that spelling instruction is not an important teaching target during this computer era as children can use spell checkers for their spelling seems to be encouraged (Berninger et al., 2008). However, spell checkers are an effective tool enabling users to correct their typographic mistakes only when the users recognize the correct spelling of the word; if the spelling checkers cannot identify the word this does not help spellers to generate the right spellings. Interestingly, an electronic

netbook, without a spell checker, was provided to Peter by the dyslexic centre due to his handwriting difficulties so as to use it within his classroom for working on his written literacy topics. As 'the typing is still a much more cautious and slightly slower activity than handwriting is', Peter had 'a little bit more time to think about what he is doing' limiting his anxiety about his handwriting, while his teachers are able to check his spelling mistakes and set them as his homework for further practice (specialist teacher).

Coordination exercises for few minutes either for their eyes and fingers, or for their hands and legs were also included in those sessions. Their purposes were the development of their coordination skills and to allow a small break between their tasks for relaxation (specialist teacher). The intervention sessions also involved learning sequences, namely months and the alphabet in the correct order, by using strategies including repetition, visualization and mnemonic techniques, like rhymes, made by the children for their efficient memorization. Furthermore, the planning of writing with mind-mapping by using different colour pencils for different ideas or keeping notes with bullet-points were included in the pupils' tasks with the aim of developing their organisational skills. Reading and the development of their comprehension skills were also practised in these sessions. For example, the children practised their actual reading with their specialist teacher with follow-up questions and discussion concerning the meaning of words and the plot of the story. At the end of the intervention sessions, the four children checked their activities in the checklist and they discussed with the specialist teacher how they experienced that session.

The children's metacognition and self-assessment were also encouraged in the intervention programme, because if the pupils were not 'able' to apply their

learning strategies in other contexts then 'they are not independent', as the specialist teacher highlighted. Amanda, Betty and Gregory did not experience difficulties in those areas, but Peter had self-assessment difficulties. His reading teacher mentioned that 'Peter processes very quickly but at the end of it the challenges are to get him back in to check what he's done', while his literacy teacher suggested that he is not 'very good at evaluating his own work and reading his work back to himself […] he thinks it's not easy and unless you point it out for him, I don't think he can pick it out by himself'. Development of metacognitive skills enable people to be agents of their own thinking by monitoring and regulating their own thinking and directing their attitude towards a particular set of goals (Hacker, 1998a; Kluwe, 1987). However, metacognition needs pupils' awareness of their ongoing thinking on a task to be developed rather than relying heavily on their reflection after the task's completion (Larkin, 2010). In other words, children need to monitor consciously their thinking simultaneously with practicing their cognitive skills so as to develop their metacognitive capacities, which may become automatic through continuous practicing and conscious modelling of metacognitive attitudes towards learning.

The issue of in-service teacher training was raised by the head teacher to enhance these intervention programmes. Characteristically, he mentioned that 'in lot of schools the provision for the children with a range of special educational needs became the function of the teaching assistant who is often the least qualified person to help those children', while there is a tendency 'to sit all children with a range of needs together and attach a teaching assistant to them'. Indeed, research by Galton and MacBeath (2008) found that some schools allocated the whole responsibility for learning of children with special educational needs to teaching assistants eliminating the need for teachers' interaction and

time with them. Consequently, teaching assistants through their support to the children tend to 'deskill them and let them being too dependent' on them (head teacher). For this reason, the school in collaboration with the dyslexic centre provided internal teacher training to its teachers and teaching assistants so as to intervene only 'when they have to and assist the children to become independent learners by the time they get to Year 6' (head teacher).

This also can have implications for spatial arrangements within classrooms, as the physical learning environment is viewed as a crucial factor for the development of pupils' learning skills and attitudes.

Literacy: Classroom organisation

The school arranged pupils in mixed-ability classes including pupils at all levels and set 'groups sometimes within the class according to task but in terms of performance and classroom management for the teaching staff' (head teacher). Vygotsky (1986, 1987) suggests that mixed-ability classes can benefit children's learning and enable the scaffolding process through peer mediation. However, in practice schools and teachers tend to choose the arrangement of ability-based grouping because it allows them to retain control over pupils within the classroom (Comber and Wall, 2001; Galton, 2007), limiting in this way children's opportunities to interact and collaborate with their classmates in mixed-ability activities.

In literacy, the four pupils were placed in ability-based groups based on their standardized levels, which were assessed once per term in respect of the

National Curriculum standards. Gregory's literacy classroom accommodated 20 pupils, Amanda's and Betty's had 22 pupils and Peter's included 18 pupils. Figures 18, 19 and 20 illustrate the pupils' spatial arrangements in literacy:
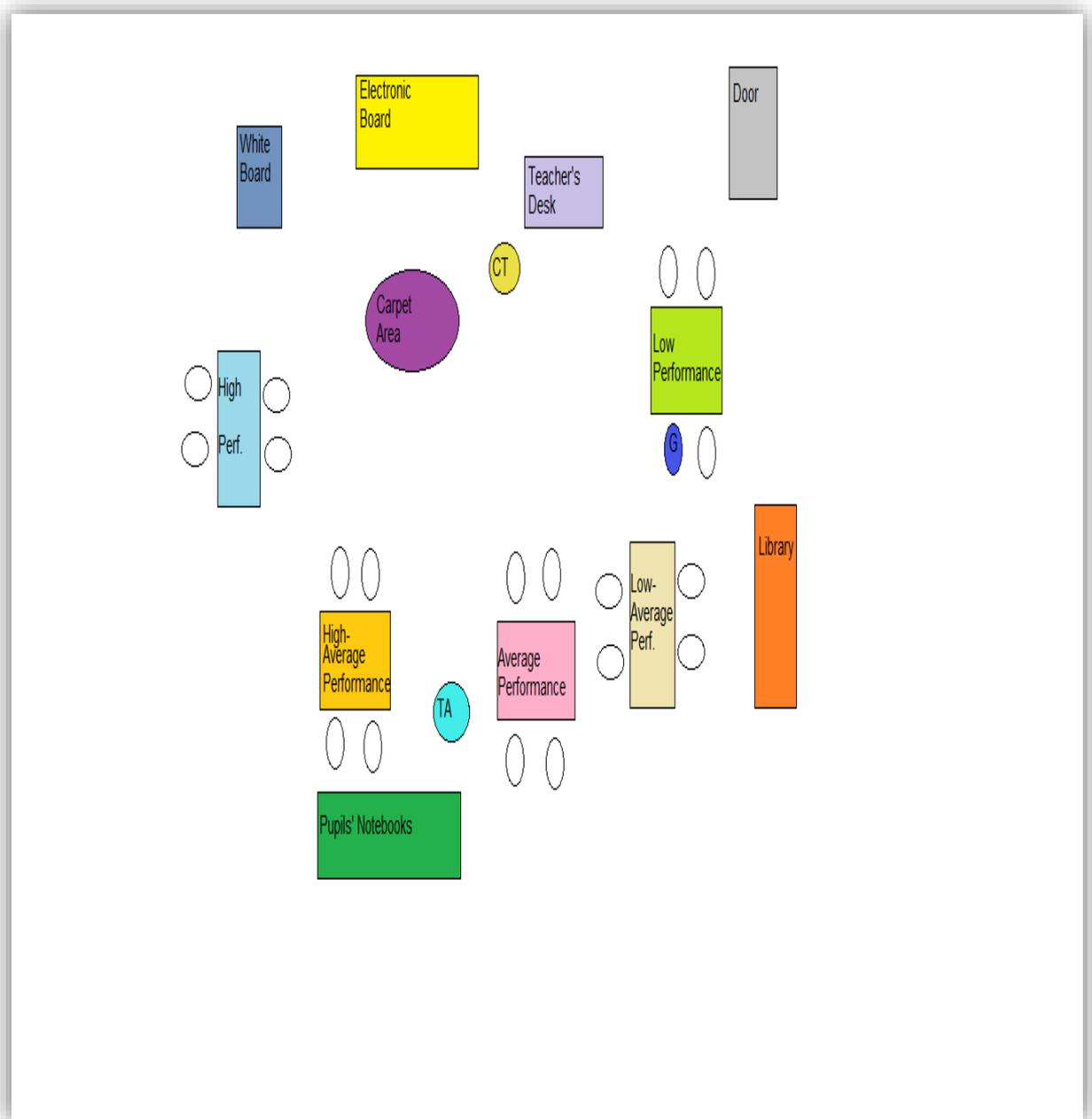
Figure 18: Gregory's literacy classroom, G is Gregory, CT is classroom teacher and TA is teaching assistant
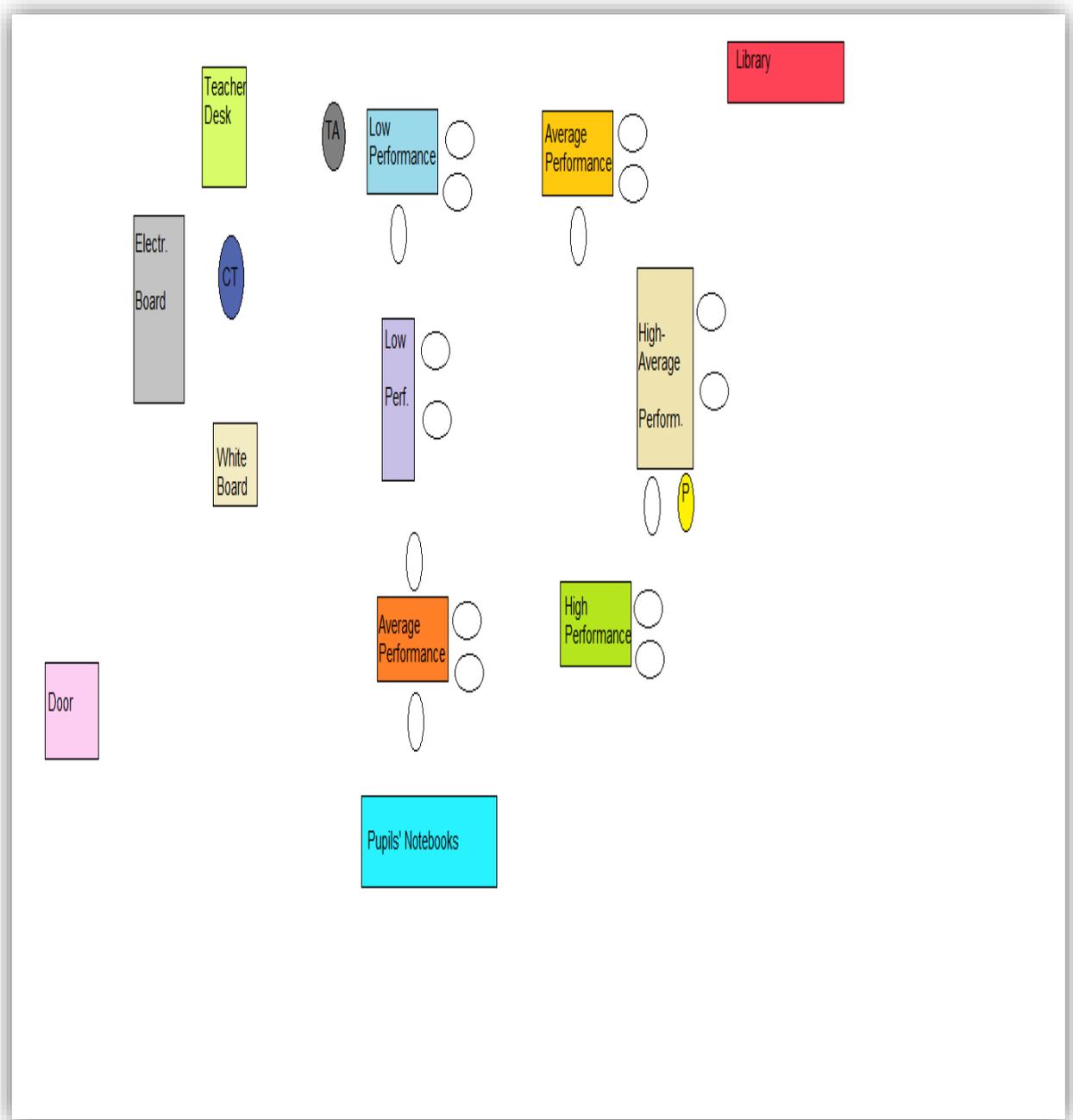
Figure 19: Peter's literacy classroom, P is Peter, CT is classroom teacher and TA is teaching assistant
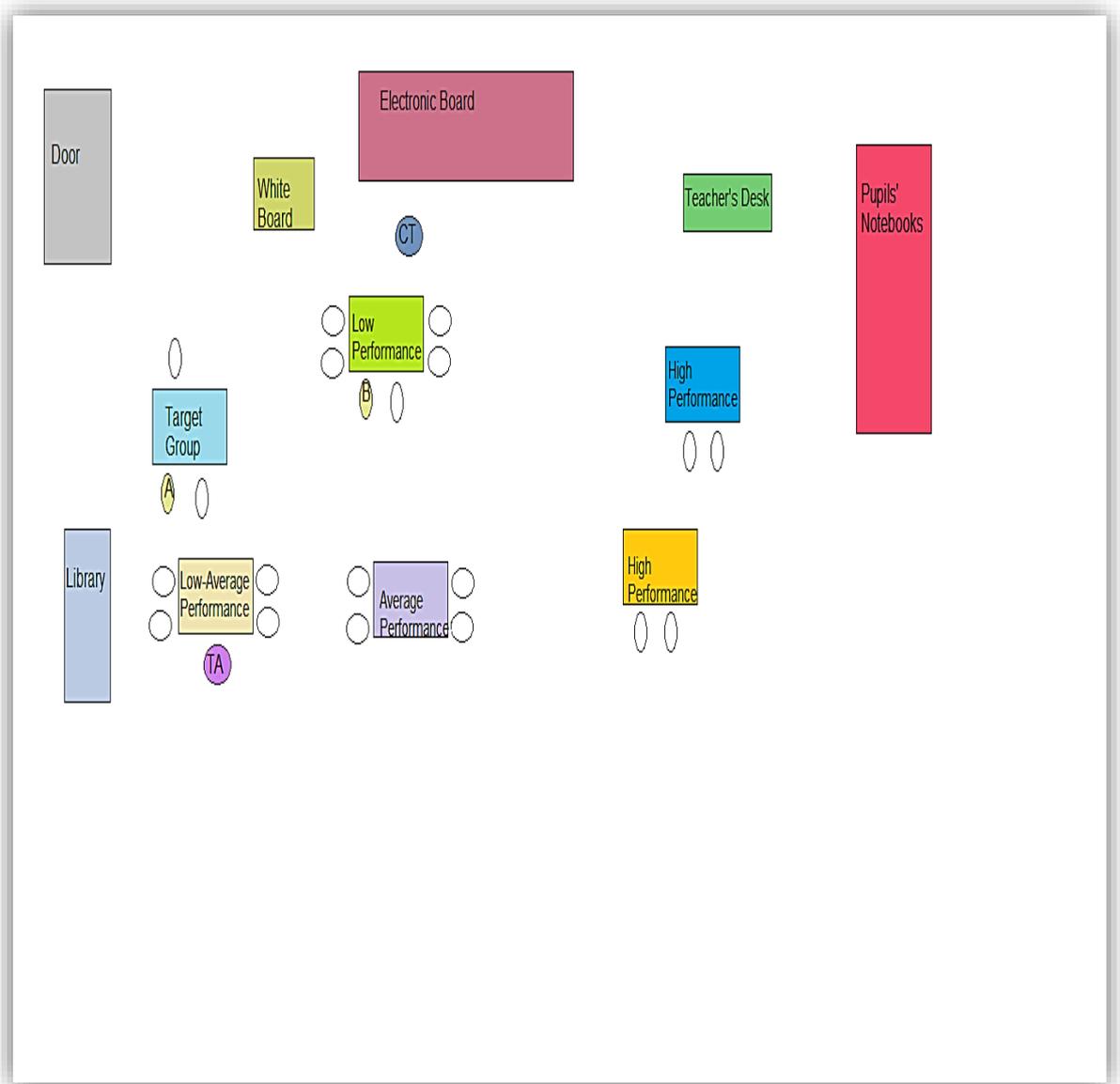
Figure 20: Amanda's and Betty's literacy classroom, A is Amanda, B is Betty, CT is classroom teacher and TA is teaching assistant

Gregory (Figure 18) belonged to the below average group in literacy which was 'two levels below where he needs to be' because his spellings, punctuation and his concentration difficulties did not allow him to produce 'as much work that it is expected of him at this stage' (Gregory's teacher). Only for drama activities did Gregory join mixed-ability groups. Additionally, Gregory's teacher mentioned that ability-based grouping, as it is presented above, enabled her to differentiate her

teaching: 'the children on the same table have the same work, so they can help each other and also I work with some groups so it's easier for me to support the children'. This setting, though, facilitates differentiation in terms of resources and teaching support but it does not allow pupils' interaction with their peers who have already achieved the expected learning targets and has the potentiality to enhance their classmates' learning process (Vygotsky, 1987).

Peter's punctuation kept him at a level below, 'which is a shame because he knows how to write, his language is fantastic, his ideas are great but it's just the sentence structure that is holding him back and I am not sure if that is because the difficulty he has or because he just can't do it', as his literacy teacher suggested. Peter (Figure 19) belonged in a group with three other pupils who were working mainly without the teacher's support. His group-members, who were considered as the 'highest ability writers in the class' and highly focused on the tasks, were able to share with Peter good ideas and assist him with his concentration (Peter's literacy teacher). In this way, 'they help each other' and they work 'well' together (Peter's literacy teacher). This arrangement facilitated peer learning through collaboration and modelling enabling them to develop further their skills (Wood and Wood, 1996), as it was observed during Peter's literacy sessions.

Amanda's teacher mentioned that at the beginning Amanda's level was low, although she was 'better than that' due to her good vocabulary and ideas and the improvement of her complex sentences and punctuation. For this reason, Amanda (Figure 20) belonged in the teacher's 'target group' which allowed her to make further progress. Amanda sat at a table with the other two pupils working independently on her tasks in terms of support by her teacher or teaching

assistant. In contrast, Betty's group (see Figure 20) was considered as an underachieving group which 'always needs a bit of support' through differentiation of teaching and materials 'so they've got different worksheets from the others, because Betty doesn't work as quickly as the others, she can't get as much done as the others, so it's good to do something that she is able to succeed with', as her literacy teacher explained. However, this kind of seating arrangement tends to target specific groups of pupils by highlighting their literacy weaknesses resulting in their low self-esteem, their constant need for teacher's support and their limited autonomy and independence in learning (Corbett and Norwich, 2005; Pollock et al., 2004; Reid and Came, 2009). For example, Betty preferred to work with 'a classmate next to me or a teacher because sometimes I have a good idea but I don't know if it fits to my stories so then I would ask a teacher, but the teacher helps someone else so if there is someone next to me it would be better'.

Peter expressed the same opinion: 'it depends if I like the classmate or not, if it is a friend then yes, if it's someone who is not nice to me then no, I would like a teacher but I prefer a friend for classmate'. Gregory being aware of his difficulties in spelling preferred to work in a pair: 'I normally prefer one of my friends sitting next to me […] in spellings because I am not good at spellings'. The two boys' awareness of their strengths and weaknesses contributed to their preferred learning style as their friend's feedback on their writing is considered to be less judgmental than the teacher's or other classmates' feedback (West, 2002). This suggests that a common tendency of children's setting into ability-based groups can foster competition or lack of co-operation among them. For instance, low achievements of children with learning difficulties can be emphasized through this sort of seating arrangement causing them feelings of anxiety about their

attainment (Sideridis, 2007). Friends' collaboration, though, on problem-solving exercises can enable a more extensive, critical and supportive learning process (West, 2002). This can influence positively children's motivation and learning as friendship interactions can be more altruistic, positive, equitable and task-oriented.

