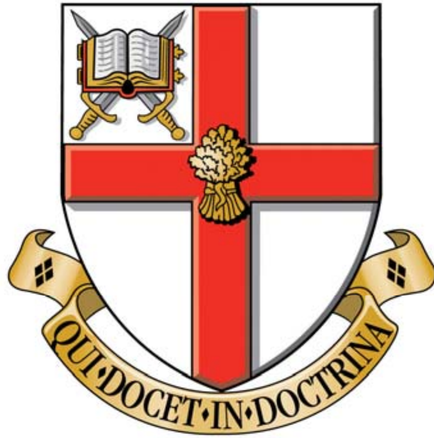

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The impact of perceptions and skills of teaching staff on the building of a Dyslexia Friendly school

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Abstract

This dissertation comprises a study of the perceptions and skills of teaching staff working with children with Specific Learning Difficulties (SpLD) in an inclusive, mainstream setting. The aims of the dissertation are to review recent and relevant literature, to audit the knowledge and skills of staff in this area, to identify strengths and areas for development in teaching and learning for children with SpLD within this setting, to enhance self-confidence of teaching skills of staff in this school and to put in place criteria to enable subsequent application of the Dyslexia Friendly Schools Initiative Quality Mark. The initial approach within a mainstream primary school setting was to gather data from a comprehensive, anonymous questionnaire (qualitative/quantitative data) designed using a combination of open and closed questions. All teaching staff were invited to participate. Data from the questionnaire was triangulated by selecting key participants for classroom observation and interview: a teacher of some years' experience, a newly qualified teacher and a teaching assistant working with children with a range of additional needs. The research and findings demonstrate the paradigm shift in the perception and management of dyslexia in recent educational history and evidence the importance of training staff in building positive perceptions and developing and implementing dyslexia friendly teaching skills and learning strategies. This dissertation suggests that such teaching and learning strategies are also appropriate for all children within this setting.

Declaration

The Work is original and has not been submitted previously in support of any degree qualification or course.

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I would like to thank the case study primary school staff and children for their support in the preparation of this study and for allowing access to their classrooms.

List of abbreviations

ADHD	Attention Deficit Hyperactivity Disorder
BDA	British Dyslexia Association
BPS	British Psychology Society
DECP	Division of Educational and Child Psychology
DfES	Department for Education and Skills
DFS	Dyslexia Friendly Schools
EP	Educational Psychologist
LDD	Learning Difficulties and Disabilities
LSA	Learning Support Assistant
NQT	Newly Qualified Teacher
PIVATS	Pupil Indicators for Value Added Target Setting
SpLD	Specific Learning Difficulty
TA	Teaching Assistant

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The impact of perceptions and skills of teaching staff on the building of a Dyslexia Friendly school

"Dyslexia Friendly Schools are inclusive schools," responding to social, emotional and intellectual inclusion, focussing on strengths rather than weaknesses, on abilities rather than on problems (MacKay, 2005, p.220).

This dissertation demonstrates that building teaching skills and positive perceptions of the dyslexic learner is an essential factor in creating a dyslexia friendly school. This is achieved by examining published literature and investigating practice and training needs in a medium-sized primary school. The consequences of failing to build teaching skills are potentially severe: the Select Committee (DfES, 2006) evidences that "the cost of failing to diagnose and appropriately teach children with dyslexia leads to significant long-term economic and social costs in terms of exclusions, lost earnings, and even crime" (DfES, 2006, s. 57).

Literature Review

Defining dyslexia

The term 'dyslexia' appears contentious and there is much disagreement between professionals across disciplines regarding any consensus of the definition of dyslexia (BPS 1999; Riddick, 2001; Reid, 2003; Smith, 2003; BDA, 2005) and of the existence of the learning difference itself (Riddick, 2001; Elliot, TES, 5.9.2005). Also, the nature of working with dyslexic learners is changing as the perception of dyslexia and the Special Educational Needs (SEN) paradigm shifts from a medical model (Gilchrist, 1999; Ramus, 2001; Hunter-Carsh, 2001) to an holistic, inclusive

educational model. (Riddick, 2001; Mackay, 2005; DfES, 2006) The medical model, where the difficulty was considered to be located within the child, whose needs could be met by specific teachers correcting a deficit within specific, closed educational units (DES,1978), is typified by researchers such as Ramus (2001), whose work within the medical community provides invaluable scientific evidence for the study of developmental dyslexia. However, research that furthers the debate about responding scientifically and within a positivist paradigm to neurological causes for dyslexia, for example, Ramus' research on phonological deficit (2001) provides valuable findings which assist practitioners to formulate appropriate strategies. Recent behaviourist research (Ayres,1996; Piotrowski and Reason 2000; Exley, 2003; Mortimore, 2005; Burden and Burdett, 2005) demonstrates that teaching skills and metacognitive understanding can impact positively upon the acquisition of skills for the dyslexic learner and can also have significant benefits for others within the cohort (Rowcliffe, 2002; Coffield and O'Neill,2004; Nugent, 2007).

The Code of Practice (DfES, 2001b) recognised that specific learning difficulties could not be easily categorised with the use of a dual category placement within "cognition and learning" (DfES, 2001b, 7.58) and "communication and interaction" (DfES, 2001b; 7.56). This reflected a broader conceptualisation of SpLD within education rather than a narrowly defined medical model with conceptions of "categories of disability"(DES,1978).

Historical definitions of dyslexia appear to have reflected and impacted on practice and attitudes towards the dyslexic learner. Kussmaul introduced the concepts of "word deafness" or "word blindness; *surditas et caecitas verbalis*" in 1878 (cited in

Miles, 1999, p.3), applied to a stereotype of the bright but frustrated child which still persists for some people today (Regan and Woods, 2000,p. 335). Within recent educational history, Riddick (1996, p.8) grouped definitions of dyslexia into exclusion and discrepancy definitions and stated the importance of using definitions in order to link causation and cognitive impairments to behaviours. Reid (2003) shares this view of using the definition as a working tool rather than a list of symptoms and argues for an updating which recognises the shift in thought not only about the nature of dyslexia as a learning difference but also about the nature of the way in which educators work with the dyslexic learner in an inclusive environment, stating that "the concept of dyslexia needs to be realigned to contextualise it into current trends and priorities in education such as inclusion, literacy and the enhancement of learning skills" (2003, p.4). This recontextualisation can lead to working definitions from which associated teaching and learning approaches can be developed (DfES 2004a, p.31). The recognition of dyslexia as a more complex range of difficulties not only with reading and writing, but also with mathematics, information processing, spatial and organisational issues was clearly stated by the BDA's updating of the definition of dyslexia to:

> a combination of abilities and difficulties that affect the learning process in one or more of reading, spelling and writing. Accompanying weaknesses may be identified in areas of speed of processing, short term memory, sequencing, auditory and/or visual perception, spoken language and motor skills. It is particularly related to mastering and using written language, which may include alphabetic, numeric and musical notation (BDA, 2005).

DECP Report-a working definition for professionals

As a response to the issues of accurately defining dyslexia for use by educational psychologists (EPs), the Division of Educational and Child Psychology (DECP) convened a Working Party in 1998. This Working Party extensively reviewed available research and published the DECP Report, located within the inclusive movement, and this has become the working definition of dyslexia used by EPs:

> Dyslexia is evident when accurate and fluent word reading and/or spelling develops very incompletely or with great difficulty. This focuses on literacy learning at the "word level" and implies that the problem is severe and persistent despite appropriate learning opportunities. It provides the basis for a staged process of assessment through teaching. (BPS, 1999, p.18).

Despite the dual category listing in the Code of Practice (2001), the working definition used in this case study LEA is that of DECP, which relies on failure to make reasonable progress in literacy. There is a tension between the DECP definition and that of the Code of Practice (DfES, 2001b), since the Code of Practice (2001) identifies additional factors to literacy difficulties, such as the need for "help with sequencing and organisational skills" and "help with problem solving and developing concepts" (DfES 2001b,5.78) which are recognised indicators of dyslexia (BDA). However, despite the omission of these co-morbid factors (ibid), the DECP definition is located firmly within the inclusive paradigm, since it requires a "staged process of assessment" within the context of "appropriate learning opportunities" (British Psychological Society, 1999, p.18).

Teachers' understanding and perceptions of dyslexia:

Teachers' understanding of and perceptions surrounding dyslexia are key to the maintenance of self-esteem and achievement of potential for the dyslexic learner (Regan and Woods, 2000; Buswell Griffiths et al. 2004a; Buswell Griffiths et al.

2004b; Reid et al.,2005) and are closely linked to training and school ethos (Regan and Woods,2000; DfES, 2006).

With the paradigm shift from the medical (Ramus, 2001) to the social inclusive model (Hunter-Carsh, 2001) of SEN and shifts towards 'quality first' classroom teaching (DfES, 2004b), knowledge and understanding of SpLD appears no longer the 'specialist's' province; perceptions of learning differences appear to be changing. As school culture adapts and teachers access training and modify teaching approaches, the "waiting for an assessment mentality" (Reid et al, 2005) which puts intervention 'on hold' pending an 'expert's' advice appear to be adapting too. The graduated response, or staged approach to SEN (DfES 2001,5.20), is progressing the concept of teacher as expert, putting in place teaching approaches as part of a whole school ethos in access strategies, in tandem with targeted learning which responds to the learning style required by the child – whether this be a particular phonic approach or a learning style strength; "the Senco should take the lead in the further assessment of the child's particular strengths and weaknesses…The child's class teacher should remain responsible for working with the child on a daily basis and for planning and delivering an individualised programme" (DfES, 2001b, s.5.47). This shift in responsibility from the specialist's province to that of the classroom teacher, supported by the Senco, requires training not only in practical matters, but in reframing the educational ethos of the inclusive school (Norwich and Kelly, 2006, p.255).