Additionally, the four children expressed their preference to sit alone during literacy sessions or testing due to their concentration issues:

> Sometimes when I am reading books that I really like, I am just like "don't disturb me, don't disturb me, look at me I am concentrating here, I don't want you to disturb me, don't disturb me, don't disturb me" (Gregory)

> I really find it easy doing by myself *(=reading/writing)*, I do like having a friend next to me, but it's quite hard to concentrate, they start talking to you, so it's hard to think truly (Amanda)

> I would probably change the more annoying people keeping distracting me every five minutes by walking them out in the next group (Peter)

> I do prefer sitting alone because when I get people around me I get really nervous and I think that they are going to get better grade than me and sometimes I just get a bit nervous and I don't do enough like so I can do better if people won't be around me (Betty)

Considering the above, it is suggested that pupils' preferences can influence their learning progress, shaping their individual learning style and eventually their learning attitude (Hardaker et al., 2010). In particular, some children prefer to

work alone on demanding tasks, while others may seek feedback from their group. The achievement of pupils' independence in learning also depends on the pedagogical methods which are applied within classrooms apart from the spatial arrangements. The next section discusses the pedagogical and assessment approaches which were adopted within the four pupils' literacy sessions.

Literacy: Pedagogy and Assessment

Literacy topics were scheduled for an hour daily starting with the teaching of a new grammar focus which was linked to the previous weeks' foci (literacy teachers). Then, a topic which was presented either as a text or as an animation was discussed in the class and a planning session was realised, where a plan with the structure of the writing's topic was provided for the pupils, including which information they should use in each paragraph (literacy teachers). During the planning session, a role play took place which aimed to encourage pupils' empathy with the text's characters and their deeper understanding of them (literacy teachers). After this, the teachers modelled pupils' writing and the children started 'a big writing day' of their topic by using a variety of resources 'to help them', namely word bank, pictures, cards (Amanda's teacher). At the end of the week, the pupils edited and proofread their writing making the necessary improvements in vocabulary, syntax and grammar, for example, adding advanced vocabulary or writing complex sentences, checking as well 'some of the success criteria' (Amanda's teacher). Editing offered the opportunity for pupils to develop their self-assessment skills based on specific criteria and to enhance their

metacognitive thinking about identifying their weaknesses and how they can improve. In this way, pupils were also encouraged to undertake the responsibility and control of their learning by developing their metacognitive skills (Rose et al., 1996).

Planning was thought by teachers to be an important stage for all pupils' learning regardless of their learning challenges as it appeared to enable them to develop their organizational skills concerning their ideas and their presentation. However, apart from Betty who mentioned that 'the planning does help me a bit because I just usually look at the plan' and she can remember her ideas, and Gregory who said that it helped him 'a little bit', Amanda and Peter preferred to write without planning. In particular, Peter mentioned that he did not find planning helpful for organising his ideas and for his memory because he had his ideas 'concentrated in my head'. Amanda also expressed her opinion as followed: 'I find it a bit boring because I don't need to get to write my really big ideas […] sometimes I got a bit away from the planning and I put my own ideas from the planning'. This illustrates that both children did not experience significant difficulties in remembering their ideas whilst writing compared to Betty and Gregory.

Literacy activities, although they had as their principal purpose, pupils' writing of a topic weekly, included role-play which enhanced pupils' socialization. Furthermore, they involved animation clips or extracts from movies, which introduced topics through visualization allowing children to practise their listening skills as well. PowerPoint presentations were also used for grammar tasks. The main working styles in classrooms were individual, peer and whole-class discussions which usually were teacher-guided and they took the form of closed-question. The importance of peer learning through mixed-ability activities was

highlighted because pupils 'actually support each other and the more able children get the opportunity to explain their thinking to the least ones and that is a part of the learning process for them' by working in pairs or groups (head teacher). This reflects Vygotsky's theory about collaborative learning which tends to benefit children's learning through interaction and support by their peers who have already achieved the required knowledge enabling them to develop further their skills (Vygotsky, 1986, 1987; West, 2002). In this way, children have the opportunity to observe their classmates' learning processes in dealing with a task and as a result they can adopt these strategies or develop their own ones.

The four pupils' participation in literacy activities was usually limited in the whole-class discussions. Betty, Peter and Gregory were involved more in role play tasks, whereas Amanda found it difficult to collaborate with her classmates for role play sessions due to her personal issues, as her teacher suggested. Betty was observed to be the most quiet in the literacy sessions compared to the other three children and as her literacy teacher explained it was due to 'her low self-esteem and confidence […] she always thinks that she is going to say something wrong and even if she puts her hand up, she says it so quietly'. For this reason, her literacy teacher used to give her time to prepare her answer and this allowed her to participate.

Handwriting with connective letters was also a literacy activity for Gregory who was attending Year 4. However, Gregory emphasized the practical difficulties of writing with connective letters giving an example (see Image 21) with the word 'word' as he was wondering how he should write the letter 'd' after the letter 'r'.
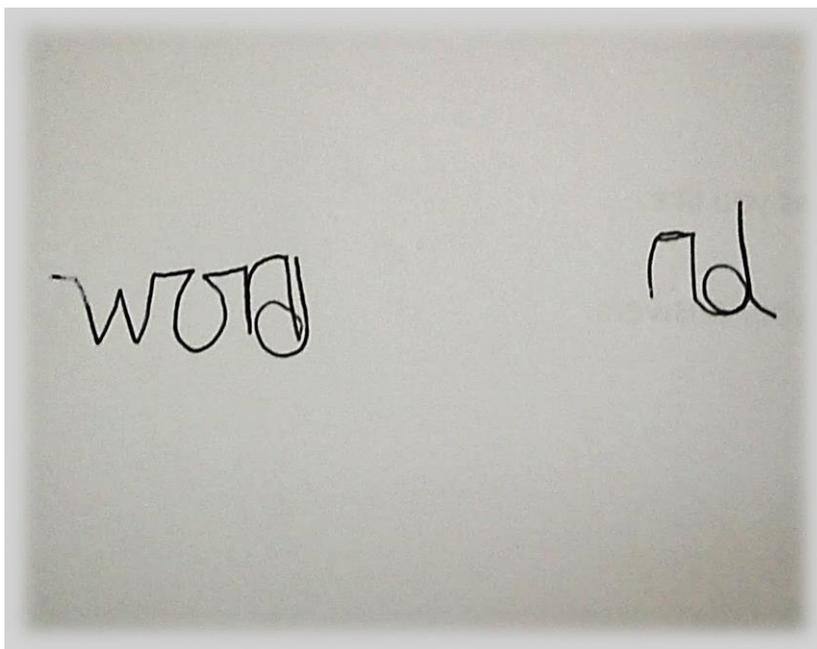
Image 21: Gregory's handwriting

His difficulties with handwriting influenced his spelling by confusing letters within words. For Gregory 'handwriting is not helpful at all, we do connective letters, it's really hard'. Furthermore, Betty mentioned that it was better for her to write the words letter by letter and not with joined-up letters. In contrast, Peter preferred print letters but he was also writing with connective letters 'because that's the way we write', while Amanda was using both.

Spelling was also one activity that was included in literacy for Gregory as he had a weekly spelling test involving a word list for dictation in his classroom. The other three pupils did not have spelling tests because as Amanda's teacher explained 'we used to do spelling part of the literacy hour' but then the school's policy was changed and 'we have to do it as a whole class not in a literacy hour'. The spelling schemes, though, were not provided to teachers at the time of the research, resulting in not doing spelling tests in the Year 5 classrooms during that period at all (Amanda's teacher).

The four pupils made different types of spelling mistakes and their experiences were different. Gregory mentioned that the words for dictation 'either are super hard or super easy, it's never in the middle for some reason'. He also described making mistakes in spelling test as 'sometimes I can just live with it, but sometimes I am just really angry […] normally when I get something wrong and I get it every time, I do it again and again'. Peter also felt 'upset' when he tried to spell in the spelling tests with the specialist teacher and he could not, while Betty felt 'really positive' with spelling tests, and when she did make mistakes she mentioned that 'I feel like I can try doing it again and try practicing that word but if I don't really get it at the time I would practise it and practise it […] I think I need to try a little bit harder to do the spellings'. Amanda said about making spelling mistakes that 'I don't feel bad, I think of being upset, I will be up to learn it, it doesn't really matter if I get wrong, mistakes, I know not to make that mistake again'. The two girls' perspectives about their spelling mistakes demonstrate their high motivation to learn and their good self-control in contrast to the two boys who felt anxious about the repetition of their mistakes.

The four children also expressed their feelings about tests:

> It's a bit scary when they're doing it for the levels […] they can make it quite easy and sometimes they can be really hard so […] it's quite neurotic if I find it quite hard […] I feel they help you, they help teachers know where you are and if you need help so I think they are ok (Amanda)

> I don't really like tests because some put pressure […] if Miss says "if you can do this for me" and just like that, I'll be fine with that, but if Miss shouts out like "you are doing a test now" and stuff like that it

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will be really frustrating because you know that you are doing a testing and you want to get a good grade (Betty)

I just like them because I'm doing them pretty well (Peter)

It's not I don't like tests it's just sometimes on that day I just don't feel like it (Gregory)

Gregory also preferred to do the spelling tests in an 'exciting' way and for teachers to check 'what you know with getting no marks'. This illustrates that his preference is in tension with the grade-driven mentality in education which derives from the overemphasis on external examinations (Hall and Sheehy, 2014).

The classroom teachers set literacy homework weekly. As the head teacher suggested homework was provided to pupils but it was not an 'enormous task' because 'if we do our job properly at school, children don't need to sit for three hours to do their homework rather than read widely'. Pupils were encouraged to read whole books for homework because 'one of the negative impacts of the literacy strategy has been children, because of the methodology of testing, are reading chunks of books rather than whole books and they read sections of books to illustrate points and not enjoying the book itself' (head teacher). Homework can be viewed as a pedagogical tool that enhances pupils' learning, systematically encouraging their self-directed learning (Jha, 2006).

Gregory had spellings to practise for the weekly spelling test (Gregory's teacher). Peter's homework included answering reading comprehension questions based on a given text, writing sentences, extension tasks of a story which required pupils' writing of their own continuation (Peter's literacy teacher). Amanda and

Betty had literacy homework every two weeks and involved a holiday diary, reading journals and relevant activities (Amanda's teacher). The purpose of this homework was to consolidate and reinforce pupils' learning that took place in the classroom and for this reason it was always linked to things that were taught during that week (Amanda's teacher).

Feedback for pupils' literacy activities was given verbally every day. It also had a written form and the teachers commented on something that they liked in pupils' writing in accordance with the learning objectives and success criteria, namely 'well done! You've achieved this part of the learning objective or the whole learning objective' (Peter's literacy teacher). Then, teachers gave 'next steps' to pupils in the form of questions for the further improvement of their writing, such as 'can you read through your work and add some conjunctions?' instead of correcting by themselves the pupils' mistakes (Amanda's teacher). This practice aimed to encourage children to develop further their self-assessment skills and their independent learning. Gregory's teacher mentioned that she discussed either in group or one-to-one their feedback after marking their writing and especially 'if they need extra work to go through it […] I give them time to do it for a while'.

Teachers' formative assessments were considered as a more effective method for pupils' learning because teachers were 'more cautious' and 'they focus on what children can do rather more on what they can't' (head teacher). Teachers' assessment in a formative way provides suggestions about improvement of pupils' learning acknowledging simultaneously their actual progress (Hargreaves et al., 2014; Wiliam, 2013). In this way, children's self-direction and autonomy in learning are encouraged as pupils are able to understand in a deeper way the

assessment criteria and regulate their own learning (Hargreaves et al., 2014). Additionally, learners' responsibility for their own learning as an essential part of their learning process contributes significantly to the development of autonomous learning because learners acquire some entitlement either through satisfaction of acquiring knowledge and skills approved by their teachers and peers or through advancing further their learning (Olson, 2009). Furthermore, through the development of metacognitive skills, pupils learn to become independent learners, in the sense of using learning resources and strategies so as to overcome barriers in their learning processes. Therefore, they tend to be less dependent on teacher's or teaching assistant's support allowing them to regulate their own learning (Harrison, 2001; Reid and Came, 2009). The organisation of reading sessions, though, did not reflect the above intention.

Reading: Classroom arrangements-Pedagogy-Assessment

At the Sunlit River School, the guided reading programme was scheduled for approximately 30 minutes for four days per week and organised in pupils' ability-based groups. It included four different sessions which were common for all Years. In particular, once per week each group read with the teacher a part of a book and every child practised his/her actual reading skills and comprehension through teacher's questions about the plot or word meaning (all teachers). All the teachers' questions were based on the 'Assessment Focuses AF1 to AF7 and each of the Assessment Focuses are on something different' (Amanda's teacher). The next day the group was set a follow-up activity related to the text of

the previous day, involving replying to comprehension questions, writing a diary or making a poster (all teachers). The third day, 'carousel' activities were organised, such as comprehension of 'current affairs' where children choose to read an article from children's newspaper and then to write something about it or draw a picture about it (Amanda's teacher). On the final day, pupils engaged with funny activities, namely playing table games, like 'Scrabble' or puzzles (all teachers). Whole-class discussions on the same reading material were not encouraged due to differentiation purposes and this had the effect of limiting children's interaction and peer learning.

The ability-based groups were arranged to meet individual learning needs and to facilitate differentiation in teaching and learning. Figures 21, 22 and 23 show the children's seating arrangements in reading:
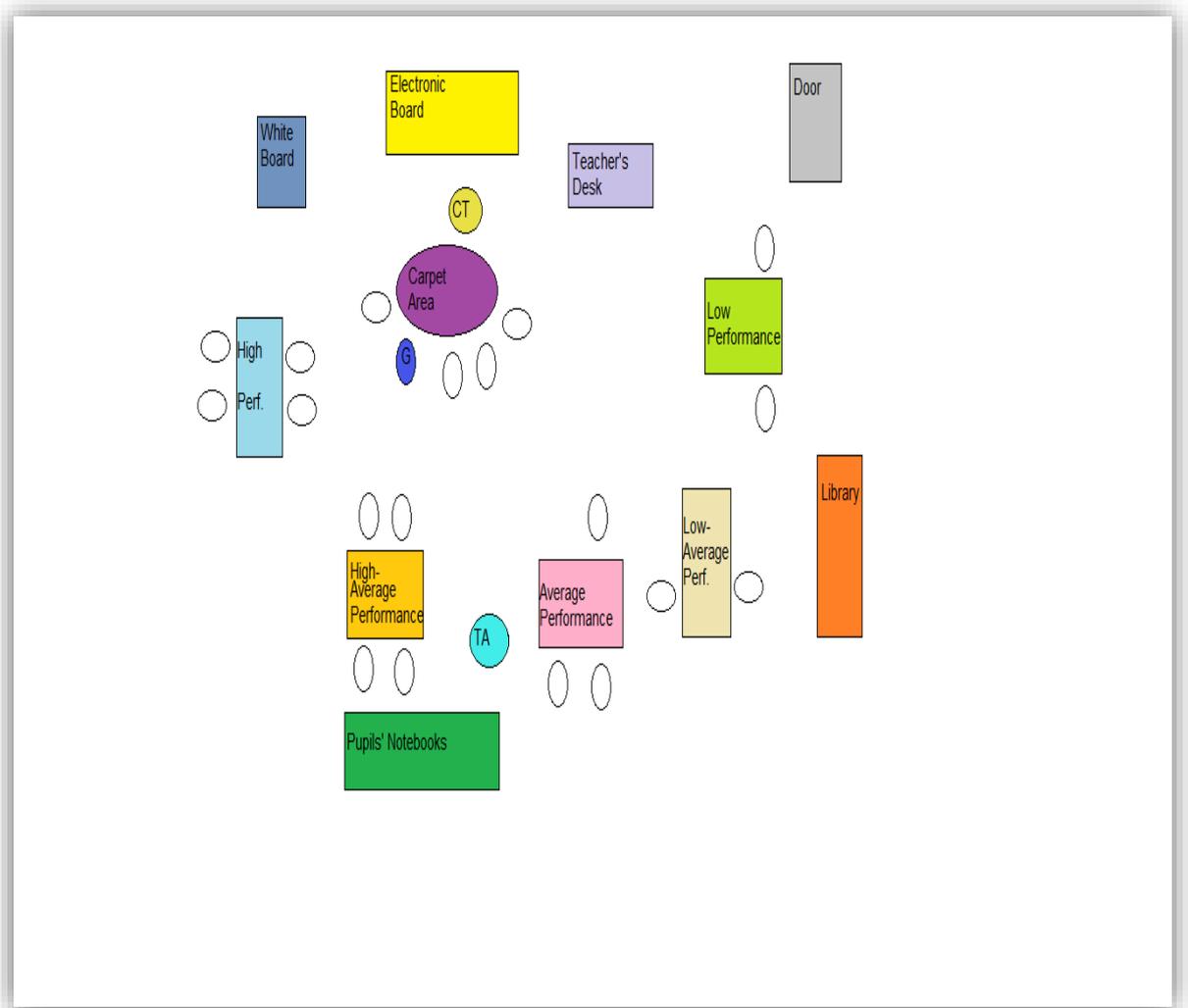
Figure 21: Gregory's reading classroom. G is Gregory, CT is classroom teacher and TA is teaching assistant
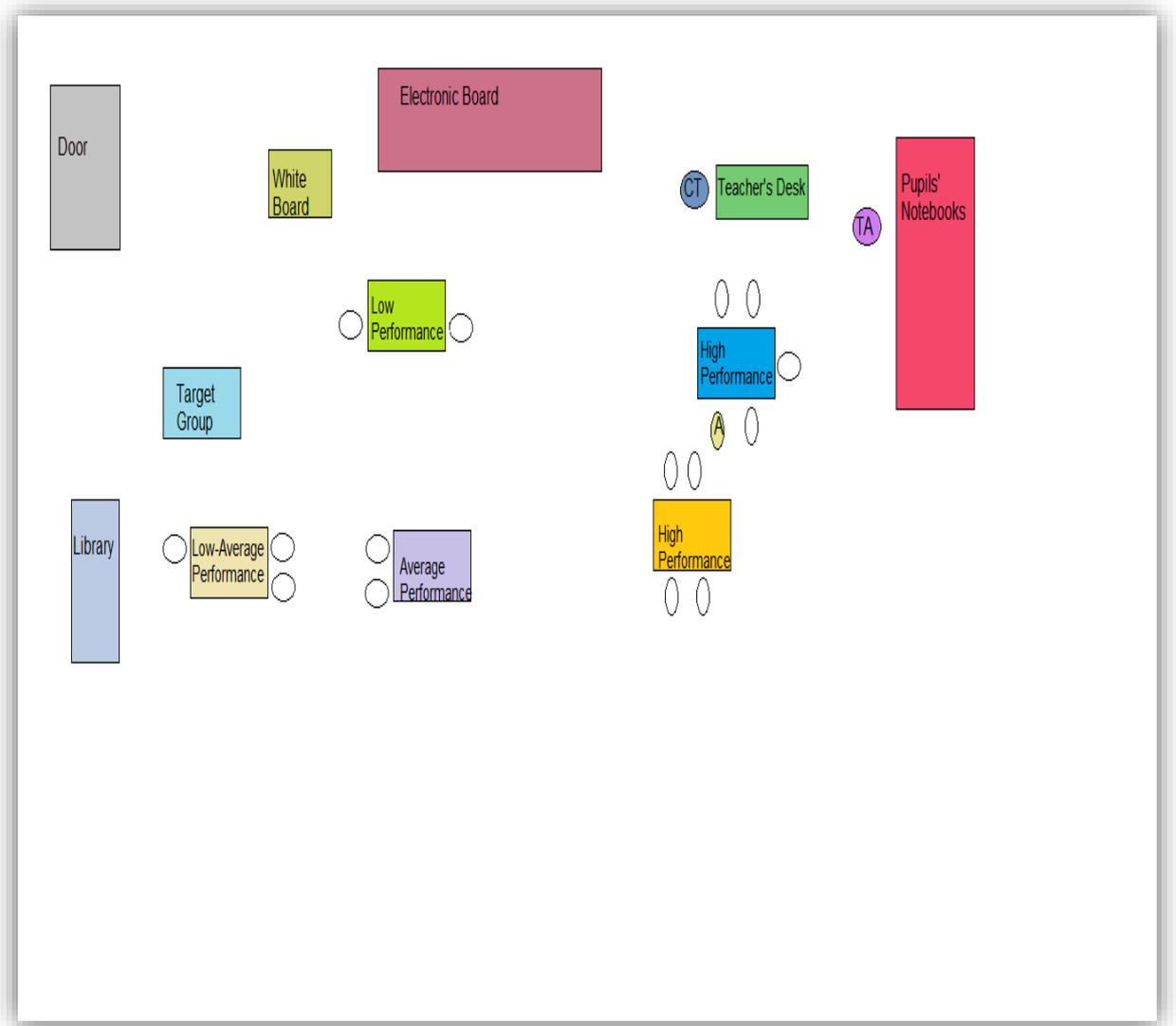
Figure 22: Amanda's reading classroom. A is Amanda, CT is classroom teacher and TA is teaching assistant
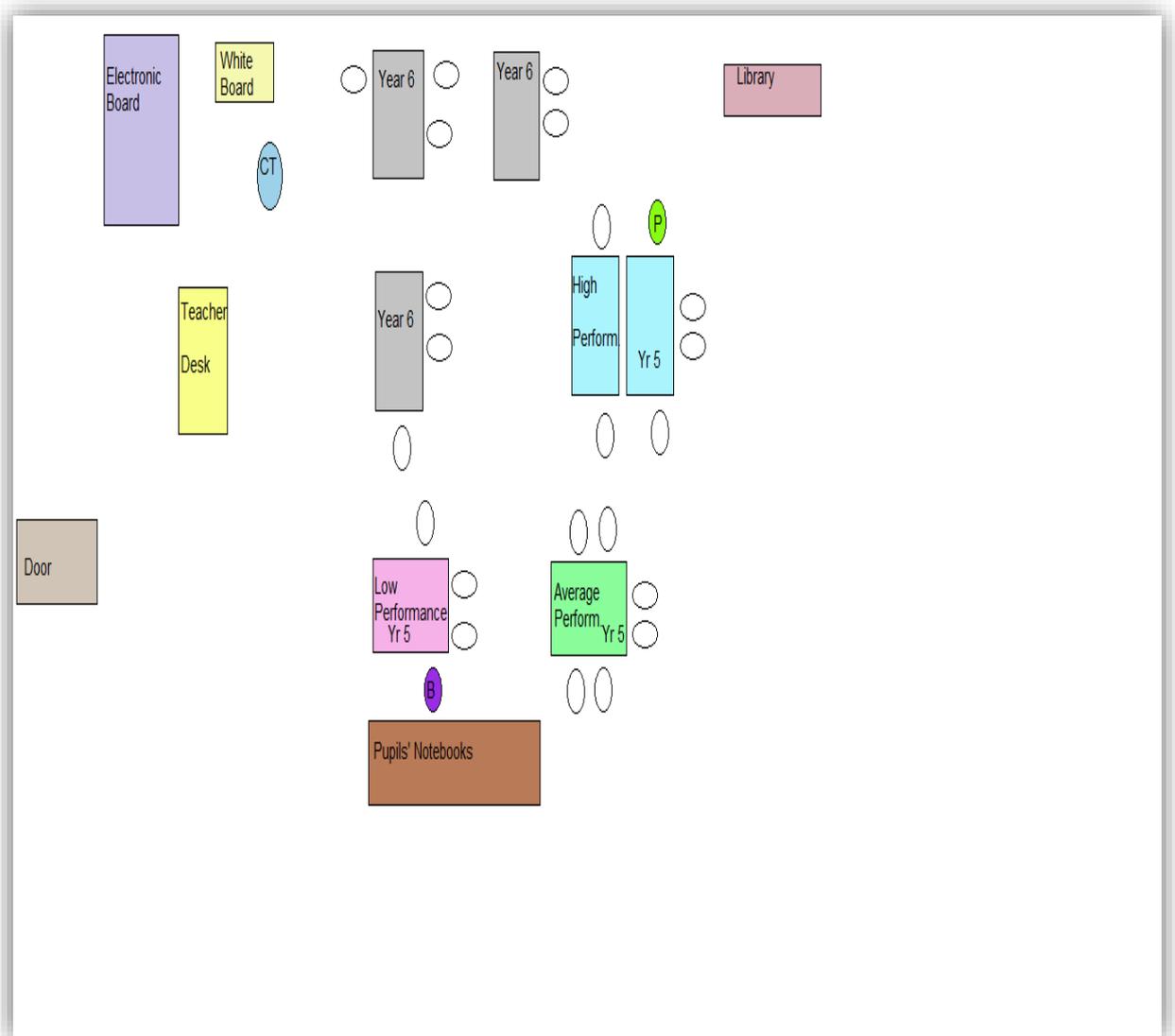
Figure 23: Peter's and Betty's reading classroom. P is Peter, B is Betty and CT is classroom teacher

Gregory (Figure 21) belonged to the low performance group based on his standardized reading levels. For the guided reading session with his teacher he moved to the carpet area which allowed his teacher to oversee the control of pupils' learning and attitudes (Pollock et al., 2004). During the session with his teacher, Gregory's group practised their actual reading skills by reading aloud to their teacher an extract from a book. The teacher's questions, namely about the text's genre enabled group discussions with her. Then, she gave them a question

to discuss and the children wrote their answers on a Post-it note and then gave it back to her. Gregory's teacher recorded their answers but feedback about the correctness of their answers was not given to avoid misunderstandings. However, the absence of immediate feedback and further discussion of pupils' misunderstandings has the prospect of creating learning gaps, confusion and deficient development of their metacognitive skills.

Amanda's standardized reading levels (Figure 22) categorised her in the high performance group as she was considered a fluent reader (Amanda's teacher). Her difficulties in guided reading were more about the table game session, as her teacher mentioned: 'she can't sometimes, she struggles working with the team, but that's her own issues sometimes', illustrating that her collaborative skills prevented her from exploiting peer learning, while her teacher attributed Amanda's difficulties in that area merely to her attitude. Peter and Betty (Figure 23) were sharing the classroom with some pupils of Year 6 due to changes in teaching staff. Additionally, as their reading teacher mentioned, on many occasions there was not a teaching assistant in the classroom which influences the time that she was able to dedicate to these pupils. This kind of arrangement, though, affected pupils' learning because of limited interaction with their teacher and peers as well as the absence of whole-class discussions about reading texts due to the presence of Year 6 pupils.

Grouping pupils, according to their standardized levels for differentiation purposes, results in variation of teachers' expectations concerning their outcomes and this has the potential to reproduce stereotypes about their abilities. For example, Peter was 'a very fluent reader, his reading age is beyond his chronological age so his reading is around to 14-15 years old, he is a very

good reader despite his dyslexia, so he is unusual in that respect, he's got very high IQ sum […] he is very good verbally', while Betty is 'willing to take part, she is not as confident a reader but she engages well with others […] confidence is an issue for her though so you can't push her too hard to answer questions'. For the above reasons, their reading teacher either differentiated the material, namely 'a scale down text' for Betty and more challenging text and activities for Peter, or modified her teaching methods, for example, she read and answered reading questions of SAT's paper together with Betty's group, whereas she let Peter's group work on them more independently, because 'they have the reading stamina'.

As the reading teacher suggested a good method for Betty is 'to chunk things up enough, you can ask the questions soon after you get the conversation flowing and just provide those interrupts so it's not about "can you read all of this and then tell me?" I wouldn't do that to Betty' because 'Betty tries to process it all together and all done which affects her speed'. Word-identification appears to influence pupils' speed of processing and their comprehension of the texts (van der Leij and van Daal, 1999). The manager of the dyslexic centre also suggested that in reading comprehension some pupils 'are able to decode but it takes a lot of energy, I'd say they have no more energy left to understand what they are reading'. Reading involves interaction between various cognitive processes and it is subdivided into word-identification skills and reading comprehension (van der Leij and van Daal, 1999). Mastery in word-identification skills depends on lower level automatization processes, which refer to learning processes that eventually lead to automacity. Pupils who experience learning difficulties, although they seem to be able to obtain word-specific knowledge, their speed limitations in word-identification during reading illustrate that an amount of effort is involved. In

other words, a learning process becomes automatic when it is fast, effortless, autonomous and completed without a person's attention or conscious control (Hudson et al., 2008).

A question can therefore be raised as to whether pupils with dyslexia can automatize their decoding skills (van der Leij and van Daal, 1999). For instance, automaticity in reading relies on memory and other cognitive processes, namely phonemic decoding (Hudson et al., 2008). When children recognize automatically a word, their memory enables them to identify the word faster than when they find an unknown word and they need to apply processes of analysis and decoding. Reading fluency in terms of speed and accuracy, though, influences reading comprehension and the opposite. Consequently, reading and comprehension are characterized by a reciprocal relationship where deficits in reading skills affect comprehension skills. This suggests that associations of children's dyslexia with low performance in reading and comprehension can create stereotypes and bias about pupils' abilities. Nevertheless, although Peter and Amanda were diagnosed with severe dyslexia, their comprehension and reading skills seem to be highly developed illustrating that teaching approaches also play an important role in the development of reading and comprehension skills.

Verbal feedback was usually provided to pupils during the guided reading session with their teachers but not necessarily when children were engaged in 'carousel' activities and table games. Furthermore, pupils' assessment in reading was a summary of their performance in the classroom throughout the year and their performance in standardized testing (all teachers). However, the limited amount of hours for children's interaction with their teachers, which minimise

their immediate feedback, in combination with the use of differentiated materials for low performers, who do not meet the requirements of external examinations, is not indicative of their reading and comprehension skills. Therefore, differentiation benefits pupils when it is addressed to their individual learning needs but simultaneously reproduces low expectations about their progress and potential learning gaps when it is less challenging. One of the purposes of differentiation is to enable pupils who experience difficulties in their learning to overcome them and to achieve higher order thinking skills. Its application can be problematic, though, when teaching practices and materials do not challenge enough pupils and thus maintain the focus on their basic skills.

Completing this chapter, the case of the Sunlit River School illustrates that despite the high pressure by the National Curriculum on schools concerning pupils' achievement of high performance, practices and activities which encouraged children's creativity such as the school radio station can be included in the school curriculum, which has the potentiality to improve pupils' learning and self-confidence. Additionally, the intervention programmes enriched with activities that meet individual learning needs provided opportunities to children to develop a range of skills and competences concerning coordination, memory and metacognition, and to boost their self-confidence. However, issues of being seen as different learners due to low achievements especially in writing continued to preoccupy the pupils despite the positive approach of the school and the dyslexic centre. This demonstrates that spatial arrangements and pedagogical and assessment methods which allow the development of competitive learning environments exclude a number of pupils from equal opportunities in education. The diagnosis of the four pupils ensured additional support for their learning needs, but it did not minimize the feelings of inferiority

and anxiety derived from their stigmatisation as lower achievers. This reflects the problematic areas of the educational system and eventually of the National Curriculum which press and assess intensively pupils through the standards agenda, transforming education into training.

The next chapter compares and discusses the findings from the three case studies.

Chapter 7: Synthesis: The three schools examined

This chapter explores effective learning environments for pupils identified with specific learning difficulties through a comparison of the three case studies. In particular, the factors which influence the inclusion and learning processes of the pupils in mainstream education, the organisation of the learning environments, and the pedagogical and assessment approaches used within classrooms are examined. The main reference point of the above is the pupils' individual learning characteristics, as they have emerged from this research.

At this point, it is important to note that the comparisons between the pupils' learning characteristics are neither intended to construct any standardized pattern of their learning strengths and weaknesses nor to reproduce stereotypes about their cognitive abilities and learning processes due to their difficulties in learning. It has been argued that pupils need to be treated as learners with individual learning characteristics, while any kind of categorisation does not reflect their actual potential.

Pupils' Inclusivity and Diagnosis

In line with official educational policies, the three schools structured their learning environments in such a way as to facilitate their pupils' inclusion. These inclusive measures aimed to allow children equal access to learning and their encouragement to become independent learners. In order for the above to be

achieved, the three schools provided a variety of activities which were addressed to all types of learners allowing their pupils' active engagement with them according to their individual learning needs.

Diagnostic assessment, though, appears to play a crucial role in the schools' learning arrangements influencing pupils' learning, attitudes towards learning and their self-perception as learners. Differences in the processes between the three schools which derived either from economic reasons (Rose Garden School) or the schools' desire to avoid pupils' early labelling and stigmatization through diagnosis (Blue Sky School) resulted in important delays with negative implications for pupils' learning and self-esteem. On the other hand, the existence of the dyslexic centre at the Sunlit River School facilitated the pre-screening assessments for dyslexia of all pupils before the arrangement of official diagnostic assessments. This allowed the teachers and specialists to intervene with the purpose of ameliorating pupils' learning deficiencies and weaknesses without imposing on them any label. In this way, children's difficulties due to insufficient teaching and learning approaches were faced at the very beginning in a satisfactory way and with positive effects on pupils' self-esteem.

The provision of special intervention programmes for the pupils was also influenced by the existence of an official diagnosis. More specifically, two of the three schools (Rose Garden School and Sunlit River School) took the initiative to provide intervention programmes for pupils identified with signs of dyslexia either in group or individual sessions, despite the absence of official diagnoses. Additionally, differentiated materials, namely photocopies with activities in accordance with children's individual learning profiles were provided to improve

their learning weaknesses usually with positive academic outcomes. On the contrary, the lack of special provision for pupils who present significant difficulties in their learning, has the possibility of causing them additional stress, anxiety and concerns about their cognitive abilities and failures to achieve the educational targets. This situation can result in their demotivation, as was found at the Blue Sky School (John's case). This issue illustrates inequalities in learning, resources and support which can be provoked by the diagnostic procedures.

With regards to the structure of the intervention programmes, the three schools provided the extra support to their pupils for approximately an hour and a half weekly either in one-to-one sessions or in classroom support so as to avoid the children's potential stigmatisation and isolation. In this way, the pupils' socialisation and participation in various classroom activities during literacy sessions were encouraged. The individual intervention programmes were conducted outside the pupils' main classroom. However, only one school (Sunlit River School) guaranteed a private and silent environment for the one-to-one sessions with the pupils. This arrangement enabled the children's comfort and concentration enhancing their performance in their literacy activities and their self-confidence. On the contrary, the individual sessions (Blue Sky School) which took place in a classroom with other groups of pupils who were working simultaneously with their teaching assistants significantly impeded the learners' concentration, illustrating that their individual learning profiles were not taken into account sufficiently.

The classroom support was offered to children either by a teaching assistant (Blue Sky School and Rose Garden School) who worked mainly with the child within his/her group or by their teacher (Rose Garden School and Sunlit River

School) through the arrangement of the target groups. In particular, the pupils who had been identified with significant difficulties in their learning were grouped together and they received additional support by discussing and organising their ideas in writing with their teachers. Furthermore, differentiated materials, namely electronic notebooks (Sunlit River School), notebooks for keeping notes during classroom discussions on a topic (Blue Sky School), and photocopies with activities according to pupils' individual learning needs (Rose Garden School) were supplied to children intending to meet their individual learning needs. Nevertheless, two problematic issues were identified in the above inclusive measures: first, the learners who belonged to the teachers' target groups appeared to avoid participation actively in whole-class tasks due to their feelings of embarrassment and inferiority, and second, differentiated resources have the potential to discomfort the pupils, especially when they were the only learners who had been provided with them within their classrooms (e.g. Blue Sky School).

It could be said that those kinds of pupils' learning attitudes were mainly derived from the association of the intervention programmes and teaching differentiation with the improvement of the learners' low levels in literacy and reading. The frequent references, also, to the level indicators in pupils' main classrooms (e.g. Blue Sky School), their setting as the pupils' personal targets (e.g. Rose Garden School), and the design of the literacy and reading activities according to pupils' levels (e.g. Blue Sky School) gave the impression to learners that the differentiation in support and resources was related to their low performances compared to their classmates. On the other hand, differentiated activities which were addressed to learners' interests (e.g. the radio station at the Sunlit River School) taking into account their learning strengths, namely verbal skills seemed

to influence positively children's progress, without, though, minimising their stress about their performances in literacy.

The above situation illustrates that being a different learner tends to be interpreted negatively within classrooms by the children's peers and this affected their emotional well-being and self-image. For instance, the ten children at the three schools experienced significant difficulties in controlling the situation of being seen differently by their classmates due to their mistakes in applying basic knowledge and skills. That resulted either in acceptance or denial of their difference in learning which was followed eventually by feelings of stress, embarrassment and anxiety within classroom settings as well as by a tendency for isolation and silence during literacy activities. The main reason for the learners' attitudes was not the diagnosis as an official confirmation statement of their difficulties, but the social consequences of not performing in the expected way. In particular, stereotypes and lack of empathy, which were expressed through negative comments on learners' performances by their peers, appeared to prevent pupils' smooth socialisation. Accordingly, the three schools' measures, which aimed to meet pupils' learning needs, namely ability-based grouping and teaching differentiation, seemed to worsen this situation by highlighting their learning weaknesses.

Indeed, labelling with difficulties in learning can cause negative evaluations of pupils not only with respect to their abilities, but also to their social identities as people who are not able to succeed in their careers (Finlay and Lyons, 1998). Being aware of these negative evaluations, the learners identified with learning difficulties usually tend to deny the labels by not referring to them. Additionally, there is a tendency for generalizations through labelling to be made which can

obscure individual differences in learning and give the impression that the people who have been stigmatized with a particular label belong to a group, which presents the same learning characteristics (Finlay and Lyons, 1998; Lauchlan and Boyle, 2007; Riddick, 2001). For instance, the use of labels by the general public and even by teaching staff does not necessarily mean that they refer to the same thing or understand precisely the terminology (Finlay and Lyons, 1998; Harris, 1995; Lauchlan and Boyle, 2007; Riddick, 2001). Consequently, escaping from labelling seems to be difficult for pupils with differences in their learning, although they have significant achievements and progress in their lives. A characteristic example is the noteworthy improvement of the four pupils, Carol, Robert, Amanda and Peter, in reading skills that though, might not be acknowledged by the public due to their being labelled as dyslexic learners. Similarly, Matthew's interactions with his teachers and peers had improved considerably despite his diagnosis with Autistic Spectrum Disorder, which highlights social difficulties.

Although labelling through diagnostic assessment is regarded as a necessary medium for pupils so as to have access to supportive resources, its negative effects, such as social stigmatization, bullying, limited opportunities in careers and life, and lower expectations about their achievements, are more serious (Lauchlan and Boyle, 2007). Consequently, pupils might be blocked emotionally because instead of developing their self-awareness gradually by building their self-image as learners, they are called on to adjust themselves to concrete learning 'moulds' which are imposed on them by professionals through diagnostic procedures. In other words, the tendency of educational systems to identify pupils' learning profiles in relation to medical labels contradicts what pupils feel about their abilities and skills, and the encouragement of pupils' self-

awareness. This issue demonstrates a low tolerance of difference in learning within educational institutions that now constitutes the foundations of competitive educational systems.