Regan and Woods' (2000) research project regarding teachers' understandings of dyslexia examined two groups of teachers taking part in group discussions. Their findings identify five themes; "descriptions of dyslexia; teaching poor readers who

were not dyslexic; identifying teachers' notions of 'discrepancy'; concern for the 'bright' dyslexic child and the utility of the DECP working definition of dyslexia" (Regan and Woods, p.337). All teachers referenced difficulties beyond reading and spelling difficulties, for example, "behavioural, cognitive and biological levels" (Regan and Woods, p.337), including memory, mathematical difficulties and sequencing problems, however, crucially none considered environmental or lack of learning opportunities to be a cause of dyslexia. Teachers also identified a notion of discrepancy, contrasting dyslexic children with children with moderate learning difficulties, in terms of a "discrepancy between ability and attainment" (Regan and Woods, p.338). Teachers indicated a link between SEN and dyslexia formulated around "notions of 'persistence' or lack of progress" (Regan and Woods, p.345) and suggested that "given adequate training, advice and support, teachers are able to provide an appropriate learning programme for a child with a severe reading difficulty" (Regan and Woods, p.345), whilst adopting a "staged process of assessment through teaching" (Regan and Woods, 2000).

Impact of training on emotional wellbeing

Research evidence (Riddick, 1996; Griffiths et al.., 2004; Reid et al.. 2004) describes how lack of training or understanding of SpLD has affected a child's self-confidence and emotional wellbeing. The teachers categorised as 'worst' (Riddick, 1996, p.155) were "thought to be negative in attitude, critical, humiliating and lacking in understanding" (ibid, p.155), contrasting with the 'best' teachers, who were seen as "understanding and helpful"; Reid et al. (2004) determined that there is a "strong link between the teacher's attitude and the child's level of self-esteem" (ibid). Buswell Griffiths et al.'s (2004) research regarding parental agency, identity and knowledge

considered the effects on the dyslexic child's self-esteem and details the frustration experienced by a parent whose knowledge of her child's learning preferences was not matched by that of the child's teacher (ibid, p.423).

Evolving Educational Policy on Teacher Training

Removing Barriers to Achievement (DfES 2004) expected those awarded Qualified Teacher Status (QTS) to be able to:

> understand their responsibilities under the SEN Code of Practice (DfES, 2001) and to know how to seek advice from specialists on less common types of SEN; differentiate their teaching to meet the needs of pupils, including those with SEN and identify and support pupils who experience behavioural, emotional and social difficulties (DfES, 2004).

Training and raising of awareness is essential; Reid et al. reported how "lack of staff awareness resulted in late identification" (2005, p.205) with associated difficulties for the children involved and resulting lack of confidence of parents in the system. The Dyslexia Friendly Schools Quality Mark (BDA, 2005) further addressed the deficit in training by requiring schools to provide evidence of training (INSET and internal school training) by allocating funding for training for *all* teaching staff. Additionally, the Quality Mark requires that there should be a named member of teaching staff "with a recognised qualification in dyslexia" (Case Study School's County Council, 2004, p.10). As a response to this need, LEAs have developed training courses. The case study LEA has designed a highly-structured course for teachers; "Certificate of Professional Development in Specific Learning Difficulties (SpLD)". This is intensive, since it requires attendance at 40 hours of training, 20 hours of one to one

teaching of an identified student and the production of a case study and discussion essay regarding dyslexia. This training should supplement and not replace Initial Teacher Training in SEN (DfES, 2006).

Ofsted's (2006) report on provision and outcomes in different settings for pupils with learning difficulties and disabilities (LDD) recommended that The Training and Development Agency should:

> improve the initial training and continuing professional development in LDD for all teachers [and] provide more opportunities for specialist training in teaching pupils with learning difficulties in general and for particularly complex disabilities (Ofsted, 2006, p.4).

Furthermore, Ofsted recommended that mainstream schools should develop knowledge and skills relating to LDD, linking closely with the DfES identification of the need for a staged and cumulative approach to SEN training for teachers (ibid p.5),, from initial teacher training and throughout a teacher's career (DfES 2006). However, Wearmouth (2004, p. 66) added a note of caution in referencing the "competency-based approach to teacher professional development", stating the need for a "focus on reflective practice in order that provision for meeting difficulties in literacy can most effectively be conceptualised".

Variance in LEA policy

Despite the considerable paradigm shift in awareness of SEN, there appears to be great variance in LEA policy, even within neighbouring authorities, impacting on teacher awareness and practice. Buswell Griffiths, Norwich and Burden's (2004) research for the BDA and Buttle Trust examined policy in five LEAs in the south-

west region. Results varied from having a policy of no intervention in schools which were successful in national attainment targets and concern that early identification of children would risk falsely identifying children with SpLD (p.28), to an LEA with teams working in all areas of SEN, including SpLD/dyslexia (p.29). This LEA placed considerable emphasis on training and professional development and has been noted (ibid) for the development of support and training materials. Its methodology contrasted harshly with a third LEA (p.30) where SEN funding and procedures lacked focus, resulting in a Statement level well above the national average for the number of children in that LEA (p.31).

Training links with school improvement

A well-trained teacher in a school is pivotal to disseminating good practice and further understanding of issues in dyslexia (Griffiths et al., 2004). Ofsted judged that SEN is "well linked to school improvement work" (Griffiths et al.. 2004, p.32) and Griffiths et al. (2004, p.32) provided the example of an LEA with well established practices in SEN, "providing and supporting high quality professional development for all staff... Sencos have termly workshops and there is induction of new Sencos. About 100 teachers have specialist qualifications". However, teachers need to be in a position where they can impact on practice and to achieve this it would be advisable for the teacher to be in the role of Senco and ideally to be a member of the Senior Management Team (SMT; DfES, 2001). Where the teacher is not a member of the SMT, it was suggested (Case Study LEA Training, 2007) that a "link" member of SMT is identified. Furthermore, Griffiths et al.'s (2004, p.100) study found that in a school with an integrated, whole-school approach to SEN, "dyslexia had not been highlighted as a special cause for concern". This was an example of an already

inclusive school becoming a dyslexia friendly school almost by default and reinforcing the concept that dyslexia friendly schools are good schools for all children (Coffield and O"Neill, 2004; Rowcliffe, 2002). The Senco in Griffith's case study school trained "on many levels" (Griffiths, 2004, p.100), worked actively with teaching assistants to plan and structure work and working approaches and developed and implemented courses within the school and the authority. When seeking a new teaching assistant (TA), there was the expectation that there would be existing qualifications or the willingness to attend courses. This Senco exemplified the inclusive approach by asserting that there was a commitment to identifying needs and matching them with appropriate provision (ibid). Griffiths et al.(2004) evidence how a high level of teacher skill, training and experience has a direct and positive impact on perceptions of dyslexia amongst all adults and children working with the dyslexic learner.

Pockets of hardening attitudes towards the dyslexic learner (Gilchrist, 1999; Lambe and Bones, 2006) provided evidence for the necessity of increased training and awareness; "attitudes both in teachers and parents who may well perceive their [unidentified dyslexic] child as lazy, obstinate, difficult and unpredictable" (Gilchrist 1999, p.33). Lambe and Bones" (2006, p.168) identified how "one of the most important predictors of successful inclusion of pupils with disabilities in mainstream classrooms is the attitude of teachers".

Dyslexia and the development of public policy on inclusion

The changes in provision for children with SEN shifted from "ineducability" under the 1944 Education Act (DfES, 2006, s.8) to an entitlement to an education under the

1970 Education Act. Children with SEN have been perceived as moving from being ineducable, to being separately educated; to being segregated within a mainstream setting; from integration (DES,1978) to inclusion (DfES,2001).

Defining inclusion

The definition of inclusion has been subject to much thought and discussion (Hunter-Carsh, 2001; Coffield andO"Neill, 2004; Corbett, 2001; Nugent, 2007; DfES, 2004). DfES, (2001a) defined inclusion as "a process by which schools, LEAs and others develop their cultures, policies and practices to include pupils." (DfES 2001a, Para 6). Inclusion contrasts with the notion of integration under which extra arrangements are made for a child without them completely 'belonging' to a particular class within the setting (DES, 1978; DfES, 2001). Inclusion developed the notion of integration in restructuring the physical setting and educational ethos and developed processes to assimilate the needs of all pupils (DfES, 1997; DfES, 2006). The notion of educational inclusion has developed from the 1944 Education Act to a social and educational matter into a moral imperative, inextricably allied with the Human Rights Movement (CSIE: 2002, Appendix 1). The Centre for the Study of Inclusive Education's list of ten reasons for inclusion put this into a clearly defined framework, divided into three sections: Human Rights, Good Education and Social Sense, with Human Rights at the forefront (ibid).

The Warnock Report

The Warnock Report (DES, 1978) followed the largest ever review of educational special needs in the UK. It provoked the first shift towards 'integrating' pupils with SEN into mainstream schooling, urging LEAs to admit pupils to a mainstream school

of their parents' preference with the caveat that it should not interfere with the efficient education of others (DfES, 1994). The Report described a continuum of provision from non-segregation to segregation ranging from full-time education in a mainstream class with any necessary help and support, through the range of support in mainstream schools, special schools, residential and hospital care to home tuition (DES,1978). The commitment to such a continuum of care is evident today in the graduated response in mainstream schools, to resourced and specialist provision. Chasty and Friel's (1993) assessment of law and practice in SEN identified that the Warnock Report fell short of full inclusion in that "it is the meeting of needs which is important, rather than the doctrinaire adherence to the principle that this must happen in the ordinary classroom of the ordinary school"(Chasty and Friel, 1993, p.21).

Thomas and Vaughan, strong advocates of the social model of disability, voiced a similar opinion that although the Report raised the idea of inclusion, it "sat on the fence regarding whether or not it was a good idea to integrate" (Thomas and Vaughan, 2004, p.120). They further asserted that "many people today believe that inclusion in this country would be much further advanced than it is if the Committee had not taken such a cautious stand on the issue" (Thomas and Vaughan 2004, p.120). However, this argument did not take into account the full historical situation. Warnock herself has recently commented that "the main fault of the report on special education … was its naïvete. Indeed it now appears naïve to the point of idiocy"(Warnock, cited in Garner, TES 20.3.1998). Barton (1993, cited in Ainscow, 2004, p.102) examined the positive changes and called the Warnock Report "historically unique" (ibid) in the way that it challenged the conception of handicap. Furthermore, another essential and positive shift arising from The Warnock Report

(DES,1978) was the voice given to parents, further amplified in the Salamanca Statement (UNESCO, 1996) and in Excellence for All (DfES,1997). For the first time, the wealth of understanding and knowledge of parents regarding their child's SEN was acknowledged and this information had to be incorporated into the assessment process.

The 1981 Education Act: The instigation of inclusion

The Warnock Report was the cornerstone of the 1981 Education Act, a radical departure from previous educational trends, which determined the duty of LEAs to take account of parents' wishes and to educate children with disabilities in mainstream schools. Hegarty (1987) commented on how the 1981 Act reversed the existing situation:

> Under the 1944 Act, local authorities were expected to provide for handicapped pupils in special schools and were merely allowed to do so in ordinary schools if circumstances permitted. The 1981 Act exactly reverses this situation: the ordinary school is declared to be the normal place of education for all pupils, and special schools are only to be used when necessity dictates.

At the time of the 1981 Education Act, educational thinking about special needs remained within the integration model, about the child fitting the system rather than the system accommodating to fit the child. Ainscow (2002, p.102) stated that the Warnock Report was a "traditional discourse on disability, focusing attention on individual child deficits". It was into this ethos that pupils who would formerly have attended special schools entered mainstream schooling.

The 1988 Education Reform Act: League tables and the National Curriculum

The 1988 Education Reform Act (ERA) established the National Curriculum and the league table system which created academic competition between schools. This was seated within the Warnock framework which had been introduced in the 1981 Education Act, but with no new funding with which to support new or existing teachers with training regarding SEN. Neither did the 1981 Act bring funding to support the new process of statementing, which was later considered a "huge defect" (Warnock, 2005). The decline in special schools and shift towards inclusion (DfES 2001a) placed increasing numbers of children with SEN into a mainstream education. However, there was a tension between a system based on achieving academic levels (DES, 1988) and the requirement to meet the needs of these children. Baroness Warnock described things as getting "far worse from 1988 onwards [for children with SEN] who were not going to help the league tables" (DfES, 2006, s.11). The 2006 Select Committee Report evidenced this tension: "the Warnock SEN framework is struggling to remain fit for purpose ... significant cracks are developing in the system" (DfES, 2006, s.16). The report concluded by advising a "radical review" of statementing as part of extensive proposals (DfES, 2006, s. 5:252).

Excellence for All and the shift towards an inclusive paradigm

The DfEE Green Paper, "Excellence for All" (1997) supported and extended the notion of inclusion developed in The Salamanca Statement (UNESCO, 1984) and built on the 1988 Education Reform Act, SENDA (2001) and Removing Barriers to Achievement (DfES, 2004). The Salamanca Statement was adopted by 94 governments and 20 non-governmental organisations at their 1984 world conference, where 300 delegates met to discuss the "fundamental policy shifts required to promote

the approach of inclusive education" (UNESCO, 1984, p.iii). "Excellence for All" (DfES, 1997) adopted the recommendations of the Salamanca Statement; which were inherent in Warnock (DES, 1978) and were subsequently developed in Every Child Matters (DfES 2003) and Removing Barriers to Achievement (DfES 2004). This consisted of a multi-agency approach; raising standards for all; a personalised, tailored approach to teaching and learning; inclusivity and a fully-skilled workforce who had ongoing and appropriate training (DES, 1978; DfES 2003; DfES 2004; UNESCO 1994). The shift towards an inclusive paradigm was gathering force in educational practice and in governmental policy.

Excellence for All Children Meeting Special Educational Needs (DfEE, 1997) gave an entitlement to a broad and balanced curriculum, outlining how the Government intended to support and develop the achievement of children with SEN in England over the ensuing five years by developing inclusive schools and in recognising that children with SEN are "capable of excellence" (ibid, p.4). In doing this, it "aligned the English education system for the first time with the international movement towards inclusive education" (DfES, 2006 13). David Blunkett places inclusion firmly into the educational agenda, advising that:

> Schools have to prepare for all children... That is a strong reason for educating all children with special educational needs, as far as possible, with their peers. Where all children are included as equal partners in the school community, the benefits are felt by all. (DfEE, 1997, p.4)

Despite these changes, according to the 2006 Select Committee Report (DfES, 2006) the proportion of children in special schools since 1999-2000 (approximately 1%), the proportion of children with SEN (18%) and the proportion of children with statements

(3%) has plateaued within a system developed from the original 1978 Warnock framework (DfES 2006,14).

The 1996 Education Act

The Education Act (1996), according to Konur (2006), has been the key piece of legislation regulating assessment, statementing and placement processes for children with dyslexia and their parents. It imposed duties on schools and local authorities to identify, assess and meet children's SEN with the aim that wherever possible, those needs would be met within a mainstream school (DfEE, 1996). Konur (2006) reflected on policy provision and the development of law on educational negligence. He concluded that:

> if the aim of the society is to enable children with dyslexia to have access to proper education to develop their academic and social skills in the same way as their non-dyslexic peers, then, the provisions of the relevant Acts and Regulations should be designed to realize such aims (2006, p.67).

Konur (2006) detailed the gap between legal entitlement and provision which can be met by the development of an inclusive school, employing SpLD-friendly methods. He cited the difficult case of a parent of a child with dyslexia with a reading age appropriate to KS1, who attended a secondary school which did not effectively implement SEN policies and methodology. He described how this impacted negatively upon the child and his whole family with a resulting volatile relationship between parents and school (Konur, 2006, p. 52).

Ofsted (2006): Does it Matter Where Pupils are Taught?

Ofsted's (2006) report examined factors that promote good outcomes across a range of different provision for pupils with learning difficulties and disabilities, finding that "pupils with even the most severe and complex needs were able to make outstanding progress in all types of settings. High quality, specialist teachers and a commitment by leaders to create opportunities to include all pupils were the keys to success" (p.3). It also identified that in tandem with access to specialist teachers and professional agencies, continuing professional development was at its best when it was specific and came from specialists (Ofsted, 2006). However, Ofsted commented that professional development needs to be regular (ibid, p.10) and based on analysing the needs of staff and pupils within the setting. A further benefit of training is that it includes raising expectations and encourages mutual respect between staff and pupils. Teaching assistants who provided the best support had "often received high quality training", however Ofsted warned that they were "not a substitute for focused, highly skilled teaching" (ibid p.11).

The DfES Select Committee Report (2006): legislation acknowledges the importance of CPD

The Select Committee on Education and Skills (2006) recommended a new strategy for workforce development, advising that the Government put into practice a 'triangle of training needs' (Appendix 2) at school level, making SEN training a "core, compulsory part of initial training for all teachers and ensuring appropriate priority and quality of continuing professional development to equip all of the workforce" (DfES, 2006, s.317). The school level triangle of training needs requires action at three levels: core skills for all teachers in all schools, requiring teachers and learning

support assistants (LSAs) to recognise problems and to be able to implement early intervention strategies such as phonics strategies; advanced skills teachers for some teachers in all schools arising from one year's job training which will facilitate some specialist teaching, screening and assessment; specialist skills teachers in some local schools, requiring two years' job training to facilitate highly specialised teaching and to allow full diagnostic assessments. (DfES, 2006, s.313). Core skills are addressed in the criteria for training and funding for whole school staff encompassed by the dyslexia friendly schools standards (BDA, 2005), the advanced skills requirement is partly addressed by the standard of provision of a term's specialist training (BDA, 2005). This would enable a key staff member to offer guidance and support to all staff and enables the monitoring of dyslexia friendly practice from a standpoint of knowledge and understanding.

Socio-economic challenges

Government policy further developed SEN practice in continuing to review standards and to audit spending. The Warnock Report (DES, 1978) introduced the concept of a statement of SEN and had marked a significant step forwards for children with additional needs, in that ways for identifying and working with their needs were being developed (Audit Commission, 2002, s. 18). However, there were concerns that the system that had developed was becoming unwieldy and financially inefficient which led to the Audit Commission Report (2002) stating that "numbers of statements have risen since the Warnock Report, to just over 3 per cent... In 2001, almost 275,000 pupils in England and Wales had a statement – an increase of 10 per cent over the five years from 1997" (Audit Commission, 2002, s.19). Of the 1.45 million children categorised as having some sort of SEN in England in 2005, 2.9% had a statement.

The remaining pupils were categorised as having SEN but without a statement (DfES, 2006, s. 88). This pattern of statistics had maintained a similar ratio during the 1990s, had peaked in 2001 and has gradually declined since then (ibid). The key findings of the Audit Commission Report (2002) were a catalyst for further change, suggesting that statements were a costly, bureaucratic and an unresponsive process which added little value in helping to meet a child's needs and which lead to an inequitable distribution of resources which may have provided funding to schools in a way that was inconsistent with early intervention and inclusive practice. However, findings stated that statements provided a means of targeting resources for children requiring very high levels of support (Audit Commission, 2002). Concerns about the level of funding and the efficiency of education provided, along with an "unacceptable variation in provision between different parts of the country" (DfES, 2006, s. 3:88) were major factors for future strategy proposals. These would develop an approach to SEN based on pupil-centred provision and created a national framework with local flexibility alongside prioritising training and resourcing all staff, improving partnership working and taking a fundamentally different approach to statementing (DfES, 2006, s. 5: 252).

The Select Committee on Education and Skills (2006) evidenced concerns that there was "a socio-economic link with data showing that children with SEN were much more likely to be eligible for free school meals (a proxy for socio-economic deprivation) than the average school population" (DfES, 2006 s.38). Furthermore, failure to address SEN effectively impacted directly upon social issues with associated financial costs to society (DfES, 2006, s.57). 52% of prisoners have literacy difficulties, with over 20% of prisoners having identified dyslexia (ibid); an

overrepresentation compared to the level of identified dyslexia in the general population. Costs to the taxpayer for the prison service, probation service and resourcing the school exclusion service are estimated at approximately £300 million a year (DfES, 2006, s.57). The continuing link between exclusions and children with SEN, not being in education, employment or training and low attainment not only impacts significantly in economic and social terms (ibid, s. 49) but also has a personal cost to the families of children with SEN (ibid, s.49).