The explanation, though, which was given by the staff members and the pupils' parents at the three schools concerning the importance of diagnostic assessments within education despite children's stigmatisation, highlighted the provision of additional support through intervention programmes and resources that allow equal opportunities in learning for learners identified with difficulties in their learning. For the pupils the significance of diagnosis was associated with an official explanation of their difficulties in learning which permits them to identify their strengths and weaknesses in particular learning areas. The official declarations for the role of diagnostic assessment suggest that it is used to identify learning characteristics, weaknesses, strengths, skills, knowledge, abilities and difficulties in learners aiming to provide guidance and advice to learners and teachers concerning a specific course of study (Isaacs et al., 2013). There is a tension, though, between the humanitarian principles of education which acknowledge individuality in learning, and educational systems' tendencies to normalize the difference in learning through diagnoses and special educational provision for pupils with differences in their learning intending to reproduce standardized developmental levels.

In particular, based on the medical model, the purpose of diagnostic assessment, if it is part of a bureaucratic system, is the allocation of support and access to material resources for pupils identified with specific learning difficulties or autism which without it they could not have (Angold et al., 1999; Armstrong and Squires, 2015; Davies and Messurier, 2002; Elliott, 2005; Elliott and Gibbs,

2008; McDowell and O'Keeffe, 2012; Skellern et al., 2005). However, if diagnostic assessment is used to improve teaching, then questions can be raised concerning its necessity because various learning approaches based on other learning theories, namely that of Vygotsky, can be applied within learning environments (Armstrong and Squires, 2015).

Additionally, the validity of diagnostic tests has been widely criticised and especially the use of intelligence tests for the identification of specific learning difficulties as they tend to predict how likely pupils succeed at school instead of explaining satisfactorily the nature of specific learning difficulties (Coles, 1978; McDowell and O'Keeffe, 2012; Norris et al., 2007). This, though, can cause associations of pupils' general cognitive ability with their attainment through the discrepancy model, which uses the Spearman rank correlation (Armstrong and Squires, 2015). In particular, the discrepancy model supports the idea that there is an underlying general cognitive factor which shows that all cognitive ability areas are roughly the same for most people. Potential differences among the scores are compared and the aim is to check how unusual is the difference in the population and whether it has occurred by chance.

The ipsative analysis within this model is based on a comparison of one area of performance with another aiming to identify people's relative strengths and weaknesses. Through discrepancy analysis the testers use pupils' scores in general cognitive ability to predict what they can achieve in attainment tests, although the two scores are not completely correlated in the general population. For instance, if the pupils score poorly in intelligence tests then this is used to explain their poor performance in literacy tests. However, these tests do not take into account higher-order thinking skills, such as metacognitive skills (Huff and

Goodman, 2007; Yang and Embretson, 2007) resulting in wrong assumptions and expectations about pupils' abilities.

By setting a biological basis for specific learning difficulties, the responsibility for failure is located within the children and not within educational institutions (Coles, 1978; Collinson, 2012; Elliott, 2005; Elliott and Gibbs, 2008). Consequently, the influence of psychometric thinking seems to provoke deterministic views of pupils' achievement and ability, which limit expectations of certain pupils who have been identified and assessed through standardized forms of assessment that appear to indicate pupils' deficiencies in comparison with their peers (Wearmouth and Reid, 2003). Furthermore, official or unofficial diagnostic labels whether they refer to physical, intellectual or mental difficulties are constitutive of people's lives apart from being descriptive (Gillman et al., 2000). For example, they tend to impose a pathology on pupils from an early age convincing them that there is a problem within them which does not allow them to perform in the expected way, constructing thus ambiguous identities and creating cases of 'patients' within education which necessitate experts to fix their problems. Nevertheless, different educational purposes and eventually teaching and learning approaches can construct a different educational reality, where pupils' individual learning needs and characteristics are taken into account without endorsing children's categorisation and labelling through medical explanations.

Curriculum

The fundamental educational principles and purposes of the three schools comprised the respect of children's individual learning needs, their equal access to the National Curriculum, and their encouragement to become independent learners. Emphasizing the encouragement of their learners' motivation, enthusiasm and enjoyment to learn, the three schools enriched their curricula with a number of activities taking into account their pupils' individuality in learning. Nevertheless, the prospect of children's linear learning processes as this is suggested by the medical model of disability and as it is expressed through the requirements and progress expectations of the National Curriculum was found to influence considerably the above intentions.

In particular, the National Curriculum requirement of pupils' two levels of progress in Key Stage 2 regardless of children's starting point and individual learning needs in combination with school accountability measures appears to set pressure on schools and affect in a significant manner their educational priorities and structures. For example, Ofsted requirements of schools' high standings in league table as a presupposition for their good evaluation shifted the focus to the improvement of pupils' performance in standardized assessments, as the external examinations at Year 6 overshadowed both Years 5 and 6 encouraging a performance-oriented curriculum.

The above situation influenced deeply a number of issues within the teaching settings. More specifically, the National Curriculum requirements were taken into account in the design of the school curriculum for literacy and reading at the

three schools. The tasks that the pupils and teachers were expected to complete in specific time frameworks in both Years 5 and 6 involved the development of pupils' skills in writing topics with advanced vocabulary and complex sentences, to spell correctly words from the list of the frequent words provided by the National Curriculum, to apply correctly in their writing grammatical and syntactic rules, and to reply to complex comprehension questions in reading. The above expectations were also addressed to pupils identified with specific learning difficulties.

In practice, the above requirements were interpreted as pupils' preparation to meet those educational demands (e.g. Blue Sky School and Rose Garden School) in various ways. For instance, lists with learning targets that actually described the standardized levels were placed either on the pupils' tables (Blue Sky School) or at the back of their literacy notebooks as personal learning targets (Rose Garden School) in order to encourage pupils' frequent references to them for their guidance. These approaches in combination with explicit and regular references to the improvement of the levels either by teachers (e.g. Carol's teacher at the Blue Sky School) or by teaching assistants (e.g. Matthew's teaching assistant at the Rose Garden School) had the prospect of causing additional stress and anxiety to the pupils with dyslexia. Paradoxically, the absence of the above methods within classrooms (e.g. Sunlit River School) did not minimise pupils' stress about their performances as the children were informed of their levels from their grades each term.

As the improvement of pupils' levels tended to monopolise the interest within schools, the emphasis on teaching and learning was given in meeting those standardized requirements, leaving limited time for the development of learners'

metacognitive skills and critical thinking and as a result leading to a narrowing of the curriculum. The concept of individuality in learning was in tension with the National Curriculum demands for homogeneous performance by all children. Indeed, the implications of giving technical support in teaching literacy and reading for pupils' learning were not always positive. The children being aware of the fact that making mistakes could influence negatively their grades and eventually their levels attempted to improve their performance without necessarily developing long-term learning strategies. For example, in replying to complex comprehension questions in reading the majority of the ten pupils at the three schools tended to avoid questions when their answers were not obvious in the texts, illustrating the insufficient development of relevant reading approaches. As a result, the pupils may experience repetitive failures in the accomplishment of complex tasks which unavoidably led to low grades, low levels and eventually low self-esteem, confidence and at times low motivation. The arrangements of the learning environments at the three schools also played a significant role in the above situation.

Learning Environments

The structure of the three schools' learning environments was highly influenced by the teaching focus on standardized levels in literacy and reading. This is relevant to spatio-temporal arrangements in literacy and reading, the pedagogic and assessment approaches applied within classrooms, and the types of relationship developed between teachers and pupils *and* pupils and pupils.

Spatial arrangements within classrooms are indicative of the underlying values and principles as well as the curricular, pedagogical and assessment procedures which are practised (D'Alessio, 2014). For instance, the way that pupils' desks are arranged in groups or rows points to the emphasis given to collaborative learning or to control by teachers respectively. Additionally, the physical setting can affect the behaviour and attitudes of both pupils and teachers in terms of concentration, attendance, motivation and self-esteem and these have a mediating effect on pupils' achievement (Clark, 2002). Consequently, classroom organization plays a crucial role in teaching and learning processes, learners' attitudes towards learning and their interactions with their classmates and the teacher.

The principal seating style at the three schools was ability-based grouping according to pupils' levels in literacy and reading which were derived from standardized assessments. The reasons for choosing this seating arrangement were the facilitation of differentiation in terms of material resources and teacher support which aimed to meet individual learning needs, and classroom management by the teachers. However, the arrangement of ability-based groups is highly encouraged by the National Literacy Framework which suggests that this sort of grouping allows pupils to develop their skills in literacy and reading independently, and enhances peer learning in relevant activities (Department for Education and Skills, 2012).

The majority of the ten pupils at the three schools belonged to average and low average ability-based groups in literacy and reading, which constituted the teachers' target groups in two of the three schools (Rose Garden School and Sunlit River School). This arrangement allowed the pupils' daily support by their

teachers compared to the higher ability-based groups through additional explanations and differentiated materials, namely photocopies with less complex activities. Additionally, these target groups were placed at the front of the classroom and usually next to the teachers' desk. At the Blue Sky School this kind of arrangement was not observed. Although its pupils were categorised into ability-based groups, the teachers supported each group through detailed feedback of their work once per week in literacy.

Similarly, in reading sessions the ability-based groups remained the main seating arrangement at the three schools without though the existence of target groups. Furthermore, pupils' movements within classrooms were related to the different tasks given to the pupils. The reading sessions with the teachers, and the independent reading sessions, which were arranged once per week for each group, encouraged pupils either to sit in the carpet area or on a different table. In general, the reading sessions compared to the literacy sessions were structured in such a way as to offer more independence to the learners so that they could enjoy reading on their own which actually is in line with the National Curriculum requirements. I will discuss later in this chapter whether the structure of literacy and reading sessions was effective for pupils' learning.

These forms of spatial differentiation in literacy and reading may allow a close connection between learning and teaching objectives, flexibility in pupils' reassignment and more opportunities for sustained interactions with their peers and teacher to be achieved (Baines, 2012). The management of the classroom was also facilitated through pupils' grouping as the teachers could support their pupils according to their learning needs and ensure their concentration on tasks. Nevertheless, the implications of pupils' grouping on their learning were not

always positive. Firstly, ability-based grouping tends not to take into account pupils' individual learning characteristics. The pupils' difficulties in concentration appeared to be increased within group settings due to their classmates' distractions influencing the accomplishment and outcomes of their tasks. This situation led either to children's pursuit of more independence in order for them to regulate their own learning, or to their tiredness due to their attempts to concentrate on their tasks despite noises and other disruptions.

Indeed, the ten pupils at the three schools suggested that either they should sit alone or with a friend in order for them to overcome their problems in concentration, and to improve their performances, especially in tests. As research has shown, pupils who collaborate with their friends have a greater possibility of achieving their learning targets than working with other classmates, because their friends' comments are less judgmental and more supportive (West, 2002). The ten pupils demonstrated high levels of self-awareness and self-regulated skills, which, though, were not acknowledged practically by their schools. Only two pupils were set to work with their classmates who could help them to concentrate on their literacy tasks daily by their teachers' initiative (i.e. John at the Blue Sky School and Peter at the Sunlit River School). It could be said that the pre-decided arrangement of pupils' grouping based on their standardized levels did not allow learners to take responsibility for their own learning by regulating their own seating arrangements.

Furthermore, grouping did not take into account the six pupils' diagnoses. Apart from their difficulties in concentration, their individual learning profiles were not actually considered in the design of literacy activities illustrating the overvaluing of levels compared to individuality in learning. Characteristically, only one school

(Sunlit River School) differentiated the materials for the main literacy topics by providing less complex activities for average and low performance groups, whereas the pupils at the other two schools worked on the same literacy tasks. From this, two issues have emerged: first, the differentiation process was in accordance with the pupils' levels and not with their individual learning characteristics, and second, the provision of less challenging materials to children identified with specific learning difficulties when they had low levels tended to reproduce children's learning gaps and eventually their difficulties in learning, causing low expectations to their teachers concerning their progress. This issue will be discussed further later in this chapter.

Additionally, by placing pupils with low performance at the front of the classrooms (e.g. Rose Garden School and Sunlit River School) their difficulties in learning were highlighted resulting in their feelings of inferiority and their less active participation in whole-class activities, as it was observed at the two schools. This situation, also, influenced negatively children's relationships with their classmates and eventually their self-confidence. The plasmatic homogeneity of the ability groups can cause polarization in children's attitudes between high and low ability groups, which can prevent the encouragement of collaboration between peers. On the contrary, mixed-ability groups have the prospect of enabling high level understanding and development of thinking skills among peers through collaborative processes, as it was observed in Peter's literacy classroom in the Sunlit River School. In this way, learners can develop empathy and understanding, instead of competition, considering their classmates' differences in learning as normal learning attitudes.

Inevitably, though, ability-based grouping influenced the ten children's relationships with their classmates and their behaviour. Aiming to avoid potential negative comments on their performances, the pupils at the three schools showed little motivation to be involved in group tasks when they were asked to participate due to their prior negative experiences. This affected their collaborative skills, which in some cases, namely Amanda's at the Sunlit River School, appeared to restrict their capacity to learn from their peers. As a result, the ten pupils either were silent and isolated during group work (e.g. Robert and Thomas at the Rose Garden School) or were not able to collaborate peacefully with their classmates (e.g. Amanda at the Sunlit River School).

These limited pupils' interactions within their ability-based groups played an important role in this situation, as literacy and reading activities required mostly independent work. This, in combination with large class sizes, tends to prevent collaboration between pupils (Blatchford, 2012) and especially within low and average performance groups. Furthermore, activities of collaborative and peer learning seem not to be fostered, because pupils might have similar understandings of the tasks or they may assume that the rest of the pupils in the group have already understood them (Baines, 2012). All the above illustrate the problematic side of ability-based grouping for the organisation of learning environments. The three schools in their efforts to overcome these problems arranged mixed-ability groups for the rest of their subjects encouraging their pupils' socialization and collaboration which, though, were not achieved to an adequate degree as the ten pupils continued to experience difficulties in their relationships with their peers because of their classmates' comments on their performance or levels of knowledge (e.g. Gregory at the Sunlit River School).

As the segregation of pupils perpetuates forms of discrimination, prejudice and reproduction of stereotypes about diversity in learning (Armstrong, 2007), a question can be raised as to whether grouping actually benefits pupils. If it is a matter of differentiation in teaching, then other practices, namely frequent movements of teachers within classrooms or different instructions can also have the expected outcomes on pupils' learning, allowing them to sit with their friends. Pupils' personal choices in seating arrangements, though, appear not to be taken into consideration, although they are part of their self-regulated learning and their self-awareness of how they can perform the literacy activities effectively. These practices support Foucault's argument that human beings are fascinated with classificatory schemes, taxonomies and rationalizing processes within educational institutions which transform schools into places where power is exercised, influencing the understanding of knowledge and procedures of exclusion and inclusion (D'Alessio, 2014). These seating arrangements which tend to highlight pupils' weaknesses in learning more than their strengths also have implications for pedagogies of literacy and reading through various learning sets.

Pedagogy: Learning Sets

The structure of both literacy and reading sessions at the three schools influenced the types of progress learners made. Starting from the temporal arrangements of literacy, the three schools followed the instructions of the National Literacy Strategy Framework which indicated an hour for literacy session daily, because in this way pupils have adequate time to practise and

advance their competences in literacy (Department for Education and Skills, 2012). In contrast, the reading sessions were organised for half an hour daily. Two of the three schools arranged the literacy hour at the beginning of the day (Rose Garden School and Sunlit River School), while Blue Sky School started the day with grammatical activities, then the reading sessions and the literacy hour. Commencing the day with writing tasks was also intended to ensure pupils' control within their classrooms and this allowed them to focus on their tasks.

In both literacy and reading sessions, the lessons were designed according to pupils' levels and improvement instead of their diagnoses illustrating the former's significance within classroom settings, as has been discussed above. Accordingly, level indicators were used for learners' guidance during writing and reading influencing the provision of differentiated materials and teachers' expectations. The negative implications of that practice on pupils' learning were more obvious in reading sessions. In particular, the structure of reading sessions at the three schools suggested one session per week where the pupils had the opportunity to be engaged actively with reading texts under the guidance of their teachers, while in the rest of the reading sessions they were asked to work independently on reading activities, including, responding to questions from the sessions with their teachers. In this way, the learners did not have the opportunity to participate in frequent discussions with their teachers, to practise their exploratory talk strategies, and to observe the ways with which their peers were dealing with and answering the complex comprehension questions. Consequently, the majority of the ten pupils at the three schools presented significant difficulties in understanding and answering questions whose answers were not obvious in the texts and needed deeper thinking processes. This

indicates that a different teaching and learning approach for them could allow them to develop a variety of strategies in reading.

Differentiation of reading materials also played a part, which was more apparent in reading sessions than in literacy ones. For instance, learners who belonged in average and low performance groups tended to be challenged less in the guided reading sessions with their teachers, whilst modelling of answering complex comprehension questions was not observed during these sessions at the three schools. The emphasis on differentiation was on understanding the meaning of words and replying to basic questions whose answers were in the text. Additionally, the pupils' written answers from their session with their teachers were planned for the following day preventing in this way any modelling by their teachers or discussion with them about their enquiries. As a result of the above, differentiation processes appeared to be one cause of children's helplessness and need for constant support by the teacher or their classmates, instead of enhancing their self-confidence and independence. In this way, learners' motivation to undertake risks in learning and the responsibility for their learning can be reduced, as they may feel insecure due to their mistakes, and this resulted in them seeking continuous teacher support rather than developing their learning strategies (Reason, 2003).

The second problematic issue of the reading and literacy sessions' structures concerns the isolation of reading from writing. In particular, there was no connection between reading and writing sessions, which would have created a consistency between learning objectives. Teaching reading and literacy separately divides language into its several parts and may eventually prevent pupils' deeper understanding of its holistic structures and uses. Their

combination, however, has the potentiality to benefit pupils' learning in terms of vocabulary, ideas, grammar and syntax. For instance, the association of reading and literacy in teaching specific topics offers the opportunity for learners to read about the taught topic, comprehend the ideas of the texts through whole-class discussions, enrich their vocabulary, practise grammatical and syntactical rules and then to start writing on the relevant topic. In this way, pupils can understand various genres and styles of texts through practising with related reading and writing topics. For example, the pupils in Year 6, Carol and John, at the Blue Sky School who were taught based on this kind of structure improved their vocabulary and were more successful in writing sentences and completing topics.

Nevertheless, the emphasis of literacy in Years 5 and 6 on pupils' production of written essays according to the National Curriculum requirements as part of children's preparation for external examinations influenced the teachers' teaching styles at the three schools. Various learning models (as they have been discussed in the Chapter 2) were observed through teaching approaches of a number of activities in literacy and reading sessions. In particular, the model of practice was used mainly at the beginning of literacy sessions almost daily and it referred to grammar, spelling and advanced vocabulary activities in respect of the demands of the National Curriculum. With this learning model, the learners individually and following a specific routine engaged in activities which were intended to strengthen and enable their in-depth learning related to the required activities and respective skills. For instance, the pupils were encouraged to practise their spellings at one of the three schools (Rose Garden School) which resulted in their improvement and successful outcomes facilitating the

development of their memorisation skills, meta-cognitive skills, self-confidence and self-regulation of their learning.