The need for change

Inclusion is inextricably linked to the rights of children and their parents (Konur, 2006), continuing professional development of staff (Ofsted, 2006; Lambe and Bones 2006; Reid et al., 2005) and the associated development of ethos within the setting (Ofsted 2006; Lambe and Bones 2006) towards a "social model of disability perspective which challenges peoples' negative assumptions and mis-attributions towards children and adults with specific literacy difficulties" (Riddick, 2001). However, it requires improved initial training and more opportunities for specialist training (Ofsted, 2006) and a close evaluation at a micro level of assessment of progress made by pupils and at a macro level of the impact of provision and services in order to continue to improve (Ofsted 2006).

Inclusion appears to be an evolving process and requires change not only in teaching practice but in ethos (Corbett, 2001). The call for a connective pedagogy (Corbett, 2001) arose from evidence of different and often very difficult experiences of what Corbett termed the "dump and hope" model of inclusion where "placement alone is the criterion for success" (ibid, p.58).

Research (Gilchrist, 1999; Hunter-Carsh, 2001; Riddick, 1996; Wearmouth, 2004; Reid, 2006; Nugent, 2007), clearly stated the need for change, for understanding of dyslexic difficulties and for training and funding to support learners with additional needs. Deterministic assumptions that children with learning difficulties are unintelligent because they cannot read or write lead to children being placed in remedial groups, limiting potential and barring access to appropriate provision (Wearmouth, 2004). Frustration and aggression amongst dyslexic children arising from this is evidenced (Gilchrist, 1999; Riddick, 1996), as is becoming "depressed, tearful, withdrawn, angry and avoiding social contact in school, including poor school attendance", with caring parents having "the feeling of failure and having disappointed those who matter most" (Riddick, 1996). A lack of understanding can damage relationships and self-esteem (ibid); experiences of children reporting that adults raised their voices to them and labelled them as "slow" (Riddick, 1996, p.135) and others who were labelled as "irritating, difficult to manage and disrupting the work of those around [them]" (Gilchrist, 1999, p.25) are evidenced with researchers identifying the origin of such behaviour as a lack of understanding of learning difficulties (Gilchrist, 1999). The denial of the existence of dyslexia continued to impact negatively on parents and children (Gilchrist, 1999; Riddick, 1996). An education professor, Julian Elliot, cast doubt on the scientific validity of the term "dyslexia", reporting that "experts cannot agree on what it is or how to treat it", stating his opinion that dyslexia is an "emotional construct" (TES, 5.9.2005), despite the considerable body of research evidence to the contrary (Gilchrist, 1999; Miles, T,R, and Miles, E.,1999; Hunter-Carsh, 2001; Riddick, 1996; Wearmouth, 2004; Reid, 2006; Nugent, 2007).

Where dyslexia had been recognised as a learning difficulty, it was often considered to be a challenge mainly with spelling and reading. Gilchrist's (1996) research asked about difficulties at school across a broader range of variables, for example," maths, copying from the board, tests, dictation as well as literacy", finding that where children reported fewer difficulties was where teachers were aware of the importance of "structured phonics teaching and a multi-sensory approach allied to keeping children on task as much as possible as well as making lessons enjoyable" (p.136). Hunter-Carsh's research two years later called for a broader understanding of dyslexia to include "more than literacy difficulties; involving more than the characteristic cognitive profile; including whole-person factors; including how interaction with values and practices with regard to literacy and to disability occurs" (2001, p.118).

The emergence of the Dyslexia Friendly Schools initiative is located within this complex, comparatively recent educational, political and socio-economic history; it addresses the main criteria for overcoming barriers to learning, acknowledging the views of the child, parents and carers and addresses training needs with the associated consequences of change in access and teaching and learning styles in mainstream schools (BDA, 2005).

Dyslexia friendly schools

This section of the Literature Review considers how the Dyslexia Friendly Schools (DFS) initiative was developed by the British Dyslexia Association (BDA), a national voluntary organization supporting people with dyslexia, and discusses the implications for practice.

In 1999, the BDA issued the first DFS support pack, including valuable checklists of descriptors of how to identify and support dyslexia and how to develop a dyslexia friendly school. The policy is based on the inclusive principle that children with dyslexia should be educated in mainstream schools alongside their peers and that all involved in the process – the child, teachers, support workers and the parents should be empowered to work together to achieve this (DfES, 2001a; BDA 1999).

In a 'Dyslexia Friendly School' all teachers are appropriately trained, aware of the impact of cognitive difficulties on teaching their subject, aware of the strengths and weaknesses of individuals with dyslexia, make efforts to raise and maintain self-esteem, communicate effectively with parents and practice appropriate assessment (Buswell Griffiths, Norwich and Burden, 2004, p.11). This requires the implementation of major whole school policies to meet standards concerning leadership and management in the school (whole school approach), teaching and learning, classroom environment and partnership and liaison with parents, carers, governors and other concerned parties (BDA, 1999).

The development of dyslexia friendly schools is inherent in the emergence of inclusive schooling and there can appear to be a tension between general inclusive practice and specific dyslexia friendly methodology (Norwich, Griffiths and Burden, 2005). This conflict between the notion of dyslexia friendly schools and "inclusive" schools was evidenced by schools "focusing on those with dyslexia" (ibid, p.149) as a separate category of SEN. Norwich et al. (2005, p.149) finds a "tension between an all-encompassing and a specific kind of inclusiveness [which] can be traced to ... the growing emergence of interest groups that focus on medically defined areas of

difficulties – e.g. dyslexia, dyspraxia, attention deficit hyperactivity disorder (ADHD) and autism" and to wider developments in the field of SEN. However, despite the tension between the notion of a specifically dyslexia friendly school and a more general 'inclusive school', there is evidence that the dyslexia friendly approach benefits all children (Rowcliffe, 2002; Mortimore, 2003; Burden and Burnett 2005). Norwich et al.(2005) conclude that the essential approach is to work with the "whole child" in a supportive learning environment, having identified strengths and needs, rather than working using a specific approach with 'the child with dyslexia', or 'the child with ADHD' or 'the child with Mearns-Irlens Syndrome'. This view is embedded in Norwich et al.'s conclusion that "the concept of dyslexia-friendly schools needs to be embedded within the notions of SEN-friendly schools and general inclusive schools" (2005, p.163).

Removing dyslexia as a barrier to achievement begins with early identification (DfES 2006) and a dyslexia friendly ethos and is translated in practicalities in the dyslexia friendly classroom. Coffield and O'Neill (2004) found that although early identification and intervention are crucial, most children's needs can be met through "effective classroom practice and flexible use of available resources" (2004, p.254). Environmental factors are key points in enabling dyslexic learners to access the curriculum (BDA, 2005). The BDA (2005) considers that classroom adaptation involves careful consideration of seating and lighting, accessible alternatives to copying from the board and the use of appropriate resources including ICT. The promotion of self-esteem and effective measures to deal with bullying related to SEN contribute to providing a stress free environment (BDA, 2005). The dyslexia friendly classroom must necessarily consider those children whose difficulties with dyslexia,

or indeed with co-morbid or single-standing issues such as dyscalculia that can impact on their mathematical achievement (Henderson, 1997; Butterworth, 2005). Henderson (1997) suggests adaptations to resources and the classroom environment which will support the dyslexic learner, including mathematics games, individual resources (number fans, counting sticks, individual 100 squares, number lines, multiplication squares), wall displays relating to concepts and the number system and ICT software.

Coffield and O'Neill's (2004) analysis of Durham's promotion of Dyslexia Friendly Schools evidences the importance attached to environmental factors in referencing an audit produced by Durham County as part of its Dyslexia Friendly Schools policy. The audit was designed to be used as a self-assessment tool by schools and details environmental and organisational factors which impact on the dyslexic learner. For example, grouping and setting regardless of literacy levels, alternative access methods, the use of multisensory strategies and specialist resources, for example, electronic spellcheckers, coloured overlays and appropriate computer software (Coffield and O'Neill, 2004).

Dyslexia friendly teaching

This section of the Literature Review demonstrates how teaching methods and materials impact on the dyslexic learner, at a time when nationally, practitioner self-confidence in teaching dyslexic children is low;

> Fewer than one in 14 [teachers] say they would be "very confident" in identifying a child with dyslexia while only 9 per cent say they would be "very confident" in teaching such a pupil. The survey, by the National Union of

Teachers (NUT), reveals the vast majority [of teachers] believe they do not have enough training to deal with special needs children (The Independent, 10.01.07).

Furthermore, this requests a shift towards 'meaningful learning' (Gray and Tall, 1994; Corbett, 2001) and thus demands building meaningful links across the curriculum as a methodology which supports not only dyslexic children, but all children (Henderson, 1998).

Governmental policy ethos states that:

> Provision for children with special educational needs is a matter for the school as a whole. ... *All teachers are teachers of children with special educational needs.* Teaching such children is therefore a whole school responsibility. In practice, the way in which this responsibility is exercised by individual staff is a matter for schools, to be decided in the light of a school's priorities and ethos (DfES, 2001, s. 5:2).

A body of research is growing to support teaching staff in making decisions regarding practice in the light of change in educational culture and inclusion agenda (Reason and Piotrowski, 2000; Rowcliffe, 2002; DfES 2002; Burden and Burdett, 2005; MacKay, 2004; Henderson,1998; BDA,2004; DfES 2005; Burden and Burdett, 2005). This research is disseminated in training (DfES 2006).

Reason and Piotrowski (2000) analyse teaching methods and materials within the context of the National Literacy Strategy (NLS), focussing on word level learning and teaching approaches in relation to this. They summarise the persistent features of good practice as:

> a hierarchical, structured study of language, in particular detailed, incremental coverage of phonics; multisensory methods with emphasis on the links between seeing, hearing and tactile stimulation, kinaesthetic feedback and the development of motor memory; learning to the point of mastery/automaticity and acknowledgement of the learning bias of the child with regard to auditory or visual preference (Reason and Pitrowski, 2000, p.53).

They concluded that some, for example, phonics, but not all of these methods are met by the National Literacy Strategy. Their comparison of teaching materials reviews schemes intended for all children, for learners making slower progress and materials targeted at learners with difficulties of a dyslexic nature and would make valuable reference for teachers seeking materials to suit the learning styles of all children. Their assessments are from a wholistic viewpoint; taking into account 'NLS searchlights' rather than a purely synthetic phonics stance, and stressing the importance of assessment for learning, so that the child does not have to "plough through every aspect of it, resulting in frustration and boredom." (Reason and Piotrowski, 2000 p.56). Furthermore, Reason and Piotrowski stress the importance of "over learning"; "planned repetition and revision that ensures the retention of what has been learnt" (2000, p.55), calling this "mastery learning". It is evident here that their suggestions will require considerable knowledge of the children involved, ongoing working assessment informing appropriate differentiation of tasks in order to consolidate retention.

Corbett's "connective pedagogy" research (2001) concluded that learning should be made meaningful through connecting with the individual learner, set in the context of a school where there is shared vision, enthusiastic leadership by skilled senior

teachers and a receptivity to learning new skills (ibid). Corbett(2001) asserts the importance of strategic planning; embedding funding and staffing into long-term development and not leaving it vulnerable to cutbacks as a 'marginalised add-on' (ibid). Corbett's (2001) conceptualisation of meaningful learning is effective learning.

Achieving economic wellbeing is one of the foundations of the Every Child Matters strategy (DfES, 2004d). To achieve this, it is necessary for all learners to make progress in mathematics as well as literacy. Gray and Tall (1994) consider meaningful mathematical learning, asking the practitioner to reflect on the quality of teaching and the quality and compressibility of what the children are learning. They argue that weakness in chunking and compressing information into richly-connected, useable ideas is a primary cause of learning deficit. Gray and Tall's concept of "procepts" (Gray and Tall, 1994), or a rich schemata of interlinked knowledge, demonstrates where the learner has the mental perspective to see something as a whole, where learning can be transferred to other areas of new learning or applied to existing concepts. Gray and Tall's mathematics research findings (ibid) are that learning mathematics often involves learning action-schemas, such as counting, adding, multiplication and factorising. In many cases, the symbol that evokes the action, such as "3+2" or "3/4", operate dually as processes (counting, addition, division) also lead to concepts (number, sum, fraction). Such symbols are called "procepts"; a contraction of the terms "**pro**cess" and con**cept**". Children who progress in arithmetic are able to use such symbolism flexibly, such as adding 8+6 by knowing 8 and 2 make 10, and breaking 6 into 2 and 4 to give 8+6 is 10+4, i.e. 14. Slow learners, however, focus only on the step by step detail of the counting process.

Therefore arithmetic, for them, occurs in time and they do not connect the input and output of a sum such as 8+4, which they may be able to calculate by counting on 4 using their fingers (9, 10, 11, **and 12**). Such a child may be able to add 8 and 4 to get 12, but not actually *know* that 8 and 4 makes 12. If asked to calculate 8 and 4 again, they simply repeat the counting procedure (Gray and Tall, 1994). Henderson's action research on successfully teaching mathematics to dyslexic children shares the importance of building meaningful links rather than "drill and kill" (Butterworth, 2005) rote learning. She finds that "students that receive the appropriate teaching that is geared to their learning style are able to master concepts, then whole topics, finally moving on to more advanced work, [becoming] enthused by the magic of patterns within mathematics" (Henderson, 1998, p.2), enabling the dyslexic learner to overcome barriers to achievement (DfES, 2004a) and achieve meaningful, lifelong learning (DfES, 2004d).

Accessing the curriculum

This section of the Literature Review explores innovations in the shift from didactic teaching, to a developing educational ethos where learning styles (Mortimore, 2003) and metacognition (Gardner, 1991) are paramount and where the development of ICT enables innovation in presentation, allowing practitioners to present their lessons using PowerPoint, video clips and manipulations of data on an electronic whiteboard. This has implications for accessing the curriculum.

Accessing learning should not be dependent on the written word in a dyslexia friendly classroom as;

> dyslexic learners are particularly vulnerable when a classroom-based preoccupation with reading and spelling accuracy is allowed to detract from information processing and organizing thoughts on paper. When this happens the specific difference becomes a specific difficulty and a learning preference becomes a learning problem (Mackay, 2005, p.8).

Access strategies comprise not only the classroom aid-based practicalities, but also adaptations to teaching and learning expectations beyond the traditional 'chalk and talk'. Awareness of learning style and metacognition are essential factors. Chasty (cited in Exley, 2003, p.213) stated that "if a child does not learn the way he is taught, then teach him the way he learns". Exley's (2003) small-scale research on learning styles found that teaching to a child's strengths improved retention of information. She assessed whether the dyslexic students of her research cohort were more strongly visual, kinaesthetic or auditory learners and by adapting teaching approaches to those preferred learning styles found a clear improvement in performance. In addition, knowledge of their learning style was transferred by the students to other areas of learning, enabling them to "focus and use their differences not only in a withdrawal situation but also in mainstream lessons" (Exley, 2003, p.218).

Chinn and Ashcroft (2004, pp.18–24) examined Bath and Knox's (1984) research on cognitive style. Bath and Knox classified two working styles at opposite ends of the continuum as 'the grasshopper' and 'the inchworm'. Grasshoppers tend to overview, are holistic, often work back from a trial answer, rarely document method and perform calculations mentally. The inchworm focuses on the parts and details, is formula and procedure orientated, works in serially ordered steps, usually forward, more comfortable with pen and paper. There are advantages and disadvantages to

both profiles. Grasshoppers have a good understanding of numbers, however, since they do not check their answers or record their methods, inaccuracy places them at risk of failure where there is no way of tracing back the problem. The inchworm has a poor memory for basic facts yet uses a certain level of strategy and any misconceptions are trackable through their recording. Chinn and Ashcroft (2004) demonstrated how it is essential to examine the process the child used in arriving at a conclusion, as the child could be relying on ineffective practises which feel 'safe' as they have used them effectively before in other applications. They further demonstrated how a diagnosis of learning and working style would enable the practitioner to work to the strengths of the grasshopper and inchworm learners and develop strategies to support their weaknesses.

Supporting Self-Esteem

Research into self-concept and self-esteem in children with SEN has produced a "broad and widely agreed consensus that children who experience problems in learning, develop maladaptive self-referential styles" (Humphrey, 2002, p.29). Riddick's research (cited in Humphrey, 2002, p.30) also reflected upon academic self-concept and evidenced children with dyslexia who had 'bad experiences' in mainstream education due to the teachers lack of understanding or not acknowledging the existence of dyslexia. This led to the children feeling "disappointed, frustrated, ashamed, fed up, sad, depressed, angry and embarrassed about their difficulties" (Riddick, 1996, p. 129). Humphrey makes three key recommendations; changing the ethos and climate of the school to provide a more accepting and dyslexia-friendly environment; performing self-concept and self-esteem enhancement programmes with

children with dyslexia and early identification and better provision for children with dyslexia in mainstream schools (Humphrey 2002, p. 34).

Burden and Burdetts' (2005) motivational analysis explores learned helplessness, depression and locus of control in children with dyslexia. They found that the vast majority did not have extreme feelings of learned helplessness, but that there was a "reasonable lowering of expectations" when compared with pupils without dyslexia (2005, p.101). They found this to be a "disadvantage of even high-quality special education" (2005, p. 101). When analysing findings referring to depression, they found that "few would confess to feeling that dyslexia was a curse, but a significant minority (30%) did admit to wishing their dyslexia would go away" (ibid, p. 102). Their self-efficacy gave indicators of a positive nature, with the "vast majority of boys interviewed [being] strongly disposed towards effort as an essential attribution for success" (ibid, p. 102). Burden and Burdett comment that although Humphrey's (2002) identification of the need for self-concept programmes for children with dyslexia is valuable, the "ingrained feelings of failure" would still exist (Burden and Burdett 2005, p. 103). Their recommendation is an inclusive approach; "a whole-school ethos which fosters a sense of self-worth, community spirit and support and personal responsibility for one's own successes and failures [which] essentially goes well beyond good instructional or esteem-building programmes" (ibid, p.103). They further recommend that in order to become dyslexia friendly, programmes for maintaining self-esteem should be embedded in policy, fostering strong feelings of self-worth and self-determination in all pupils – generating, in effect, a truly inclusive ethos"(Burden and Burdett, 2005, p. 103).

The impact of the literature is now discussed. As Governmental policy continued to develop teaching practice, the movement for inclusion gathered momentum leading to a plethora of research (Corbett, 2001; Exley, 2003; Humphrey, 2003; Kjellin and Wennerstrom, 2006; Konur, 2006; Lambe and Bones, 2006). The dyslexia-friendly schools initiative united research in the related fields of teaching and learning styles (Mortimore,2003; Exley,2003; Reid,2005), thinking skills (McGuinness1999; Gardner,1999), metacognition (Ayres,1996) and self-esteem (Humphrey and Mullins, 2002a; 2002b; Humphrey,2003). Furthermore, arising from dyslexia-friendly schools research, the notion that there are benefits to others when practitioners use dyslexia-friendly methods has been researched and analysed (Rowcliffe; 2002,93-100; MacKay, 2005).

In conjunction with academic research, two kinds of manual for practitioners emerged: handbooks of specific teaching techniques and/or progressions (Chinn and Ashcroft, 2004; Cowling, 2002; Hornsby, 1999; Cowling,1993) and works raising awareness of the wider issues, for example, the classroom environment and maintaining self-esteem within the context of the Every Child Matters agenda, giving the non-specialist practitioner a framework for reflection (Reid, 2003; BDA,2005; Cheminais, 2005; Pollock, Walker and Pollit, 2004; Cheminais, 2006). LEAs are producing their own response and guidance; the case study County Council's 'The Companion' is a valuable resource for practitioners, providing audits of 'Quality First Teaching' and guidance on the wave response to SEN engendered by the Code of Practice's recommendation of a "graduated response" (DfES, 2001b).

Work published within the field of SEN and learning continued to impact on practice; research on metacognition (Ayres,1996) was synthesised with thinking skills development and further research on learning styles and wholistic approaches (Mortimore, 2003) added to the development of teaching and learning techniques which were evolving. Research on short-term memory (Gathercole,1998; GathercoleandPickering,2001; Gibbs,2005), procepts and effective compression of concepts (GrayandTall,1994) and phonological deficits (Gibbs,2005), provided a broader context and research rationale for practice. Furthermore, teaching approaches which support inclusive education (Corbett,2001) and guides for practical strategies in response to new legislation (Cheminais, 2005,2006) contributed to the developing framework for dyslexia-friendly teaching and learning, supporting the practitioner in theorising and evolving skills.