The practice, though, of single words tends to ameliorate pupils' orthographic skills, but it does not necessarily develop their understanding about the semantic structure of the language. This was confirmed by the pupils' difficulties in using the words in other contexts. Other practices for spelling improvement with positive outcomes on children's learning were visualisation of words, teaching phonics and mnemonic techniques, such as rhymes, whereas handwriting with joined-up letters was not an efficient approach according to the majority of the pupils. Planning of their writing was also practised within literacy classrooms allowing them to remember and organise their ideas due to their difficulties in memory, whilst in reading unknown and long words, decoding practices of words into syllables were often used by the children.

Homework was also a method of pupils' practice which aimed to improve their learning weaknesses. More specifically, reading books and numeracy activities were encouraged for pupils of the three schools, while only two of the three schools set homework for spellings (Rose Garden School, Sunlit River School) supporting in this way their pupils who experienced significant difficulties with their memorisation skills. Indeed, the pupils of the above two schools presented improved performances in spellings. On the other hand, the pupils of the Blue Sky School who did not have homework spellings appeared to present higher levels of stress and anxiety about their performance in dictation. Based on this, the importance of homework relies on learners being encouraged to exercise their skills frequently and without limited time, enhancing their meta-learning and memorisation skills. This learning model of practice can minimise pupils' learning

gaps, memory weaknesses and learning difficulties, allowing children to become aware of their weaknesses and how they can overcome them without time pressures and stress.

The instruction model was the main model within classrooms of the three schools following usually a sequence of stages: first, teachers' attraction of their pupils' attention; second, teachers' introduction of the new learning objective with the necessary explanations; third, scaffolding process through recall of pupils' previous knowledge about the topic with the new information; fourth, encouragement of pupils' performance; fifth, teachers' feedback on pupils' performance which focuses on its correctness; and finally, the evaluation of pupils' corrected performance. This process usually commenced with whole-class discussions about the topic and its planning, while material resources, including PowerPoint presentations, articles from newspapers, videos or photos facilitated children's scaffolding processes. Then, written activities, namely fables or stories, were encouraged supported by teachers' frequent instructions and verbal feedback. At the end of the session, evaluation of pupils' writing was provided either by the teacher or through peer assessment.

Although this learning model was the most frequently used within classrooms, a variety of activities enabled pupils and teachers to be involved with other learning models. Characteristically, the simulation model was realised through pupils' engagement with role-plays and classroom literacy games at the three schools, as well as computer games in intervention programmes at the Sunlit River School based on their learning objectives. In this way, children have the opportunity to explore in-depth areas of learning that cause them difficulties and to facilitate their internalisation process through simulation, experiments, trials

and making mistakes, viewing all of these as part of their learning processes which enhance their skills and performance through those kind of learning experiences.

Peer learning was also realized in the context of group work of two or three members where pupils collaborated so as to accomplish given tasks through role-plays, brainstorming, literacy games or brief discussions about the taught tasks of the previous day after the teachers' encouragement. Although the time offered for peer learning was considerably limited in comparison to individual work within classrooms, peer work has the prospect of improving children's learning processes through collaboration between learners of mixed ability allowing the development of their collaborative and evaluative skills concerning the presentation of a given task (cf. Falchikov, 2001). However, peer assessment as part of peer learning was encouraged in its simplistic version within classrooms through peer feedback, which often illustrated pupils' misunderstanding of assessment criteria, while it was the teacher's choice whether to include it or not in their teaching approaches.

Additionally, the emphasis on individual work in literacy did not allow more productive time to be spent in peer learning and pair problem-solving where the learners have the opportunity to explore on their own possible solutions of the problem in a collaborative way. Especially for pupils who had been labelled with specific learning difficulties and worked for most of the time within same-ability groups, these two learning models of peer learning and problem-solving allow their involvement with their classmates who had already reached the expected performance and learnt through them, as Vygotsky emphasized in his work (Vygotsky, 1986, 1987). This also might help to explain the lack of empathy

between peers concerning pupils' difficulties in learning which usually leads to negative comments about, and teasing in relation to, their performance, knowledge and skills. The intense focus on individual performance appears to prevent the development of other important learning methods, such as peer learning and it tends to overemphasize individual weaknesses in comparison to their peers. In this way, principles of understanding, cooperation and empathy are hindered among peers.

With regards to pupils' independent work, the coaching learning model was mainly adopted by the teachers at the three schools for the pupils' production of written essays or stories. Teachers modelled the required attainment for writing through resources, namely paragraphs or sentences that illustrated the expectations of the learning objectives, coached their pupils during their practice using scaffolding processes and individual support when it was necessary which was gradually withdrawn when pupils corrected their performance. Teachers' preference for the coaching model instead of mentoring can be explained by their limited available time for working individually with their pupils and the number of their pupils. Furthermore, the focus of literacy activities within classrooms and intervention programmes was more on the improvement of pupils' performance in association with a particular target, usually curriculum requirements in the short-term period rather than on management of elements of their life-course that enables a long-term change.

Pupils' reflection and metacognition were rarely practised within classrooms or even in one-to-one intervention programmes. Therefore, learners' strategies and metacognitive skills appeared not to be developed adequately reproducing their difficulties in particular areas of learning in reading and literacy. Only one of the

three schools (Sunlit River School) placed an emphasis on children's metacognitive learning and especially in one-to-one intervention sessions. For instance, the pupils were asked about their learning strategies constantly during the accomplishment of activities. In this way, they had the opportunity to exercise their meta-memorization and meta-comprehension skills, which enabled them potentially to develop self-regulation of their learning.

Furthermore, due to continuous practice on their self-control the above pupils had also developed their skills in self-reflection, task analysis, goal setting and strategic planning. However, self-motivational beliefs, which are also a part of self-regulated learning, are influenced significantly by pupils' performance leading either to children's strong motivation to be involved in difficult activities or to their disappointment concerning their self-efficacy and expected outcomes of their efforts, affecting their motivation and preferences for easy activities (Schunk and Zimmerman, 2006). These were observed in the ten pupils, and especially Carol, Amanda and Betty, who showed the highest motivation for learning despite their difficulties and prior negative comments by their peers, while Peter and John are representative examples of disappointment and demotivation due to their unsuccessful learning outcomes.

With regards to the design of intervention programmes, they followed more the requirements of the National Curriculum for external examinations than the outcomes of pupils' diagnostic assessments, as they focused mostly on the improvement of pupils' learning weaknesses according to National Curriculum standards. Characteristically, the involvement of important learning practices in the intervention programmes, namely the setting of homework, self-assessment, memory exercises, metacognitive skills and self-control based on pupils'

diagnoses tended to be dependent on specialist teachers'/teaching assistant's decisions. For instance, significant omissions of activities which enhance memorisation skills during Carol's intervention programmes although they had been suggested in her diagnosis seemed to have had an influence on her progress at the Blue Sky School. Additionally, the provision of supportive materials, such as photocopies of the taught spelling patterns could potentially have improved her memory. On the other hand, the intervention programmes at the Sunlit River School were enriched with a variety of activities, involving the practice of pupils' motor skills and self-control techniques, which were addressed not only at the improvement of the children's learning but also at their self-confidence. At the Rose Garden School, the classroom support of Robert and Thomas aimed to improve their performance in writing by planning and discussing their ideas, while Matthew's support also involved the development of his social skills.

Furthermore, the assistive technology, e.g. electronic notebook, appeared to contribute to pupils' learning facilitating the improvement of their writing and memory skills. When it was used within classroom setting, as in Peter's case at the Sunlit River School, it had positive impacts on pupils' learning outcomes. The frequent use of assistive technology can facilitate pupils' learning and self-esteem, but it was found that its lack does not necessarily influence negatively their progress, as with the three boys at the Rose Garden School who presented significant improvement in their spellings without assistive technology.

Classroom activities, such as practices of spellings, revision, planning, self-assessment enhanced by setting homework have the potentiality to balance an absence of intervention programmes resulting in pupils making remarkable

progress in memorisation of spellings, writing and self-regulated learning. Children can be independent learners by developing mechanisms which can lead them to self-regulated learning and metacognition. Thus, differentiation in teaching and learning approaches within classrooms and changes in foci can result in pupils' progress in learning when it is not shadowed by repressive accountability measures, namely examinations and standardized performances. Similarly, less emphasis on pupils' assessment outcomes for accountability reasons can allow this pedagogical tool to provide qualitative feedback to children concerning their learning strengths and weaknesses instead of categorising them in particular groups and determining teaching in classrooms.

Assessment and Feedback

The dominance of Key Stage 2 external examinations over curriculum and the foci of assessment pressurise in an intensive manner teachers and pupils, influencing significantly the application of formative approaches in learners' evaluation. Assessment methods are an important tool of teaching and learning which aims to uncover pupils' potential learning gaps or misunderstandings during their processing of new knowledge and information. Additionally, it shows whether the old knowledge has been acquired successfully allowing pupils' scaffolding process to take place through its application in other contexts. Nevertheless, the emphasis on summative assessment methods by the educational system prioritizes grades over formative forms of assessment with various negative implications for pupils' learning and self-image as learners.

Although performance-based assessment appears not to enhance and represent pupils' learning potential, it continues to determine pupils' evaluation according to standardized testing resulting frequently in biased interpretations of children's outcomes concerning their abilities and intelligence. This kind of summative assessment which is based on grading or marking informs the public about pupils' attainment in particular standardized contexts without though illustrating their actual potential (Brookhart, 2013b). Due to wide and sometimes unquestioned acceptance of the results as indicative images of pupils' abilities, possible failures in those standardized assessments tend to influence negatively their self-efficacy and self-perception as learners and eventually their motivation (Hattie and Timperley, 2007).

At the three schools summative assessment approaches were applied so as the teaching staff could identify their pupils' standardized levels in combination with formative sorts of assessment. Formative assessment in its ideal form, includes feedback which provides information to pupils about their performance related to an educational goal, their learning strengths and weaknesses compared to their previous performances without the use of marks and grades (Black, 2013; Wiliam, 2013). It depends on learners' understanding about their learning targets and on their ability to monitor their own learning which can be achieved by teacher-pupil dialogue and structuring their own learning (Black, 2013; Brookhart, 2013a). Nevertheless, if this type of feedback is combined with marks it may result in negative effects on students' self-efficacy because they misinterpret the extent of their skills and abilities by focusing more on grades (Hattie and Timperley, 2007). Therefore, feedback is a more effective tool for pupils' learning when it is addressed to their learning process aiming at its improvement.

The principal means of feedback provision within the case study literacy classrooms were verbally on a daily basis or in a written and detailed form once per week, whilst in reading sessions it was a combination of verbal feedback during the session with the teachers and written feedback on the pupils' answers of comprehension questions. In relation to learning targets, Hattie and Timperley (2007) have suggested four different types of feedback: task, process, regulatory and pupil's self-level (cf. Hattie and Timperley, 2007). The feedback which is related to task includes information about how well the learners accomplished or performed in that task usually referring to their correct or incorrect answers and resulting in a more surface form of knowledge development.

However, it is an effective practice when it focuses on erroneous interpretations during pupils' learning process and interaction with the task instead of referring to a lack of knowledge or understanding. The latter can be more efficiently achieved with further instructions than feedback of information. Additionally, the feedback of task cannot be generalized to other tasks as its focus is exclusively on the accomplishment of a particular task and its benefits involve the development of more efficient and effective strategies and tools in order for learners to process and understand the materials. This form of feedback, which is also called corrective feedback, was observed more often within classrooms at the three schools during literacy, reading sessions and intervention programmes.

Feedback about the task's processing focuses more on pupils working on tasks including information about relations between people's perceptions and the environment. Furthermore, it is related to their strategies concerning the detection of faulty hypotheses and errors encouraging pupils to change or choose different strategies which are more effective in their application to other

similar tasks. Therefore, learners acquire a deep knowledge and understanding about their strategies and tools which motivate them to be engaged with more challenging tasks. The benefits of this form of feedback include the improvement and effectiveness of pupils' strategies and processes that can result in the enhancement of their confidence and self-efficacy. This kind of feedback was mainly observed in the one-to-one intervention programmes at the Sunlit River School, where the pupils had the opportunity and time to rethink their learning strategies and tools when they experienced challenges in the accomplishment of a task in the session.

The third type of feedback is related to self-regulation which concerns interaction between confidence, commitment and control. More specifically, 'it addresses the way students monitor, direct, and regulate actions toward the learning goal. It implies autonomy, self-control, self-direction, and self-discipline' (Hattie and Timperley, 2007, p. 93). This kind of feedback results in improvements to learners' capabilities for self-assessment and internal feedback as well as enhancement of their willingness to invest more effort and engagement with a task and situation, their self-efficacy and confidence concerning the correctness of their response. Additionally it contributes to pupils' attributions regarding failure and success, and their mastery of seeking help. Therefore, pupils' development of internal feedback and monitoring of their mental processes when they are engaged with academic tasks constitute its positive implications, while children's limited strategies of self-regulation and their dependence on external issues for feedback, namely teaching, can act as impediments.

The ultimate kind of feedback is personal feedback including positive or negative evaluations, and this is not necessarily about the accomplishment of tasks. For

example, when pupils receive praise after a success they interpret it in two ways, either that they have high or low ability, whereas when they receive a neutral feedback or criticism after a failure, they tend to attribute it to their low abilities. Consequently, this type of feedback influences negatively learners' self-evaluation of their abilities, self-confidence and motivation. At the three schools, this sort of feedback was limited as the teachers' main focus was to provide information about the successful completion of tasks rather than personal evaluations.

The effectiveness of feedback, though, depends on various factors. More specifically, the time that the feedback is provided to pupils after the completion of their tasks, namely immediate or delayed feedback can play a crucial role in their learning. Immediate feedback is considered as an appropriate form when it is addressed to pupils' processes, while it could be said that delayed feedback can be beneficial for tasks. At the three schools, the teachers offered immediate verbal feedback often to their pupils when they were dealing with the task, while a more detailed form was provided in written form weekly. Additionally, the effectiveness of feedback is related to the way it is received by the pupils. For instance, some pupils prefer more direct feedback, whilst others feel more comfortable with a more indirect form (Hattie and Timperley, 2007; Russell, 2005). This is also associated with pupils' learning preferences which affect the success of feedback. In particular, for some learners who tend to be active and involved in their learning through exercise and practice, immediate feedback without stressing the important things and giving them the opportunity to try again might be the ideal form for them (Russell, 2005). On the contrary, some pupils need more time to think about feedback comments and they prefer to make their own reflections before they try again.

Other forms of feedback include a theory, a model or an explanation in order for learners to understand better the subject and the reasons for their inaccurate performance. For instance, based on the pupils' learning characteristics, the teacher at the Rose Garden School adjusted her feedback to her pupils offering them immediate, short-term and verbal feedback when it was necessary during their engagement with tasks, whereas in the other two schools the feedback which was given in the classrooms to the pupils was almost the same for all the learners without meeting necessarily their individual learning needs.

Peer assessment and self-assessment were also included in pupils' evaluation of literacy activities. In particular, peer assessment was strongly encouraged within classrooms during literacy sessions at the Blue Sky School, except from Carol's classroom, and less frequently at the Rose Garden School and the Sunlit River School. Falchikov (1993) has claimed that peer assessment benefits pupils' collaborative learning, critical ability, self-confidence, adaptability, independence when they are engaged in group work and responsibility towards to their peers' learning when its criteria and process have been understood by the learners sufficiently. Nevertheless, peer assessment does not have the expected outcomes when pupils have not understood the assessment criteria deeply, as at the Blue Sky School. In this way, learners comment on their peers' tasks without necessarily applying assessment procedures.

On the other hand, self-assessment can lead to pupils' educational maturity because as a self-regulatory ability it involves self-management and self-appraisal (Falchikov, 1993; Hattie and Timperley, 2007). Self-management is related to pupils' monitoring and regulation of their behaviour through various processes, namely planning and correcting their mistakes, whilst self-appraisal is

addressed to evaluation of their knowledge, abilities and cognitive strategies via various self-monitoring processes (Brown and Harris, 2013; Hattie and Timperley, 2007). Both of these aspects are considered very important for children's learning processes, their interaction with feedback and their independence as learners. The development of metacognitive skills via self-assessment results in the improvement of learners' performance in accordance with their expectations and goals; and in their evaluation of their understanding, strategies and efforts concerning their engagement with tasks.

Indeed, the pupils at the Rose Garden School and at the Sunlit River School, who applied self-assessment almost daily in the context of their literacy sessions within their main classrooms and in the intervention programmes, showed an improvement of their attainment, self-confidence, skills of identification of their own mistakes and self-control of their feelings in relation to errors they made, in contrast to the pupils of the Blue Sky School who were not encouraged to apply self-assessment with the justification that dyslexia prevents them from identifying their own mistakes. This type of assessment, though, has the potentiality to benefit pupils with difficulties in their learning, because it appears not to cause them embarrassment due to their mistakes identified by their teachers or peers, while it tends to enable them to experimentally use different strategies to overcome their difficulties, which at the same time can enhance their engagement with their learning without being dependant on others' support.

Assessment is an important pedagogical tool which can foster children's learning and their self-regulated skills. However, the emphasis on pupils' performance in standardized examinations limited its beneficial use within classrooms transforming it as the main measure for pupils' categorisation into high and low

performers. Its negative implications for education can be identified through the narrowing of the curriculum into teaching according to the requirements of assessments, and on children through their demotivation and feelings of stress and anxiety when they are evaluated as low performers. This raises questions concerning fundamental educational purposes and their realisation within educational institutions.

In the final chapter I suggest how genuine inclusive practices can be conceptualised and enacted in UK schools.

Chapter 8: Discussion and Conclusions

In the concluding part of this thesis, the key arguments and the ways in which this study contributes to the field of education are presented. The main focus of this research is the school curriculum addressed to pupils identified with specific learning difficulties. Semi-structured interviews and classroom observations were conducted within three case studies of English mainstream primary schools in the London area aiming to answer the principal research question 'How can a school curriculum provide effective learning and equal opportunities to pupils with specific learning difficulties for literacy at Key Stage 2?'. Documents of pupils' writing were also collected so as to allow an in-depth understanding of their difficulties in literacy. The sample of respondents included pupils aged 9-10 identified either by official diagnosis or by their teachers in relation to specific learning difficulties and especially to dyslexia, their parents as well as head teachers and teaching staff.

The small number though, of the case studies can be viewed as a methodological limitation of this research project, as it does not allow generalisations to be made. Nevertheless, this study was designed to reflect depth rather then breadth, because it has examined cases and within those case studies individual cases within the schools. Guba and Lincoln (1985) suggest that there are a number of criteria for judging the worth of a research project. The first validity criterion is whether the research findings are credible to participants in the research. Credibility is a form of respondent validation and is underpinned by an assumption that participants can have full knowledge of their worlds. Guba and Lincoln (1985, p. 296) suggest that the naturalist must show that the work is

'credible to the constructors of the original realities'. The second of Guba and Lincoln's (1985) criteria is transferability. One of the problems with the notion of external validity is that in experimental settings, despite rigorous methodological checks, it is rarely possible to be certain that the artificiality of the case being examined does not impede the making of generalizations or the transposition of the findings of the experimental case to other cases in place and time. Transferability is a less well-developed notion than external validity, since it places the burden of proof on the reader or user of the research: 'the naturalist cannot specify the external validity of an enquiry; he or she can provide only the thick description necessary to enable someone interested in making a transfer to reach a conclusion about whether the transfer can be contemplated as a possibility'. (ibid., p. 316). Guba and Lincoln's (1985) third and fourth notions are those of dependability and confirmability. The social world is such that emergent designs are appropriate for its investigation, whereas pre-determined designs are more appropriate for the study of the natural world, albeit that they can never provide absolute knowledge of events. The problem with emergent designs is that they acknowledge the central role of the researcher in the act of collecting data and thus rule out the possibility of replicability. Guba and Lincoln's solution is to concentrate on the research act itself and, by using an auditor, posit the notion of an ideal or correct research procedure. The auditor's role is to confirm that the researcher has followed the most appropriate procedures, made the most rational connections between phenomena and drawn the most sensible conclusions that they could have done in the circumstances in which they find themselves. The auditor would have a number of tasks: 'to ascertain whether the findings are grounded in the data whether inferences based on the data are logical', whether 'the utility of the category system: its clarity, explanatory power

and fit to the data' are realistic, and finally 'the degree and incidence of inquirer bias' (ibid., p. 318). I did not use an auditor in the research project described in this thesis.