The shift in ethos and practice has been immense: from classrooms where before 1944, children with SEN were excluded from mainstream, where the children were seated in rows and the teacher was placed at the front, depending mainly on text and the spoken word to deliver the curriculum (Miles and Miles, 1999), to becoming dyslexia friendly, inclusive schools using dynamic and highly-evolved pedagogy and technology. This shift has pervaded all areas; teaching and learning, monitoring and assessment and the environment in which practice takes place and has involved all adults concerned in actively making the change (Corbett, 2001; Mortimore, 2003; MacKay, 2005).

Methodology

Research has been defined by Kerlinger (1970, in Cohen, Manion and Morrison (2005, p.5) as "the systematic, controlled, empirical and critical investigation of hypothetical propositions about the presumed relations among natural phenomena" and refers to the "process of obtaining and analysing information and data" (Hitchcock and Hughes,1999,p.5). The purpose of this research is to provide the school involved in the study with:

1. a partial audit of their current skills;
2. a partial audit of their current perceptions;
3. a. identifying what skills and perceptions are in school today;
   b. identifying what challenges are in school today;
4. what needs to be done to improve.

This methodology focuses on the identification of skills and perceptions.

Cohen, Manion and Morrisson (2005) drew distinctions between the positivist and interpretive paradigms by indicating that conditions ruling interpretive research are more subjective in that the researcher has to make "efforts to get inside the person and to understand from within" in order to "retain the integrity of the phenomena being investigated" (p. 22). Positivist methodology is characterized by viewing social phenomena "in the light of physiological (or biological) laws and theories and [is] investigated empirically, just like physical phenomena" (Oldroyd, 1986, in Cohen, Manion and Morrison, 2005, p. 8) Interpretive researchers begin "with the individuals and set out to understand their interpretations of the world around them." (Cohen, Manion and Morrison, 2005, p. 23). Interpretive theory emerges from the research rather than preceding it and being proven by the research process as in the

positivist paradigm. Research for the purposes of this study has taken the *interpretative, qualitative approach due to the focus on context and meaning* rather than on cause and effect. Hitchcock and Hughes (1999, p.25) emphasize the value of this approach in an educational context, stating that "the complexity of education demands the use of very many different research techniques and models," however "the most productive approach is a qualitative one".

Within the interpretative approach there are two methods of data collection available: quantitative methods where precise numbers can be calculated with accuracy, for example, scoring and tallying information from a questionnaire or reporting on testing which gives precise results and qualitative methods where the approach is more open ended and responsive and where uniqueness and subjective facts become the object of study (Cohen, Manion and Morrison, 2005, p. 272). With both methods of collection, it is essential that the sample remains representative of the population from which it is born (Cohen, Manion and Morrisson, 2005, p.95). For the purposes of this research, the methods have been quantitative (selected questionnaire questions) and qualitative (interviews and observations and other selected questionnaire questions). Likert scales have been used as they build in a degree of "sensitivity and differentiation of response whilst still generating numbers" (ibid, p. 253).

Traditionally, dyslexia research has been carried out within the interpretative paradigm; with a mixture of quantitative methods (Butterworth, 2005) and qualitative methods (Burden and Burdett,2005; Coffield and O'Neill, 2004) which seek to explore and explain the subject matter having observed, discussed and triangulated

with corroborative data in order to validate the study (Cohen, Manion and Morrison, 2005, p. 95).

A valuable starting point which provided a clear focus for the research, located in the current framework for thinking about dyslexia in schools, was the Dyslexia Association's "Dyslexia Friendly Schools" pack, which seeks to "promote excellent practice … supporting and challenging schools to improve accessibility to learning to more children" (BDA , 2005, viii) Good practice is validated across four areas; leadership and management; teaching and learning; the classroom environment; partnership and liaison with parents, carers, governors and other concerned parties (BDA, 2005, p.29). For the purpose of this study, research has been limited to Standard 2: "Teaching and Learning" and Standard 3:"Classroom environment" (curriculum and learning environment); (BDA, 2005, p.29).

The research has focussed on one school, a medium-sized primary school with 6% free school meals. The interviews consisted of open and closed questions with the intention of gathering data to develop hypotheses and to gain insight into perceptions and skills which affect the teaching and learning styles of dyslexic learners and which impact upon developing dyslexia friendly schools. The form of the interviews was an "interview guide approach", where "topics and issues to be covered were specified in advance, in outline form; the interviewer [deciding] the sequence and working of questions in the course of the interview" (Cohen, Manion and Morrison, 2005, p.271). This approach had the advantage of increasing the comprehensiveness of data gathered although salient topics may have been inadvertently omitted (ibid); however the purpose of the interviews was to explore pertinent issues, rather than to gain data

which can be aggregated. According to Kitwood (ibid, p.267) "the interview ... is a transaction which inevitably has bias, which is to be recognised and controlled". Control was conducted by exploring differing viewpoints arising from the research and, essentially, from triangulating interview data with published articles from authors with a different bias.

The initial approach was to gather data from a comprehensive questionnaire designed using a combination of open and closed questions (Appendix 1), since open-ended questions supply "valuable additional information and new insights" (Tall,1988, p.35) and correctly planned closed questions are an "extremely rapid and confidential means of collecting a large number of fairly detailed views" (ibid,p.33). All teaching staff (teachers and teaching assistants) were invited to complete the questionnaire and 100% were returned. The questionnaire sought existing attitudes towards working with dyslexic children and explored issues of self-confidence in teaching skills. The questionnaire gathered information on dyslexia friendly teaching methods already in use and on elements of the classroom environment which teachers perceived to contribute towards dyslexia friendly learning. At this point in the research, dyslexia friendly techniques were not made explicit, ensuring an assessment of existing attitudes and confidence in the practitioners' own skills without influence exerted by new training or discussion. An element of sensitivity was maintained towards some projected responses, particularly regarding working with dyslexic children and in the perception of the support given by staff within the setting. This was addressed by assuring anonymity and non-traceability, by informing that the aggregation of data would not identify individuals (Cohen, Manion and Morrison (2005), p.259) and by

assuring respondents that their responses, however frank, would be genuinely helpful and confidential.

Data from the questionnaire was triangulated by selecting key participants for interview: a teacher of some years' experience, a newly qualified teacher in his first year of teaching and a teaching assistant (TA) working with children with a range of additional needs in a mainstream classroom. The interviews followed a short classroom observation, which had dyslexia friendly teaching and learning as its focus using the observation pro-forma from 'Including All Children in the Literacy Hour and Daily Mathematics Lesson' (DfES, 2002). As with the preliminary interviews, seeking alternative viewpoints, in this case using a range of teaching experience, assisted triangulation of data.

Validity and reliability comprise firstly the accurate measurement of data and secondly whether the researcher is measuring what it is intended to measure. (Winter, 2000, p.3). According to Hammersley,"an account is valid or true if it represents accurately those features of the phenomena, that it is intended to describe, explain or theorise" (cited in Winter, 2000, p1). Cohen, Manion and Morrisson addressed the issue of bias in qualitative research which, to some extent, would affect validity: "in qualitative data the subjectivity of respondents, their opinions, attitudes and perspectives together contribute to a degree of bias" (2005, p.105). The qualitative paradigm is linked to the subjectivity of the research, "interpretation is typically viewed as an inextricable element of data collection (Winter, 2000, p.4). Validity then "should be seen as a matter of degree rather than as an absolute state" (ibid, p.4). A further issue is researcher impact and impartiality. This research necessarily

includes the researcher, due to opinions developed through experience and personal research and due to the involvement in the research setting. However, as Boucher states: “the solution is the researcher” and in recognising the question of whether the researcher influences the work, the researcher must test the assumption that the research will be affected, assuming that an objective account is possible (1994, p.3).

Threats to validity within this research were minimised by: the interview process; the triangulation of data from classroom observations / interviews by selecting a ‘vertical’ sample of teaching experience from an experienced teacher, a recently qualified teacher and a TA with many years of experience. Reliability and validity in the questionnaire process were achieved by the anonymity of respondents in the full questionnaire, using a range of question types to ensure coverage and to give the opportunity for the respondent to answer in more depth, indicating that respondents’ participation and opinions were valued and would be taken into serious account and indicating the (short) time that it would take to complete the questionnaire to assist with respondent compliance. Researcher influence was addressed by applying to the researcher ‘the same rigour of analysis that [was] applied to those [being researched]’ (Boucher, 1996,p.4)

Ethics

Reasonably informed consent from participants and the Headteacher were sought, Diener and Crandall (cited in Cohen, Manion and Morrison, 2005, p.51), defined it as "the procedures in which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decisions."

Once the research was completed and analysed, notes from observations, recordings and questionnaire information were destroyed. Questionnaire anonymity was ensured by ensuring that the papers did not bear any identifying marks and that any identifiers were removed (Frankfort-Nachmias and Nachmias, 1992, cited in Cohen, Manion and Morrison, p. 63).

Research

Background to Case Study setting.

The model operated by the case-study setting is one of an integrated, whole-school approach to SEN, the graduated response, or staged approach to SEN (DfES 2001, 5.20), governed by inclusion (DfES, 2004) and the implementation of Every Child Matters (DfES, 2003). Currently within the case study school there were 11 children with identified speech and language processing difficulties who were experiencing difficulty gaining skills in reading and writing despite targeted support over a period of time, and therefore fitted the DECP definition of dyslexia (BPS, 1999, p.18).

The case study LEA's response had been to remodel the Educational Psychologist's (EP) consultation with special regard to the graduated response. This model evaluated the demand and workload of each setting and allocated each cluster group of schools a number of hours of service. The case-study setting was part of a 'consultation model' group that had been effective in supporting children and their families within this cluster, operating as a half-termly meeting where Sencos were invited to present case-studies of children at any stage of the graduated response (usually at Wave 3; Appendix 3) for discussion and analysis in order to produce an action plan. EPs drew on teacher knowledge of the child in their setting rather than the 'snapshot' view of a child that would be gained on a visit into school for observation. An invaluable benefit had been that Sencos attending the cluster received experience of and training (albeit informal and unstructured) regarding SEN concerns which they may not have been monitoring within their setting. This facilitated an efficient use of EP and Senco time and a 'seamless service' between statutory agencies (DfES 2001b, s. 10.1).