Main Findings of the Research and Contribution

The main findings of this research are presented as answers to the three sub-questions of the study and are indications of its contribution to knowledge. The first sub-question: 'How can pupils identified with specific learning difficulties learn effectively?' would be deficiently answered if pupils' individual needs were not taken account of. In particular, based on the findings, the children who participated in the study presented differences in their learning difficulties, preferences in learning, and social and emotional needs that do not justify the recommendation of a general guidance about learning for all pupils. However, examining critically the participants' perspectives about this issue, the teaching approaches, assessment tools and pedagogical theories, some concluding remarks can be made. From the ten learners, five pupils had been officially diagnosed with dyslexia, one pupil with Autistic Spectrum Disorder and a range of learning difficulties, while four pupils had been identified with significant difficulties in their learning presenting signs of dyslexia by their teachers and specialist teaching assistants. All of them experienced remarkable difficulties with memorisation of sequences and spellings to different degrees affecting the expression of their ideas in written form. Furthermore, their reading comprehension skills and their concentration skills were varied. Additionally, marked problems with their self-confidence and self-esteem were caused mainly

by their classmates' negative comments about their performance in standardized assessments and by the children's feelings of inferiority due to their low achievements. This influenced significantly their self-esteem, motivation, attitude to learning, socialisation and self-image as learners.

The intention of this study was not to reproduce stereotypes about the learning characteristics of pupils identified with learning difficulties. Consequently, it is argued that teaching and learning arrangements play a crucial role in children's learning. Indeed, it was found that various teaching and learning practices had different outcomes in terms of their effectiveness in pupils' learning processes. The learning model of practice had positive results in the amelioration of pupils' weaknesses in memorisation of spellings when it was applied frequently within classrooms and intervention programmes, and in combination with homework improved significantly the children's attainment in that area and their self-confidence. It also had similar outcomes for the pupils' reading and comprehension skills.

Additionally, mnemonic strategies, namely rhymes enabled the pupils to remember sequences or spellings of long words, while techniques of copying, repetition and revision facilitated significantly their memorisation skills. Self-assessment and immediate feedback, usually verbally, enhanced pupils' self-awareness, metacognitive skills, memory, identification of their mistakes, and self-regulation of their learning, encouraging them to undertake the responsibility for their own learning and to seek independence in learning. On the contrary, the lack in the previous practices caused further anxiety, stress and frustration to pupils. Assistive technology also facilitated their learning process especially in terms of their self-confidence, whereas its absence did not necessarily have

negative implications for the development of their thinking skills. In terms of concentration difficulties, the children almost unanimously expressed their preference to sit alone rather than in groups especially during testing, whilst many of them preferred their friends' support within the classroom concerning their difficulties in spelling and instructions.

Accordingly, with regards to the effective learning of the pupils, teaching and learning approaches which allow their independence and self-regulated learning have positive outcomes in their learning processes, motivation and self-confidence, minimising significantly any potential embarrassment or inferiority caused by criticisms of their skills, knowledge and performance. The contribution of this study in that area relates to the holistic view of the pupils' perspectives about their learning processes and daily challenges at schools, and the identification of misconceptions concerning their learning needs derived from the comparison between the pupils' and their teachers' perceptions. This study was primarily based on the pupils' experiences and worldviews about the current educational system and schools' arrangements as they are the direct recipients of educational policies and measures. Consequently, it is argued that when pupils are perceived as individual learners with their own learning strengths and weaknesses, without bias, labels and stigmatisation based on standardized assessments it allows the development of independent learners who can manage efficiently their own learning processes.

Answering the second sub-question: 'How do schools' structures and practices provided by their curricula encourage effective learning for pupils with specific learning difficulties?', it was found that the schools' arrangements influenced significantly pupils' learning and self-perception as learners. As Giddens (1994)

suggests: 'people shape structures but structures also tend to determine what people can do' (cited in Siraj-Blatchford, 2010, p. 472). Structures enable individuals to work within them in formative and creative ways as they determine in this way the reproduction of social systems. The structure of educational practices is a crucial issue for pupils' development of learning, because they shape children's self-awareness in terms of abilities and skills. In addition, structures are constructed based on specific values and principles which aim to fulfil educational purposes. Based on the research study, the teaching and learning arrangements of the three schools for the pupils who participated in the research aimed to meet the requirements of inclusive education and of the National Curriculum, which tends to encourage standardized developmental processes.

In particular, the 1994 Salamanca Statement which introduced the concept of inclusive education in mainstream schools promoting equal opportunities and access to curriculum and resources of pupils with special educational needs is based on ambiguous notions concerning definitions, measures and purposes. This in combination with English educational policies which tend to promote school accountability measures that expand the existing competition through a standards agenda has caused major problems for inclusive measures, processes of diagnostic assessment and schools' organisation. Counter-factually, the lack of unanimity concerning the severity of dyslexia for the provision of diagnosis causes significant inequalities in pupils' learning.

In practice, the three schools aiming to combine these two fundamentally different agendas, the inclusive and the standards agendas, arranged ability-based groups in literacy according to pupils' levels in standardized assessments

as their main seating style. Additionally, differentiation in materials and teaching was mainly facilitated by teachers to meet pupils' learning needs, while teaching assistants were allocated to children with special educational needs taking on the responsibility for their learning. Intervention programmes were also provided for pupils with diagnoses, whereas it was the schools' choice to support further their pupils without an official diagnosis. Nevertheless, the above measures had various implications for pupils' learning and self-esteem. For instance, the seating arrangement of ability-based groups appears to create stereotypes about children's abilities, embarrassment, feelings of inferiority, isolation, lack of active participation, motivation and empathy, stigmatisation, labelling, low self-confidence and problems with concentration to pupils who experienced significant difficulties in their learning. This also influenced teaching approaches resulting many times in teachers' low expectations of their pupils' progress, while the differentiated materials were often addressed to a lower level compared to the requirements of external examinations.

This research has contributed to the concept of inclusive education by examining critically the educational policies in England during the period 1978-2016, underlying the problematic areas of terminology, educational measures and inclusive practices in comparison with practical difficulties and issues as they emerged from the empirical research. It has also illustrated the different implications of schools' teaching and learning arrangements on pupils identified with specific learning difficulties, which tend to influence children's effective learning.

In answering the third sub-question: 'Which elements are taken into consideration in the design of a curriculum for this specific set of pupils?', various

learning and curriculum theories were explored. The curriculum design and development reflect the aims of education which are based on various philosophies that view learning differently, introducing respectively pedagogies and assessments. The behaviourist perspective considers children as 'tabula rasa', and suggests that learning processes are characterized by a transfer of knowledge and its passive assimilation. On the contrary, the perception that 'the mind is not a vessel to be filled but a fire to be kindled' as it was expressed by the Greek philosopher Plutarch (46-120 AD) and supported by socio-cultural learning theories encourages pupils' active engagement with knowledge in a critical and creative way (Vertsetis, 1986, p. 12).

Educational structures in respect of their stance on this ontological issue formalize pupils' learning targets and the pedagogies that enable them to achieve them. However, pedagogy does not simply refer to ways of teaching curriculum content but to something more special and esoteric (Corbett and Norwich, 2005). The focus on teaching methods and assessment tools, though, monopolizes the interest in the field of education causing debates related to specialized pedagogy according to individual needs or common pedagogies applied to all pupils.

Throughout this study the critical discussion of curriculum models and the principal inclusive theories, which attempt to explain the problematic implementation of the concept of inclusive education, has contributed to an in-depth understanding of the practical difficulties translating theory into practice. Additionally, based on the above theories and research findings, this study suggests the following alternative curriculum which encourages individuality in learning, pupils' collaboration, empathy and understanding, teachers' expertise

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and lack of labelling. This attempts to minimise the negative effects of the competitive standards agenda and the gaps in the inclusive agenda.

An alternative curriculum

Taking into account all the theories that have been referred to throughout the thesis and the findings of the empirical research, an alternative curriculum is suggested which aims to restructure pupils' education without pedagogical and social barriers.

The principal causes of the problematic realisation of inclusive education through curriculum development are identified in the foundations of educational systems and especially in their expectations. The unsuccessful outcomes of the application of inclusive measures in mainstream education tend to be explained by the contradiction between the standards agenda and the inclusive agenda. In practice, the two contradictory agendas illustrate the marked differences between curriculum purposes for the acknowledgement of individuality in learning, and accountability policies which demand pupils' high standardized performance in external examination and eventually schools' high positions in league tables.

The notion of transforming mainstream schools into inclusive institutions, it can be argued, was based on the current educational system introducing new practices, namely special provision that intends to facilitate the accession of pupils identified with special educational needs. In this way, the current English educational system that has competitive characteristics in its foundations seems to be viewed as the most appropriate system for meeting socio-economic needs. However, its emphasis on medical diagnoses for children's learning abilities

appears to medicalise education and categorise learners into able and less able pupils.

Additionally, the provision of intervention programmes for learners based on their diagnostic assessments aims to ameliorate their learning difficulties so that they perform in a similar way to their peers, reproducing in this way pupils' categorisations, standardized performances, and the belief that being a different learner is an unacceptable learning attitude. The implications of this situation on schools' practices involve the allocation of the responsibility of pupils' learning to teaching assistants, and the enhancement of stereotypes about children's learning characteristics and future progress among teaching staff, parents and society due to the wide use of medical labels, namely dyslexia.

Based on this study's findings, the structure of the educational system appears to influence negatively pupils identified with difficulties in their learning. In particular, accountability policies for schools tend to press the teaching staff to focus more on pupils' high achievements in external examinations in accordance with the requirements of the National Curriculum. The majority of teaching time in literacy is dedicated to pupils' writing based on the specific criteria of the standardized levels, whereas classroom organisation into ability-based groups is adopted so as to facilitate the achievement of the above target for pupils' high performances. Additionally, the curriculum appears to be narrowed to teaching basic skills and the focus of intervention programmes seems to be on learners' adjustments to the expected levels. Pupils' strength in verbal expression is not taken into account during the examinations limiting in this way the realisation of equal opportunities in education. Consequently, pupils' categorization according to their current abilities as they were identified by standardized assessments do not allow

actual inclusion to be realised, while the assignment of children diagnosed with specific learning difficulties to teaching assistants, either specialized or not, underlines negatively their learning differences, giving the impression that they are not normal learners and undermining their ability to operate as self-regulated and independent learners.

An emphasis on their low performance can also create stereotypes of their abilities and becomes the main reason for their teasing or bullying by their peers. This in combination with a lack of diagnosis affects detrimentally pupils' self-esteem as children due to their anxiety and frustration about their intelligence and performance have the tendency to attribute their failures to meeting the expected outcomes to their abilities. Furthermore, high competition among pupils in terms of attainment, which tends to be fostered, can prevent the development of empathy, understanding and collaboration among children.

On the other hand, significant considerations concerning curriculum development and inclusivity have led to a long-term debate. Instrumentalist curriculum models (autonomous instrumentalism, critical instrumentalism and economic instrumentalism) and the cultural transmission curriculum model locate education in the service of social, political, economic or cultural needs. These models construct the idea of an ideal society and respectively ideal citizens who need to be educated in such a way that can support the realization and reproduction of this ideal. Regardless of the relevant emphases either on autonomous individuals, or society, or economy or culture, they foreground society, giving importance to its needs, and they understand education as a tool which aims to produce the kind of citizens able to meet its requirements. Accordingly, curriculum content is selected so as to meet the various needs of the society

excluding knowledge, which is not considered as necessary for the above purposes, while accountability measures ensure the control of future citizens' knowledge and skills through the overemphasis on pupils' assessment.

These curriculum designs permit current governments to introduce changes and new measures according to their political perspectives. Therefore, a curriculum is understood as the content which is taught in schools, including learning objectives, teaching approaches and assessment procedures (Carr, 2003) based on specific principles and values. A characteristic example is the association of education with the democratic society which sets particular curriculum aims according to democratic principles and has as an end-point the encouragement of active citizens and critical thinkers. However, some paradoxes are identified in pupils' processes of becoming active and critical citizens in democratic societies. More specifically, pupils are expected to learn and perform in the same way reproducing similarity and regularity in learning and thinking, which is in tension with democratic principles of plurality and difference in people's thinking. Characteristically, pre-constructed answers and ways of thinking which ensure pupils' high achievements in external assessments are encouraged within schools through the expectations of external examinations. Inclusive education, therefore, is viewed as the enactment of an instrumentalist curriculum model to normalize difference among learners, because difference in terms of opinions, attitudes, knowledge and skills cannot be easily controlled and managed socially and politically.

Learning processes, also, take the form of a horserace, as teachers' and pupils' efforts focus on the achievements of high performances in assessments by filling the learning gaps in a short-time period. Furthermore, potential difficulties and

differences in learning are viewed as something that can have negative implications for learner's future life and social acceptance. Accordingly, medical explanations of them, including intelligence tests, are used in education and recommendations of pupils' improvement in learning are offered. Inclusive practices, such as intervention programmes, which aim to fix learners' cognitive problems which prevent them from performing in a similar way to their peers, are applied in educational institutions, without taking into consideration other factors that play a role in learning, namely learners' motivation, self-esteem and learning environments.

A more holistic view of the learning process and of the individual as a learner is offered in the curriculum model of productive learning environments (Scott, 2016). Acknowledging the various elements that contribute to and influence learning, such as spatial and temporal arrangements in learning environments, material resources and relationships of learners with their peers and teachers, an explicit differentiation of curriculum aims and content from pedagogic strategies and assessment methods is suggested which can facilitate the learning process. Additionally, a variety of learning objectives, pedagogic approaches and the structure of curriculum content with an emphasis on formative assessment modes encourage learners to be actively involved in their learning process allowing the development of self-regulated learning processes.

Taking into account the practical challenges of inclusive education, the negative implications of inclusive arrangements on pupils' learning, well-being and socialisation, and the various curriculum theories, it is suggested that the starting point for an alternative curriculum model needs to be the practical acknowledgement of individual differences in learning as a natural and normal

learning attitude. All pupils as they process knowledge and information experience difficulties regardless of their socio-economic and cultural background. Hence, pupils' difficulties are part of their learning processes and not an irregular learning attitude. Additionally, learners have different paces, styles, interests, motivations, experiences, beliefs, opinions, backgrounds and self-confidences which also need to be respected practically. The above issues in combination with arrangements in learning environments, namely the formation of relationships with their teachers and peers, spatial arrangements and material resources play an important role in shaping pupils' learning profiles and their attitudes towards learning. The reproduction of various labels which potentially pathologize education and learners, namely inclusive, special, specific learning difficulties and dyslexia tend to attribute negative meanings to differences in learning.

Simultaneously, not learning in the same way does not mean that learners do not have the same rights in education. In this case, education is not seen as a socio-economic or political tool, which is based on pupils' categorization according to their current abilities. In contrast, education aims to enable learners to challenge and construct their society retaining the worthy elements and changing the problematic issues through collaborative procedures and through understandings of their culture, history and society as well as of other societies. Accordingly, learners need to be located in the centre of education. Free access to knowledge and information, free expression of their opinions supported by valid arguments and actions which cannot harm their fellow person and society, development of empathy, respect, collaboration, creativity, critical thinking and self-regulation of their learning and life are also needed to be nurtured through education.

Nevertheless, the child-centred pedagogic approaches seem to be viewed as a limitation of teachers' initiatives for pupils' learning. On the other hand, children's minimal engagement in their learning cannot benefit their independence. A combination of various teaching approaches seems to function in favour of children's learning, especially when accountability measures, such as summative assessments and standardized learning objectives, do not restrict their efficient application within learning environments.

Furthermore, all learners have skills and capacities which can be developed either in the short-term or the long-term. Therefore, as education refers to learners' qualities, their measurements in quantitative ways result in unfortunate and invalid outcomes. For example, learners' abilities cannot be characterized by grades, or by 'A', 'B', 'C' based on inaccurate standardized performances, because it is in tension with the concept of lifelong learning. As summative assessments do not reflect pupils' potential and future progress, formative evaluation places a significant emphasis on self-evaluation and formative feedback, and is considered as the most appropriate evaluation approach which encourages learners' self-regulation of their learning process. For instance, combinatorial projects of various subjects, namely history, literature and science on suggested topics presented either in written form or verbally according to their individual learning characteristics can be the basis of pupils' formative evaluation. In this way, learners develop their higher order thinking skills, namely critical and creative thinking by exploring different topics, while they are assessed in respect of their learning profile equally.

Learning progress is also identified through individual's achievements in meeting personal learning targets without, though, overemphasizing the notion of failure.

Self-regulated learning reflects the concept of lifelong learning which allows learners to develop their potential in a long-term process without being negatively criticised and labelled about their outcomes in the short-term. Consequently, education cannot be considered as a basis for comparisons or competition between pupils, but as a basis for the communication of ideas, collaboration and contributions that enables learners to self-improve. Furthermore, as education concerns qualitative changes within a person, learners' acquisition of knowledge cannot be measured in valid ways. Therefore, in modern societies where there is a plethora of information, it does not matter how much someone knows but how he/she applies it in his/her life and society.

The structure of curriculum content, which aspires to higher order thinking, needs to be designed in such a way that allows revision and reconstruction of knowledge throughout education in a critical and creative way, and the application of theory in practice taking into account learners' experiences and background. Strongly framed curricula with clear distinctions between subjects do not foster learners' development of a holistic view about topics, facts, events or an era and therefore, this type of organization does not encourage children's motivation for engagement with knowledge. However, in some subjects, namely literacy and mathematics it is important that basic knowledge is acquired properly by children, allowing them to continue to higher operational modes. For instance, in terms of learning language which consists of elements, such as grammar, syntax and vocabulary, a systematic and organized way assisted by linguistics enables learners to understand the structure of their language. This, though, does not presuppose an overemphasis on writing against other modes of communication.

Pedagogical approaches, with an emphasis on teacher-guided discussions need to permit learners to think critically and creatively, to support their arguments with evidence, to express their ideas and opinions without causing harm to others, and to work collaboratively on projects. Homework, also, can encourage pupils' self-regulation of learning and motivation for their further involvement with knowledge. However, in order for the above to be achieved, some changes are presupposed, namely smaller numbers of pupils within classroom, improvements to teacher education that aims to enable teachers to support their pupils without relying on the presence of teaching assistants. Furthermore, children's choices concerning their spatial arrangements can foster their peer learning and socialisation, allowing them to manage their own learning in respect of their individual learning needs.

Summarizing, learners are equals in their right to education regardless of their strengths and weaknesses, and they need to have the opportunity to shape their lives according to their personal choices and desires. Curriculum content offers the opportunity for learners to study various political, social, economic and cultural issues, and to suggest changes through collaborative processes. Therefore, a curriculum that is driven by socio-economic needs tends to result in biased and restricted content. The development of individuality and teamwork through communal projects also needs to be encouraged. The emphasis is not on assessment of what is learnt but on improvement of what is learnt. The main principles of the curriculum need to be an acceptance of the other without categorizing, labelling and judging their learning processes and ways of learning. Sameness in learning is considered as an illusion, because in practice it cannot be achieved. Hence, any practice which pathologizes education and learning is viewed as an inappropriate measure for children's well-being.