The concerns referenced in Reid et al.'s (2005) study regarding late identification of children with SEN were addressed within the case study LEA. County INSET for Sencos had actively sought to recruit candidates for Continuous Professional Development (CPD) training, affiliating with a teacher training college. It was expected that Sencos would cascade knowledge to other staff within the setting. The case study's LEA offered autism training to staff working with children on the autistic spectrum in mainstream, SpLD training for TAs working with children with dyslexia, but choose to give general dyslexia training (as opposed to specialist dyslexia teacher training) as INSET for schools which registered an interest or who were working towards the DFS Quality Mark.

Durham's teams of qualified specialists, in this case educational psychologists and specialist advisory teachers, supported pupils whose difficulties put them at the School Action Plus stage of the Code of Practice (DfES, 2001b). Where the school will have worked with a child on the special needs register for at least 2 cycles, where the child has not shown reasonable progress (DfES 2001b). At this point, it will have been demonstrated that, despite careful and targeted intervention at school level, further support and advice from an agency with experience of working with a child with particular difficulties or learning differences was necessary. The case study LEA's model had, in practice, been able to support children before the School Action Plus stage. Access to outside agencies, for example, Speech and Language therapy, enabled a full screening of phonological awareness, memory processing, receptive and expressive language. This was available at any point in the graduated response; in the case study setting it was standard practice to seek early identification and further information about a child's learning challenges rather than to take the

approach of 'waiting for an assessment' (Reid et al., 2005). Access to Educational Psychologists and Senco colleagues at half-termly case-conference meetings ensured that any difficulties which were beginning to present would be discussed, even where a child may not have been on the SEN register. This is an essential part of the graduated response to SEN and demonstrates that where a setting has a supportive and SEN-friendly environment, which enables the child to access the curriculum, placement on the SEN register should not be inevitable as barriers to learning will have been overcome. At a formal level, should the child not make reasonable progress towards 'SMART' (Specific, Measurable, Achievable, Relevant and Time bound) Individual Education Plan (IEP) targets (MacKay, 2005), swift access to an Educational Psychologist's opinion, which is firmly located in the classroom and draws almost entirely upon teacher knowledge of the child, is available. This contrasts with the previous system where a referral to an Educational Psychologist could take months. In the current model, an opinion and guidance would be sought, providing strategies which could be enacted immediately following consultation.

The case study LEA revolutionised its statutory assessment process in 2007 with the introduction of Individual Pupil Funding (IPF; Appendix 4). This addressed The Audit Commission's (2002) concerns effectively, in that it restructured funding for pupils with additional needs, radically reducing the wait for assessment and access to funding. It also addressed the personalisation requirement (Select Committee, 2006), that "all children should be considered on an individual basis with a sliding scale of additional resource to meet their needs" (s.5:252).

Not all children with dyslexia need a statement, and indeed the case study setting's LEA response to SEN was shifting towards statementing only those children with the most severe and persistent needs. This conforms to the fundamentally different, pupil-centred approach to statementing required by the Select Committee on Education and Skills (2006; s. 5:252). The school needs, and indeed to access IPF funding *must* respond on different levels: creating an 'access for all' environment in the classroom; putting in place appropriate teaching methods to enable the child to continue to learn to read and write (and in some cases to function as a mathematical learner); communicating well with parents and continuing to monitor and assess progress.

IPF is potentially an agent for change in creating a financial climate for developing dyslexia friendly schools. Before applying for IPF, the school has to provide evidence that a checklist of interventions have already been used (Appendix 5). This puts the responsibility onto the school to apply dyslexia friendly strategies but is a 'back door' method to becoming a dyslexia friendly school, which should be a whole-school ethos-led methodology for all as part of the inclusion and Every Child Matters agenda, rather than a response to needing funding for a single child.

Research findings.

Knowledge and understanding of dyslexia.

Findings evidenced that all staff had a construct of dyslexia, ranging from 'word blindness' to understanding of dyslexia as a learning difficulty; 'a different style of learning linked to literacy'. 60% of respondents gave detailed answers which referred to indicators of dyslexia beyond difficulties with reading and writing, for example, 'balance/co-ordination', 'letter reversals and poor memory for symbols', 'different ways of processing words/ letters', 'it can change from day to day'. 90% of respondents referenced dyslexia as being 'difficulties with reading/writing' with four of these referencing processing difficulties as part of the issue. One referenced different levels of severity, one referred to varying performance; 'it can change from day to day, one day they can be totally switched on and remember everything, another day they don't know the simplest of words or numbers'. One respondent referenced the discrepancy definition of dyslexia (DfES 2004c, p. 6); 'almost by definition the disparity between performance and ability in literacy'. However, this respondent also identified wider issues for the dyslexic learner, concurring with the BDA definition of dyslexia (BDA, 2005) in referencing memory and organisational problems and was additionally the only respondent to reference the dyslexic learner's ability in creative areas such as IT, technology, art and comedy. Comments tended to be descriptive of features of dyslexia, for example, problems with spelling and writing, letter reversals, problems with reading (70% of respondents) rather than an understanding of current working definitions.

Only one respondent reported formal training in dyslexia teaching. All respondents had worked with children with identified dyslexia with 50% reporting difficulties

which led to such feelings as 'inadequacy'. Teachers reported developing appropriate and effective strategies as they worked with the dyslexic pupil.

Experience

All respondents reported that they had worked with children with identified dyslexia. 50% of respondents reported difficulties; 'not enough time to cater to their needs fully', 'limited experience in training', 'I was not given enough background to his problems' (although this was the only respondent to report being given lots of advice and information about how to structure work), 'challenging!', 'I felt inadequate as I have no training about dyslexia'. 40% reported strategies that they had used to meet needs, including: structured, multisensory over-learning; asking the child to read at a slower rate and to record information using a different format, for example, bullet points and mind mapping; providing a range of ways to access the curriculum; using repetition and over-learning and relating learning to the child's strengths. One respondent gave a detailed answer, describing structured, multi-sensory work in the context of a classroom where dyslexia friendly techniques were used to reduced barriers to learning. This respondent also identified that for severe dyslexics, regular, direct tuition was needed to build skills in reading and writing in order to teach the child to read and write, over and above the generalised support of the dyslexia friendly classroom which helped to access the mainstream activities of the class.

The Dyslexia Friendly Classroom

Supporting Spelling

All practitioners reported using aids to support spelling. These were all totally visual, with only one reporting using 'buddy systems'. Most (80%) reported using word

lists, two of whom also used national curriculum high frequency word cards. One KS1 practitioner reported using spelling patterns on a wall display, which children are able to add to – transforming what could have been an extra piece of visual information into an interactive learning aid. 50% of KS2 respondents did not report using word lists, however they used individual spelling logs, dictionaries and spellcheckers. In addition, one KS1 practitioner reported using electronic spellcheckers. 90% of practitioners reported always or sometimes using wall displays containing topic words and 90% of practitioners always used wall displays containing high frequency words with the remaining KS2 practitioner reporting that these were sometimes used. In supporting mathematical skills, all practitioners reported using wall or desk number squares and number lines. In addition, practitioners reported using personal wordbooks, wordbanks specific to the lesson, one KS1 class being visited on a regular basis by a 'word fairy' who left words for the children to explore.

How practitioners supported learning using ICT

All classrooms were equipped with an electronic whiteboard, three student desktop computers and one teacher laptop computer. In addition, there was a central computer suite which was resourced at a ratio of two children to one computer. All computers were linked to a central server, enabling users to access their work from any computer in the school. Staff made good use of ICT resources available and facilitated children's learning by using computers to draft and redraft work. Furthermore, the electronic whiteboard was used by children. In observations, whiteboards were used either as a larger screen to display computer information to a class or as a multisensory teaching aid where touching the screen would, for example, enable the user to move an object or to insert text.

Supporting children with short term memory difficulties

Staff tended to rely on extra adult and buddy support, with KS1 staff commenting that adult support was used whenever possible. All KS2 and one KS1 practitioners used writing frames, no KS1 and all KS2 practitioners used bullet pointed instructions, two KS2 practitioners used personal diaries/notebooks, one KS2 practitioner used a class noticeboard of events. KS2 practitioners commented that they also used wordbooks, individual whiteboards, colour coded timetables, staff liaison sheets, notes on the student's desk rather than on the board, liaison with parents, a supportive understanding environment and buddy support.

Grouping

Children were grouped in all classes and all teachers reported using different combinations of groups according to the subject in which the children participating. Different combinations were facilitated according to the learning activity. Working groups facilitated practical organisation; all teachers grouped children so that TAs could access the group for additional support, two teachers grouped children in small focussed ability groups which were mostly supported by an adult. 30% of practitioners reported organising their groups according to assessed reading or writing ability.

20% of respondents specifically mentioned mixing ability sets depending on learning focus. These respondents referenced using peer support, a reading or scribing partner and peer tutoring. One respondent's rationale was to group children so that they were able to access TA support plus additional resources where appropriate. This

respondent referenced assuring that children did not feel inadequate in comparison with their peers.

Checking for understanding

All practitioners reported that they used questioning, 30% asked children to repeat instructions. One member of staff referenced using paired, group or adult support to help to keep children 'on task', another respondent listing instructions on the whiteboard; providing a visual reminder of what to do. One respondent referenced using quick observation to ensure that children were correctly on task, then 'checking and rechecking and encouraging during the task'. Practitioners additionally referenced 'knowing the children' and being aware of those in their cohort who might be having difficulty remaining on task.

Alternative methods of recording.

All practitioners reported using methods of recording other than independent writing. One KS1 and five KS2 practitioners reported summarising using a mind-map, two KS2 practitioners used a 'quick-jot' summary in the last 10 minutes of lesson, one KS1 practitioner and four KS2 practitioners reported using paired writing and one KS2 practitioner used audio recording. Other methods of recording referenced in KS1 were photos, games and computer tasks. Alternative methods of recording cited in KS2 were using story boards, highlighting, matching grids, model-making, using drama or a play, designing posters and diagrams, writing poems, raps and songs and working with a conference buddy.