As Isocrates (436 BC - 338 BC) argued in his rhetoric speech *Panathenaicus (339 BC),* the 'educated man' is:

> Whom, then, do I call educated […]? First, those who manage well the circumstances which they encounter day by day, and who possess a judgment which is accurate in meeting occasions as they arise […]; next, those who are decent and honourable in their intercourse with all with whom they associate, tolerating easily and good-naturedly what is unpleasant or offensive in others and being themselves as agreeable and reasonable to their associates as it is possible to be; furthermore, those who hold their pleasures always under control and are not unduly overcome by their misfortunes […]; finally, and most important of all, those who are not spoiled by successes and do not desert their true selves and become arrogant (Isocrates, 1930, pp. 391-393)

Without making any reference to the accumulation of knowledge as a purpose of education, Isocrates considers educated people to be those who can judge any occasion and act accordingly either as individuals or as social members contributing in this way to society's welfare; who can collaborate honourably and show understanding and empathy; who can be self-controlled, identifying what is good and what is harmful for themselves and for others; who cannot be restricted by their failures and misfortunes but face them with courage; and who cannot be corrupted by their successes and favourable fortune, in the process becoming isolated, arrogant, unconcerned and apathetic for and about the well-being of their fellow men and women. Therefore, in his view, education does not concern

the transfer of knowledge for assessment purposes, but it refers to knowledge acquisition and use for people's well-being.

My conclusion is that the main purpose of education is children's well-being and this needs to be the principal target of educators, setting aside teaching and assessment practices which result in the opposite outcomes. This can be in accordance with, as Socrates also reminds us, education that brings all the good is just like a fertile land.

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Appendix 1

Thematic analysis of 35 interviews from Blue Sky School

- **Specific Learning Difficulties (focus on dyslexia)**
1. **Characteristics of SpLD (dyslexia)**
   1.1. <mark style="background-color: yellow">Cognitive</mark>
   (1) <mark style="background-color: #00ff00">Characteristics</mark>
   (a) *Memory*
   1. Lack: about spelling mistakes/ words-ideas they want to write/ purpose of writing/ tasks of day's lesson/ time/ visual memory/ short term and working memory/ time tables instructions in general
   2. Good: about topics they are interested in/ plot of their reading either reading it with teacher or not/ their written sentences/ the task of their intervention/ lyrics of songs

   (b) *Reading*
   1. Preference on reading than writing
   2. Preference on reading with pictures-comic books
   3. Various reading skills
   4. Various comprehension skills
   5. Difficulty with phonics – sound of words and letters-phonological awareness
   6. They don't remember the plot when the book is too big
   7. Focus on reading the words and not the meaning
   8. Fast readers of books
   9. Difficulty with decoding

   (c) *Writing*
   1. Difficulty with writing
   2. Preference on writing: stories/ describe pictures
   3. Dictation: cannot follow because they forget the meaning of the words but they write them down
   4. Difficulty finding the correct letter from the sound in spelling
   5. Difficulty with time pressure
   6. Logic and persuasive skills
   7. Tests
   8. Difficulty with complex sentences
   9. Difficulty in expressing their ideas in writing
   10. Long sentences
   11. Difficulty in recognition-identification of their own mistakes

> **12.** Difficulty in spelling, missing out words, thinking process of writing down their ideas

(d) *Orals*
   1. Better when they express their ideas orally
(e) Creativity – thinking outside of box- many ideas-imagination
(f) Self-correction skills
(g) Difficulty with instructions
(h) Difficulty in organizing ideas-structure
(i) Lack of concentration/ easily distracted
(j) Good at vocabulary
(k) Difficulty in memorizing
(l) No assimilation at the same pace -processing
(m) Observation skills
(n) Difficulty in metacognitive skills
(o) Active in classroom in terms of bringing ideas and answering about reading-no reading aloud

(2) <mark>Pupils' strategies</mark>
   (a) Teacher's help
   (b) Peer's help
   (c) On their own
   (d) Extra set work at home by parents' initiative

   (e) <u>Strategy of learning a new word-spelling-reading</u>:
      1. Dictionary: meaning/spelling
      2. Try to think if the word sounds/ is **familiar** (the familiarity of the word helps to their memory)
      3. Ask someone else/ a friend or a family member
      4. Break down the word into smaller parts orally or written
      5. Remember the meaning + pronunciation of the word for the spelling
      6. Handwriting or writing the word letter by letter
      7. If mistake in spelling then copying few times
      8. Check its correctness by someone else
      9. Use of sentence form the front letters of a word (e.g. 'because')
      10. Songs of letters or alphabet
      11. Use of glossary for new words at school
      12. No specific strategy which will repeat for remembering a new word
      13. Memorizing through repetition the spellings-daily practice

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(f) <u>Strategy of writing a paragraph & in tests</u>:

1. Thinking of a word to start and then this word gives them ideas
2. Thinking of the sentence in their mind, then they write and then they change it if it is necessary
3. Organizing their ideas somewhere else
4. Guess the right answer in test when it is difficult
5. Carry on and then go back in the difficult task at the end of the test
6. Go back at the end of test to see what they forget and correct it
7. Skip the difficult tasks in test
8. Read over again the difficult task in test but if cannot find it then skip it
9. Made an answer for a test
10. To sit alone and write the test on their own without the others distracting them
11. Read again and again all the text in order to find the no obvious answers of difficult questions

1.2. Self-esteem

(a) Causes - Results

1. Frustrated about spelling
2. Annoying about spelling and knowing that other people can spell it
3. Annoying for asking help by other peers/teacher
4. Classmates comments about spelling
5. Feeling weird to read their own work although they want sometimes
6. No comfortable to read aloud in front of class
7. Tests are annoying because not able to finish all the questions and leave them
8. Dictation: annoying because of time pressure/wrong spelling/ memory lack
9. Find hard the dictation because of unknown words- preference to know in advance the text for dictation
10. Wondering about their intelligence
11. Trying to understand and explain their difficulty
12. Anger & upset when something is difficult making them to be quiet and refusing to do anything
13. Feel being stupid
14. Not sure by themselves
15. Using as an excuse the lack of their memory
16. Prefer their independence on their studying
17. Very stressed when test- scared about performance-upset about label and dyslexia

18. No confidence
19. Feeling 'special'
20. Motivation to work hard
21. Tendency to give up in difficult tasks resulting in being quiet when upset
22. Embarrassed asking the others
23. Lack of motivation
24. Shy-embarrassed-uncomfortable- upset and frustrated for mistakes making them quiet
25. Fear of told off for not completing their work-silly when compared to their peers
26. Need for their self-management
27. When dealing with difficult task, feeling being: stuck, confined in his ability, embarrassed to ask, barriers, demotivation, humiliation by peers, stop learning process

(b) Awareness of pupils about their difficulties:
1. Awareness of memory lack
2. Awareness of their level
3. Awareness of difficulty in literacy
4. Awareness of their dyslexia
5. Awareness of not good spelling
6. Awareness of mistakes when they compare with correct word in spelling
7. Awareness of confusion of sounds in words
8. Awareness of their learning: they want 'next steps' to be improved

(c) Pupils' strategies to cope with it
1.3. Social
   a) Parents'-teachers' opinion: no problems with peers
   b) Pupils' opinions: experience comments about their performance by their peers

- **School's Practices**
2. **Curriculum, Learning, Inclusion**
2.1. Curriculum
   a) Principles: to meet the needs of pupils/ knowledge of expectations from them/ feedback/ praise/ respect and safety/ inclusive principles and good teaching and learning strategies/ to cover wide range of topics and experiences/ activities out of school for enrichment of their experiences
   b) Structure :
    1. Interruptions of routine by other events
    2. Emphasis on pupils' levels

3. Organic Grouping according to levels- affect their self-esteem
4. Structured routine daily because: social norms, everyday expectations and consistency
5. Extra teaching
6. Respect to rights of children for play and praise
7. Focus on writing
8. Clear timetables – time tables and dyslexia/ they should not use their dyslexia as excuse but to manage it
9. Encouragement of learning: motivation to be learners themselves

c) School's strategies
1. pupils with SpLD learn strategies for spelling/ organic groups based on levels and individual and peer work/ mixed ability groups are used for social reasons but main grouping is based on their levels so they can target the teaching on a particular need/ indicators of levels: lists with targets-tests-performance in classroom activities

2.2. Learning
(1) Pedagogy
(a) Purpose is to differentiate
(b) Structure of learning: routine (e.g. journal/guided reading/literacy)/ self-reading/ lots of writing (Y6 especially)/
(c) Teaching methods: acting/ 'hot seat'-interviews/ description of pictures/ dictation/group work
(d) Emphasis on levels and exams (narrowing the curriculum into 200 words for spelling)
(e) Teacher-pupil relationship
(f) Homework: no as a setting thing-just guidelines: reading
(g) Teaching material: same books for activities throughout the Years and for silent reading
(h) Encouragement of learning in classroom: atmosphere of classroom-teacher's many expectations-if meet the expectations then praise- if not repercussions allowing accountability
(i) Practices at home by parents' initiative: repetition of time tables/ audiovisual activities-reading books-dictation-writing-test-timetables-maths exercises
(j) Better learning for them: through one-to-one or small groups/ positive for homework-more structured work/ need for more specialized guidance/ teacher and self –assessment, detailed feedback/ with peer of higher level –no friend/ practice of visual memory for spelling- self-correction/ practice-recognition of their mistakes but not too many words/ repetition of word several times for spelling – writing sentences with the words

(k) Issues influence their learning: tasks-classroom environment-routine in learning-teachers/ motivation-school

(2) Assessment

(a) Kinds of assessment: Peer assessment/ teacher's assessment/ tests

(3) Feedback

(a) Kinds of feedback: constantly, verbal,carpet, group activity, written & detailed within rota, reports

2.3. Inclusion

(1) Principles: to meet the pupils' needs

(2) Practices

(a) According to diagnosis: focused work with adult for specific programmes; differentiated work in class; use of technology; intervention group for levels

(3) Special provision

(a) Content

(i) Intervention group for their level (because of exams Y6)

(ii) Special provision for dyslexia: word families and sentences/ alphabet order/ memory activities/ dictation/ technology-IPad for dictation/ spelling patterns-strategies/use of dictionary/ for memory: pair games-timing of their performance in alphabet patterns -speed in matching cards/ self-correcting their work/ rewriting words for practicing spelling/ no instruction work is included in provision but in classroom they do some/ no self-assessment strategies for recognition of misspellings- someone else has to identify to them the mistakes

(iii) One-to –one provision/ support in classroom for organizing ideas

(iv) Focus on exams for Y6

(v) Designer of provision: expert who did the diagnoses, class teache, TA, Head of inclusion and discussion with parents

(vi) Focus on exams-preparation for tests in Y6

(b) Frequency and results

(i) Interruption of lesson and learning in classroom to go out for special provision

(ii) Interruption of providing the special provision for other reasons (e.g. busy student or SEN teacher with other activities)

(iii) 3 days/week – 2*15 min. session+ 1*30min session/ 2*30min. session in class and 1*30min session for dictation

(c) Outcomes

(i) according to pupils' views: limited knowledge (they didn't remember the unknown words that they found)

(a) Factors: teacher training/knowledge/ examinations and their expectations regardless from where the pupils start- emphasis on levels

- **Educational system & social issues**
1. **Diagnosis for SpLD**
   a. Process: long time
   b. Factors which influence: age
   c. Outcomes-changes: extra support at school /self-awareness/ extra help at home/ self-esteem and family ability to help/ more confident/ better career/ but no difference in general
   d. Outcomes of potential delay in process: delay in learning/ refusing to do extra work at home/ wrong impression about self-awareness/ wrong impression by others (parent and teacher may think lazy/slow/apathy)/ low self-esteem

2. **Equality**
   a. external examinations
      i. influence on pupils: stress/ grades not representative of abilities/ hold back the career in beginning/ grades +teachers' comments influence their self-perception/ assessment for pupils' learning is good but not with this testing system
      ii. influence on teachers: emphasis on levels/ time pressure
      iii. influence on schools: narrow the curriculum

3. **Opinions about SpLD-how they are viewed**
   a. Social issues by pupils: labeling-stigma/ social preconceptions about their abilities/ barriers to learning/ other weaknesses don't have terminology, like lack of creativity
   b. Social issues/concerns by parents: concerns for delay-memory lack-learning progress-no comprehension-no asking for help/ more help/ labeling/ standard developmental level in learning/ critique to expert support and changes in staff cause fear to pupils/ concerns about exams-time pressure and performance/ critique to intervention (focus on levels) and to style of h/w (self-awareness h/w) of school
   c. Social issues by teachers/ head teachers: concentration issues but not different from others

Appendix 2

Applicant name: Anna Moutra   Date:

Address: 20, Bedford Way

Postal Code: WC1H 0AL   E-mail: amoutra@ioe.ac.uk

Dear Sir/Madam,

I am a doctoral student at the Institute of Education, University of London, currently pursuing my PhD Degree in Education. My department is Curriculum, Pedagogy and Assessment. For the purposes of my study, I intend to conduct my research in the field of Curriculum. My aim is to design a school curriculum for students identified with specific learning difficulties (e.g. dyslexia, dyspraxia) aged 9 to 11 for literacy at Key Stage 2. I am interested in exploring the learning processes of these students in literacy.

For the purposes of my research, I aim to conduct a study in mainstream primary schools during the academic year October 2013 to June 2014. More specifically, I hope to visit your school ten days in total to make classroom observations of literacy lessons at Key Stage 2. As my intention is not to cause any disruptions with my visits to your and teachers' schedule, you and the members of staff can choose the most suitable dates for your school.

My research methodology requires a sample of head teachers, teachers, teaching assistants/special educational needs teachers, and students aged 9 to 11 who have been identified as having specific learning difficulties (either with SEN statement or not) and included in mainstream education. I aim to conduct a small number of interviews with all the adult participants who are willing to take part in my study. I hope to interview you and the teachers, teaching assistants/special educational needs teachers of the students with specific learning difficulties at your and their convenience. The interviews can be conducted either in a formal way with the use of a voice recorder with the participants' consent in order to facilitate accuracy in collecting the data or in an informal way without the use of a voice recorder.

I hope to observe classrooms in an effort to understand the learning process of these students in reading and writing. As a classroom observer, I am willing to participate in activities that include the students who are part of my study, if the teacher requests my assistance. Additionally, if the school provides special provision to these pupils during my school's visit, I hope to observe their special classes with the consent of the students and special educational needs teacher. In the event that students are absent on the day that I visit the school, I intend to reschedule at a later date that is convenient to you, the teachers and the students.

In order for me to interview the students, I have obtained a Disclosure and Barring Service (DBS) check. I also intend to seek permission from parents/guardians and from the students. I intend to conduct the interviews with the students after the lessons and they will be based on their experiences of the day's lesson. The interviews can be conducted individually, or with a friend, or in the presence of an adult at the child's discretion after the classroom observations. The interviews can take place in the classroom or in any other area within the school grounds where the interviewees will feel comfortable.

Participants' and school's anonymity as well as the safety of data obtained during the research is absolutely guaranteed. My academic supervisor and I will be the only ones having access to the data. I aim to publish independently the results of my research e.g. in an article or at conference under participants' pseudonyms so as to inform the academic community about my study. In accordance with the ethical requirements of scientific research, my methodology has been reviewed and approved by the Research Ethics Committee of the Institute of Education.

All participants retain the right to refuse to participate in the research or withdraw at any time or for any reason without penalty. Furthermore, all participants have the right to refuse to answer questions that they do not want to during the interviews. Additionally, all the participants will have the opportunity, if they want, to review the transcripts of their interviews. Upon completion of my research I will supply you with a short report.

For further details, I can be contacted at the above e-mail address.

With best wishes

Anna Moutra

I APPROVE THIS RESEARCH APPLICATION

Name……………………………………………………………………………………

Signature………………………………………………………………………………….

Name of the school…………………………………………………………………………

Date…………………………………………………………………………………..

Supervisor: Professor David Scott

Appendix 3

'Designing a school curriculum for students with specific learning difficulties included in mainstream education for literacy at Key Stage 2'.

RESEARCH PROJECT

Information for teachers and parents

My name is Anna Moutra and I am a doctoral student at the Institute of Education, University of London.

This leaflet will inform you about my research.

I hope you will find it useful. If you have any questions I would be pleased to answer them, so please do not hesitate to contact me through e-mail or phone (my contact details are given at the end of this leaflet).

- **Purpose of my research**
  The aim of my research is to design a school curriculum for students identified with specific learning difficulties (e.g. dyslexia, dyspraxia) for literacy at Key Stage 2. I am interested in exploring the learning processes of those students in literacy. For the purposes of my research, I aim to conduct a study in mainstream primary schools during the academic year October 2013 to June 2014. More specifically, I plan to visit the schools ten days in total to make classroom observations of literacy lessons of Key Stage 2 and to conduct brief interviews with the participants.

- **Participants in the project**
  Head teachers, students aged 9 to 11 who have been identified as having specific learning difficulties (either with SEN statement or not) and their teachers and teaching assistants/special educational needs teachers.

- **Process of research**
  I intend to make classroom observations for literacy at Key Stage 2. After the observations, I aim to interview the students about their experiences of the day's lesson. I also plan to conduct a small number of interviews with the head teachers and the teachers of the students who will participate in my study. The interviews can be conducted either in a formal way with the use of a voice recorder with the participant's consent for facilitating the accuracy of my data or in an informal way without the use of a voice recorder.

- **Measures about the information given during the interviews and observations**

Participants' and schools' anonymity as well as confidentiality will be guaranteed through the use of pseudonyms. I will remove all the features which might identify the participants and the schools of my research in any research text or communication. Furthermore, you will have the opportunity, if you want, to review the transcripts of your interviews so as to verify their accuracy. All the data gathered from my research will be kept in a safe place and only my academic supervisor and I will have access to them.   I intend to publish independently the results of my research, for example, in conference or in an article under participants' pseudonyms in order to inform the academic community about my study. When I complete my research, I will be able to send you a short report about the results of my study.

- **Participation in the research**

Participation is entirely voluntary. Even if participants agreed from the beginning to take part in it, they can withdraw whenever and for any reason without any penalty. Furthermore, during the interviews they have the right to refuse to answer to questions that they do not want to. Before conducting my research, I will ask the participants to read and sign - if they agree to participate - a consent form.

The research project has been reviewed by the Research Ethics Committee of the Institute of Education, University of London.

Thank you for reading this leaflet.

Contact details:

Anna Moutra

Email: amoutra@ioe.ac.uk

Institute of Education University of London

20 Bedford Way

London

WC1H 0AL

My supervisor is: Professor David Scott

Appendix 4

One of the interviews with Carol, pupil at Year 6 at the Blue Sky School

Researcher: Can you tell me your name?

Carol: Carol

Researcher: And how old are you?

Carol: I am ten years old

Researcher: Can you tell me what did you do in literacy lesson today?

Carol: In literacy we were doing a kind of thing that we have to act a bit of what the emotive word was saying, if it was 'sad' then we had to act like we looked sad, and we also I think we might be writing in our books but I am not sure

Researcher: In the morning what did you do?

Carol: In the morning I went to a group, just me, and I had, it's for my dyslexia and I have to make words and sort out alphabet, alphabets, yeah

Researcher: Can you explain me the one (=task) with the alphabet? What did you do?

Carol: In the alphabet cards you have the whole alphabet and one of the letters or two maybe have something wrong in them like one of them had an 'i' and a 'j' in wrong places and maybe other places you may have a 'b' and a 'd' that make wrong and then you have to figure out what was wrong

Researcher: In the order? If it was in wrong order?

Carol: Yeah, it could have been maybe 'z' to 'a' so you have to sort it out and say its proper way

Researcher: And then what else you did?

Carol: I had to, I have a word family which I think today was '-ore' and I have to , all the letters of the alphabet in a blue pack and I have to each letter to see if it makes a word and then if it doesn't make a word I will put in one pack, if it does make a word then I put in the other pack, some of them I don't know and then I put them in wrong but they are actually right and some of they are like 'fl' like 'fly' or something there are some words (=she means letters) that go together to make a word

Researcher: And how did you use the dictionary?

Carol: the dictionary, I found words maybe difficult so I have to search through the dictionary because the dictionary helps me quite a lot so I have to learn how to use it and if you and I have to find out what the word means exactly, what sort of noun and how to spell it sometimes

Researcher: Do we have any paper? I would like to show me how you learn your spelling, a new word, how do you spell it. Can you show me how you learn the word...which word do you want?

Carol: The way I learned the word 'because' like 'big elephants can always understand small elephants'

Researcher: Which means?

Carol: The front letters like 'big' and then that makes 'elephants can understand small elephants' it makes the first letter of each word comes together to make the main word

Researcher: So with this way you learned the word

Carol: 'because'

Researcher: Can you write for me the words that you use for each letter?

Carol: Yeah, I might not be able to spell some of those

Researcher: It's ok

Carol: (she was writing) See I can't spell the 'elephant'

Researcher: What is difficult for you with the word 'elephant'?

Carol: I find it maybe 'th' difficult, where to put them and maybe I have to sound them out cause 'el/e/phant' (she pronounced /e/ the second –e- of the word) but it's not very easy

Researcher: this is the way you learned 'because'

Carol: Yes, I learned it when I was in Year 2 so and I have been able to do ever since

Researcher: and for the other words what do you do? New ones

Carol: some of them let's say 'can't' because I first of all they taught me how to spell it 'c a n' t' but then because I did my handwriting you can do it like this and you get used to the way you write it so it is how I remember 'can't' and other stuff

Researcher: let me write you one word, ok?

Carol: Yeah

Researcher: (I write the word 'elephant' with correct spelling) this word, can you read it?

Carol: 'elephant'

Researcher: what is different from what you wrote?

Carol: I put an 'a' and a 't' there and I was reading it actually wrong

Researcher: how do you find the sound of this word?

Carol: the sound is actually quite strange like the way you spell it cause the 'p' that it has a 'p' in the middle and it goes "ele'ph'ant"

Researcher: And it might be confused with which letters?

Carol: Probably I might get confused with a 'th' or an 'f' those probably are the two words that I get confuse them with this one

Researcher: when you have spelling how do you practice it?

Carol: I usually just try to make some kind of , so the way that I did 'can't' so sometimes I make it like sing songs like (she sings the word 'can't') like a song

Researcher: you make a song in order to remember the word

Carol: Yeah, I tried to do it with 'elephant' cause I got used to do it, I actually I can't write the word by self by using this which is quite of weird so I always have to use this because I just can't do it

Researcher: you use for example always for the 'e' the word 'elephant' and for 'c'

Carol: you can I suppose that you could use like it could be, I like using the word 'elephant' but for the 'c' like 'can' 'can't' but the 'elephant' I am not sure, I like the word 'elephant', it's the way I was taught

Researcher: so all the letters of alphabet have one word in order to remember?

Carol: no, I do it, I just sing like this (she sings the alphabet) like this, that's how most of us are taught to do it and then other ways it might try to do it, as you said with words, it's too long to do it with a whole sentence, it's too long, I can't exactly do that

Researcher: and after your session one-to-one what did you do in the classroom?

Carol: after my session I read because I haven't got enough time actually to do the journal writing so I have to read and after that we had guided reading and then we do the stiles where we have questions and maybe sometimes a piece of writing and you have to have, cause only a little square with a number on it on a paper where the square with the number on it and it has the answer and you have to put each number into the right space so maybe if it was one that I put next to one

Researcher: and about what was the text?

Carol: the text, well I read quite it was about three different texts that I managed to do, one was about cowboys, the other one was about cowboys and I think actually, yes I only managed to start (the third one) and I think it was about snowman or something?

Researcher: it was a long text?

Carol: the text is actually about a half size of a piece of paper and you have on the sides pieces of information and you have to match them into the piece

Researcher: so you have a text and you have some

Carol: yeah, you have some writing some on the side

Researcher: and you put the numbers

Carol: yeah this little plastic thing and you have a number to put it

Researcher: and there is any way to check if you do it correctly?

Carol: yeah if you flip it over and you take it out then it is usually a pattern on the top of a page and if you got the same pattern then you've got it right, if you haven't then you've got it wrong

Researcher: And about what it was? The text was talking about cowboys?

Carol: Yeah

Researcher: it was a story?

Carol: it was about how cowboys, like what they wear so maybe one of them it was about their trousers even when it was hot and the second one was also about clothing but just a bit more on one thing which was I think –inaudible- but I am not sure

Researcher: and the third one you didn't have enough time

Carol: yeah in the third one I just managed to read about three words

Researcher: how did you find the activity about body language, the emotions that you did?

Carol: I found it quite fun cause I remember doing it in Year 3 but I haven't done it for a long time doing that quite of thing, it is quite different for me doing since I have been doing lots of writing lately

Researcher: which word did you have?

Carol: the word I think we had was 'exhausted' and we acted as if we were exhausted. So like I was breathing heavily and the acting was on the floor like I was tired

Researcher: did you like that you were acting in front of your classmates?

Carol: yeah, it is quite embarrassing but it is fun and interesting cause you can see what other people think that it might be like some people what we're doing guess a task maybe but it was quite funny

Researcher: and how did you decide about the way that you are going to present this word with your classmate?

Carol: well first of all we both had terms of thinking what an exhausted person might do so I follow up maybe that we drew like falling on the floor and my classmate, Ian, he maybe breath heavily and after that we decided who is going to do what and then we did it

Researcher: About the one-to one session do you have everyday?

Carol: No I have it on Mondays, Tuesdays and Thursdays afternoons

Researcher: And for how long?

Carol: I think it is about, probably the longest it might be 20 minutes and the short maybe 15 minutes because sometimes we have different things to do and something maybe important like today I think I finished slightly early because I finished most of my stuff early

Researcher: Usually how many things you do during the one-to-one session?

Carol: we usually do the alphabet which is usually the one thing that sometimes I have to put words into order but I usually do about three activities maybe four maybe if it is not quite long

Researcher: And today you wrote any sentence?

Carol: today I didn't write anything in my book which was annoying cause I like writing

Researcher: You like writing?

Carol: Yeah but I found it frustrating how I can spell some of the words but yeah I think today we didn't write in our books in maths neither but I am not sure

Researcher: you have a specific book that you write?

Carol: yeah we have our own books which we keep in the cupboards and we each day take them out and write what we want to know, when we finish each book we get a new one and if your book isn't bad when you go to the next Year you can keep it but if you need you can have a new one

Researcher: what do you like to write?

Carol: I like to write many stories sometimes I like describing things

Researcher: Thank you

Appendix 5

Main Topics for research- Interview guide

PARTICIPANTS	MAIN TOPICS
Students	**Learning process** • Tell me about the today's lesson. (What difficulties they face in specific lessons?) • How do they learn to write/read/spell/remember a new word? • What do they find difficult when they read/write/spell? Why? How do they overcome it? What techniques do they use? • Description of the process/tools that they use when they learn a new information • How do they think usually? In images or words? (E.g. if they listen the word 'cat' which one will come first in their mind: image or letter?) -- **Social-psychological issues (only one time I will ask these and close to the end of my visits)** • How do they feel for having a SEN statement? Why? • How do they feel when they must read aloud or write fast? Why? • Tell me how about how the other pupils treat you? (Does their performance at school create problems with their friends? Why?) • How do they see their future? Which profession do they want to follow/ what do they want to become when they will grow up?
Teachers	**Characteristics of students** • (How do they define SpLD?)/ What is SpLD for them? • Which are the strengths and weaknesses of these students? How do they face their weaknesses? Why?

	• Which are their main characteristics as students? Why?
	Teaching practices
	• What is the process they go through in order to teach these students?
	• How the structure of these particular lessons influence on these students' learning?
	• How do they feel teaching these students? Why?
	• How do they involve those students in classroom's activities? In which ones? Why?
	• How do these students participate in classroom? Why?
	• What kind of teaching and assessment (feedback) do they believe is better for these students? Why?
	• What kind of material is useful for their learning? E.g. coursebook instead of photocopies?
	• (Are the teachers involved in their teaching and learning or do they let the teaching assistants to do this?)
	--
	Social-Psychological Issues
	• How do their peers treat them based on their performance? Why?
	• In practice which factors do they influence their inclusion? E.g. national curriculum/examinations/ time pressure
	• How do all these factors influence on them?
Teaching assistants/Special Educational Needs Teacher	• Tell me about this specific student and his/her learning profile.
	• Tell me about the kind of specific provision is provided to them and how this influence their progress.
	• Tell me about the differences in their learning from the other students.
	• How does a SEN statement influence their life? Why?
	• What kind of teaching, learning, assessment (feedback) and materials are better for them?

	• Which factors may influence their learning? Why?
Head teacher/Inclusion	**Inclusion** • How is the school organized? • How do they design their inclusion? (Which principles do they follow?) • Which factors may influence the inclusion of these students? -- **Curriculum** • How do they design their curriculum? • How do the current demands of National Curriculum influence these students? Why? e.g. spelling • How do they overcome possible external difficulties (ofsted-school's accountability) so as to provide equal opportunities in learning?
Educational Psychologist/Manager of Dyslexic Centre	**SpLD-characteristics** • (What is 'specific learning difficulties'? Which are their main characteristics?) (Which are the strengths and weaknesses of these students?) • Which are the differences between students with SpLD and without? • How are these differences explained? (e.g. biological factors or social?) • How do these differences influence on these students? Why? -- **Social-psychological Issues** • What kind of social and psychological issues do these pupils experience? Why? • What kind of support do you provide to these students? • How does a SEN statement influence those students' life? Why? • How these students are categorized by their fellow pupils? Why? How does this influence on them?

Parents	- How did they understand that their children have difficulties in learning? - How do they learn during these years? --- **SEN Statement** - Do they have a SEN statement for their child? If yes, which was the process of having a SEN statement? Did they face difficulties? Why?/ If no, why not? - Do they believe that a SEN statement can make a difference in their children's life? Why? --- **Social-psychological issues** - How do their children feel about their difficulties? Why? - How do their peers treat them based on their performance? Is there any incident? (How do they see their children's future? Which profession do they prefer their children to do in the future? Why?) - Do they believe that their children have the same opportunities in learning and examinations as the other children? Why?

Appendix 6

Letter of consent to children

<div align="center">CONSENT FORM</div>

My name is Anna Moutra and I am doctoral student at Institute of Education, University of London.

I am doing research for my study and I am interested in how students with specific learning difficulties learn English.

For this reason I will visit your classroom ten days in total from October 2013 to June 2014. In the classroom of the subject of English I will see how the lesson is taught.

After the lesson I will ask you some questions about it. If there are any questions that you do not want to answer, please feel free to tell it to me. During our discussion you can be with your friend or someone older if you want.

You can change your mind about participating in my research any time and for any reason and you can drop out. There will not be any problem at all to you.

When I will be in the classroom and when we will discuss I will have a voice recorder because it will help me to remember what we said.

No-one from your teachers, peers and family will see your answers.

Our discussions will take place after your course and they will last about 15 minutes.

- Only if you want you will take part in my research.

- Any time and for any reason you can stop taking part in my research without penalty.

- If you have any questions you are free to ask me.

- You are free to answer as you like.

- No-one will learn about your answers.

I agree to be interviewed

Name: ……………………………………………………………………………………….

Signature: ………………………………………………………………………………

Date: ……………………………………………………………………………………….

Appendix 7

Letter of consent to parents

PERMISSION FOR PARTICIPATION IN EDUCATIONAL RESEARCH

Researcher's name: Anna Moutra   Date:

Address: 20, Bedford Way, Institute of Education

Postal Code: WC1H 0AL   E-mail: amoutra@ioe.ac.uk

Dear Parent/Guardian,

I am a doctoral student at the Institute of Education, University of London, currently doing my PhD Degree in Education. My department is Curriculum, Pedagogy and Assessment. For my study's purposes, I intend to conduct my research in the field of Curriculum and in particular I aim to design a school curriculum for students with specific learning difficulties (e.g. dyslexia, dyspraxia) aged 9-11 for literacy at Key Stage 2. I am interested in exploring those students' learning process in literacy.

My research methodology requires a sample of pupils identified with specific learning difficulties either with SEN statement or not. I aim to conduct brief interviews with the pupils in individual or small group face-to-face of up to 15-minute duration inside the school, where children will be asked about their experiences of lessons. Furthermore, I plan to observe classrooms in an effort to understand the learning processes of these students in reading and writing. Interviews and observations can be in a formal way with the use of a voice recorder with the participants' consent for purposes of data collection facilitation or in an informal way without the use of a voice recorder.

In accordance with the ethical requirements of scientific research, my methodology has been reviewed and approved by the Research Ethics Committee of the Institute of Education. A CRB check has also been obtained in order to validate my ethical acceptability to research young children.

The pupils' anonymity as well as the safety of data obtained during the research is absolutely guaranteed. Nobody other than me and my academic supervisor will have access to them during my analysis of them, and they will be subsequently destroyed according to ethical research requirements.

All parents/guardians/children retain the right of refusing participation in the research or withdrawing should they deem it upsetting to their and their environment's well-being. For further details, please contact me through my e-mail.

I AGREE FOR MY CHILD TO PARTICIPATE IN THIS RESEARCH

Name………

Relationship to the student (please state the student's name as well)……

…….

Signature……………………………………………………………………………………

Date……………………………………………………………………………………

Supervisor:

Professor David Scott

Address:

    Department of Curriculum, Pedagogy and Assessment
    Institute of Education University of London
    20 Bedford Way
    London
    WC1H 0AL

Appendix 8

Letter of consent to teaching staff

RESEARCH CONSENT

Researcher's name: Anna Moutra   Date:

Address: 20, Bedford Way

Postal Code: WC1H 0AL   E-mail: amoutra@ioe.ac.uk

Dear Sir/ Madam,

I am a doctoral student at the Institute of Education, University of London, currently doing my PhD Degree in Education. My department is Curriculum, Pedagogy and Assessment. For my study's purposes, I intend to conduct my research in the field of Curriculum and in particular I aim to design a school curriculum for students with specific learning difficulties (e.g. dyslexia, dyspraxia) aged 9-11 for literacy at Key Stage 2. I am interested in exploring those students' learning process in literacy.

For the purposes of my research, I aim to conduct a study in mainstream primary schools during the academic year October 2013 to June 2014. More specifically, I plan to visit the schools ten days in total to make classroom observations of literacy lessons at Key Stage 2. I hope to conduct interviews with the adult participants in individual, face-to-face brief interviews of up to 30-minute duration, depending of course of their willingness to be interviewed. I also aim to observe classrooms in an effort to understand the learning process of these students in reading and writing. The interviews and classroom observations can be either in a formal way with the use of a voice recorder with the participants' consent for purposes of data collection facilitation or in an informal way without the use of a voice recorder. In accordance with the ethical requirements of scientific research, my methodology has been reviewed and approved by the Research Ethics Committee of the Institute of Education.

The participants' anonymity as well as the safety of data obtained during the research is absolutely guaranteed. Nobody other than me and my academic supervisor will have access to them during my analysis of them, and they will be subsequently destroyed according to ethical research requirements.

All participants retain the right of refusing participation in the research or withdrawing should they deem it upsetting to their well-being. For further details, please contact me through my e-mail.

I AGREE TO PARTICIPATE IN THIS RESEARCH

Name……………………………………………………………………………..

Signature………………………………………………………………………

Date………………………………………………………………………………

Supervisor:

Professor David Scott

Address:

    Department of Curriculum, Pedagogy and Assessment
    Institute of Education University of London
    20 Bedford Way
    London
    WC1H 0AL

Appendix 9

Thomas's standardized learning targets according to his literacy level

AF	Name	Pupil	Teacher
	I can write at Level 3		
	3c		
6	I can mark sentences with capital letters and full stops.	✓	✓
5	I can use a range of connectives to extend sentences.	✓	
1	I can write descriptive phrases.		✓
	I can write my ideas in a logical order	✓	✓
	3b		
6	I can use capital letters, full stops and question marks in my writing.	✓	✓
6	I can sometimes use speech marks.	✓	
5	I can sometimes use connectives to write complex sentences.	✓	
5	I can use verbs in the correct tense in a sentence.		
1	I can choose words for their descriptive effect which interest the reader.	✓	
	I can sometimes use paragraphs correctly.	✓	
	I can usually structure my sentences correctly linking ideas logically		
	3a		
6	I can use punctuation to mark sentences including inverted commas and commas though it is not always accurate.	✓	
6	I can use capital letters, full stops and question marks in most of my sentences		
6	I can use commas in some of my writing.		
5	I can use all connectives to join my ideas together.	✓	
1	I can develop sentences by using adjectives and adverbs to interest the reader		
1	I can write a clear and developed description		
7	I can use other words as well as adjectives to create effects in my writing		
	I can organise my writing logically linking sentences and paragraphs		

Appendix 10

Robert's standardized learning targets according to his literacy level

AF	Name I can write at Level 3	Pupil	Teacher
	3c		
6	I can mark sentences with capital letters and full stops.	✓	
5	I can use a range of connectives to extend sentences.		
1	I can write descriptive phrases.		
	I can write my ideas in a logical order		
	3b		
6	I can use capital letters, full stops and question marks in my writing.		
6	I can sometimes use speech marks.		
5	I can sometimes use connectives to write complex sentences.		
5	I can use verbs in the correct tense in a sentence.		
1	I can choose words for their descriptive effect which interest the reader.		
	I can sometimes use paragraphs correctly.		
	I can usually structure my sentences correctly, linking ideas logically		
	3a		
6	I can use punctuation to mark sentences including inverted commas and commas though it is not always accurate.		
6	I can use capital letters, full stops and question marks in most of my sentences.		
6	I can use commas in some of my writing.		
5	I can use all connectives to join my ideas together.		
1	I can develop sentences by using adjectives and adverbs to interest the reader		
1	I can write a clear and developed description		
7	I can use other words as well as adjectives to create effects in my writing		
	I can organise my writing logically linking sentences and paragraphs		

Appendix 11

Matthew's standardized learning targets according to his literacy level

Level 2

I M to

level 3.

AF	Name I can write...	Pupil	Teacher
	2c		
6	I can sometimes use full stops and capital letters correctly.	✓	✓
7	I can sometimes use exciting vocabulary.	✓	✓
5	I can vary the way I open my sentences	✓	✓
3	I can sequence my ideas in order	✓	
	2b	✓	
6	I can regularly use full stops and capital letters accurately.	✓	
6	I can use question marks correctly.	✓	
7	I can use exciting vocabulary in my writing to engage the reader.	✓	
5	I can write in the past and present tense	✓	
5	I can use a range of connectives in my writing.	✓	
3	I can write opening and closing sentences	✓	
	2a		
6	I always use capital letters and full stops correctly.		
6	I can use question marks and exclamation marks in my work		
6	I can use commas in lists	✓	
1	I can create interesting and lively writing.		
1	I can write with a viewpoint in mind.		
1	I can write descriptive phrases to add detail.		
7	I can use vocabulary which is new to me		
4	I can group my ideas together in sections		