Brain Gym

One KS1 and one KS2 practitioner reported that brain gym was part of the learning routine. Four KS1 and four KS2 practitioners reported that it improved focus and readiness to learn. Additionally, practitioners reported that brain gym helped to reduce fidgeting, particularly if it was preceded by a wet break, by finding it useful to bring quiet and to calm the class to focus on a new task. Furthermore, respondents recorded that brain gym maintained concentration during a long activity and provided children with an opportunity for a required break.

Mind mapping

Respondents were all comfortable implementing reasoning for mind mapping. All had used mind mapping with their children, stating advantages of making a clear focus for main points, focussing the individual, acting as a memory jogger, improving planning and learning, reinforcing and consolidating work, giving the children an opportunity to present things in a different way and which are non threatening and open ended. One respondent reported that mind maps reflected the way that the brain organises information summarising a topic. Another commented that mind mapping ensured knowledge of key objectives and they were useful for assessment as patterns of learning can be observed.

Multi-sensory work

KS1 responses described how multisensory teaching and learning strategies improved concentration and focus since the children had fun whilst they learned. One respondent commented how multi-sensory work helped to embed learning. KS2 responses focussed on how multi-sensory work was effective for all children, as it

used as many senses as possible and that it facilitated the children's preferred learning styles. One respondent stated that it was 'indispensable to dyslexics, utilising several pathways to the brain'.

Practitioner Confidence

Only one practitioner felt very confident in planning work. Of the remaining practitioners, 50% reported themselves to be midway between 'very' and 'not at all' confident, 30% were not confident and 10% not at all confident in planning and organising work for dyslexic children.

Confidence was slightly raised in responses regarding how confident practitioners were in working with dyslexic children in their class with 30% rating themselves as '4' with 5 being 'very confident', 50% rating themselves in the middle of the scale and 20% rating themselves at 2; below the level of feeling confident. Only one practitioner rated themselves as less than confident with a '2', the remaining practitioners rated themselves as confident (40%) or more than confident (50%).

In this study, time to complete written activities was cited by a majority of respondents as a difficulty for dyslexics. 50% of practitioners responded that there was often time during the literacy hour to complete work, with the remaining 50% stating that there was often a problem with children completing tasks. 20% of practitioners found that consolidating learning for all children during the numeracy hour was often a problem, however, 80% of practitioners stated that there was usually time for children to complete their work.

Practitioner confidence in maintaining self-esteem in the dyslexic learner

Only one practitioner self-rated as less than confident in achieving this, the remaining practitioners self-rated as confident (40%) or more than confident (50%).

Attitudes to inclusion

The majority of respondents (90%) stated that dyslexic children should be educated in mainstream schools with caveats that it 'depends on severity' and 'depends on their needs/ability to cope'. Concern was raised about meeting the dyslexic child's needs and resourcing was a feature of answers, for example, 'a well resourced local school, a committed class teacher, a specialist teacher (where appropriate) and a trained LSA was valued'. One respondent supported his/her answer strongly by commenting 'no they shouldn't have to attend a specially-resourced school, why should they have to? Socialising with local friends is vital'. The concept of 'experts' working with the dyslexic child was mentioned by three respondents; 'working one-to-one with a trained person in a mainstream school'; 'they can be catered for by experts'; 'they can be supported by a specialist teacher where appropriate'.

Opinions based on practice in the setting

Respondents reported the strengths of the Social and Emotional Approaches to Learning (SEAL) programme and Organic Learning Project, 100% commenting on the supportive, emotionally nurturing environment with an emphasis on creativity. None of the respondents reported being confident regarding whole class teaching. Learning targets with achievable goals were considered to be an aspect of good practice. Respondents reported that ideas disseminated to encourage alternative

methods of recording and initial teaching (ie, verbal and written instructions, kinaesthetic learning) were another aspect of what the school did well.

All respondents requested training in and information about dyslexia as a key issue for development. Only the Senco and the specialist dyslexia teacher working with a child with a Statement of SEN identified that they had formal training in dyslexic teaching and learning strategies. All respondents reported that training and information about dyslexia would be helpful; 70% 'a great deal', others finding it 'useful'.

Following analysis of the questionnaire, two lesson observations were arranged. The first was with a KS1 teacher of some years' experience with a TA new to the school who had not previously worked with children with SEN. The second was in KS2, with an NQT in his probationary year. Both observations were referenced using the 'inclusive teaching observation checklist'(DfES, 2002, pp. 53-56) followed by interviews with the staff concerned.

The KS1 lesson (Y1, a class of 30, three on the SEN register) was well-paced and positive, achieving all objectives on the teaching checklist (DfES, 2002, pp. 53-56) and supported by a calm and positive TA (Appendix 6).

Inclusive teaching and learning was ensured during the session of whole-class teaching by meeting the following factors: facilitating access to the teacher and resources through planning and purposeful seating of the children which maximised accessibility for all; ensuring that children were clear of the objectives of the lesson

which were displayed next to the whiteboard for further reference; careful structuring of the lesson which was explained at the outset with objectives clarified; checking the understanding of those identified as having learning differences by further verbal questioning and by using a visual check of 'thumbs up, thumbs down' to demonstrate understanding of the whole class; careful differentiation of questions further ensured inclusion and pitching at levels to challenge all children and using a range of vocabulary designed to be accessible at different levels throughout the ability range. Purposeful TA support monitored the inclusion of those with additional needs, sensitively rephrasing questions and clarifying vocabulary where appropriate and ensuring that children with additional needs were clear of their objectives before they moved on to independent work.

A further range of strategies to facilitate inclusion were used during independent work; independent tasks were related to the whole-class teaching, having been modelled using the same software on the electronic whiteboard; the children all worked confidently through an appropriately differentiated task, accessed by clicking on a differentiated link on-screen. ICT support was supplemented by the TA and class teacher who monitored, encouraged and challenged all children, carefully and sensitively targeting those in need of extra support. Support was further enhanced by careful selection of a buddy partner, matching differing strengths in pairs of children rather than grouping them according to ability. Children with literacy difficulties were effectively supported by the software, which electronically read onscreen words when they were clicked.

The plenary used a range of mind-friendly methods to ensure that all children achieved some success, for example, working with a carefully selected buddy partner and explaining instructions which were then enacted. The class teacher ensured that all children understood their objectives by rephrasing them and demonstrating using a prepared teaching aid. The children were paired for the plenary activity, with academically stronger children supporting those with literacy difficulties. Peers freely gave positive feedback, demonstrating a supportive and positive working ethos. This was reinforced by the class teacher, who subtly chose to praise children with lower self-confidence amongst general class praise. Once again, the teaching assistant supported children by ensuring that they understood what they were doing, questioning, watching and rephrasing vocabulary, carefully maintaining the children's autonomy.

The interview confirmed that the teacher was aware of the needs of every child in the cohort and confident in employing a range teaching and learning strategies: 'I'm always conscious of having differentiated words; more difficult words like 'cardigan' were given to the more able children and the likes of 'red' were given to C because he'd be able to sound that out and read it'. TA time was maximised and used efficiently and carefully to support children with additional needs using appropriate strategies, such as preparing for the plenary or rephrasing the teacher's language at a speed or vocabulary which the children could access. The teacher reported that training for working with children with dyslexia would be valuable. She evidenced the school commitment to training: all staff had participated in a continuing professional development (CPD) unit with the local University, examining writing skills. Further evidence was that the school has worked hard to achieve its 'Artsmark

Gold' and 'Healthy Schools' status and was gathering evidence to achieve the 'Inclusion Mark'. Ofsted had recently judged the curriculum to be 'outstanding' and noted the 'strong emphasis on continuing professional development for staff' (Ofsted, 2007).

The TA interview examined how the TA supported children with SEN. There was evidence of effective communication between the teacher and TA; 'R. shows me his targets and where he is and what we're hoping to achieve before Y2'; 'I'm beginning to tap in to what R. wants me to observe'. The class teacher (R) had commented that 'she's very good at grasping where the children are up to and how to help them and at what I want her to do. We always have a good chat at the end of the morning and will go through the plan for the next day'. The TA reported having no formal training in working with children with additional needs and evidenced that training in dyslexia friendly support methods would be important.

The KS2 observation was of a newly qualified teacher (NQT) working with a class of 24 Y3 children, five of whom were on the SEN register with identified speech and language difficulties, for example, speed of processing, difficulties with word finding and word ordering.

Inclusive teaching and learning was ensured during the session of whole-class teaching by meeting the following factors: purposeful seating, particularly for children with identified hearing difficulties; ensuring that children were clear of lesson objectives through self-monitoring using 'thumbs up, thumbs down' signalling. Checking for understanding and maintaining the attention of children who have

problems sustaining concentration was sympathetic and principally at an appropriate frequency. New or difficult vocabulary was clarified through discussion and by returning to new words on the electronic whiteboard.

Some evidence of multi-sensory teaching was in place when the class teacher encouraged the children to use different coloured pens to indicate rhyming patterns on the interactive whiteboard. During this section of the whole class work, some children with learning difficulties became unsettled and indicated that they did not fully understand the task. The class teacher gave a further illustrative example of the task using the same teaching methods which had preceded this. Strategies which the children needed to use to complete the task were made explicit but were limited to a verbal explanation with one written illustration using the electronic whiteboard.

There was no evidence of paired or partner work, or of buddy support. Interactive strategies were present, but were limited to the children coming to the front to take a role during whole class work.

A further range of strategies to facilitate inclusion was used during independent work; independent tasks were directly linked to the task modelled in whole-class teaching; materials and resources for the task were available although they consisted of copywriting before filling in the required rhyming words; clear routines and expectations were in place and a quieter part of the classroom was used for those children who needed assistance with their concentration. There was evidence of strategies to support independent spelling when children used electronic spellcheckers, word mats and buddy support, although this buddy support had not

been enacted by the present class teacher. He confirmed during interview that the children were for the most part grouped by ability although there were times when a 'higher ability child would scaffold work for a lower ability child.' However, he acknowledged that 'these children have visual aids more than anyone else; these children are strongly visual learners.' Access to learning had been partially ensured by differentiation of the learning task material according to reading ability. However, although the vocabulary had been simplified for the group with learning differences the children still struggled with some words and with an unclear font. A more detailed writing frame scaffolded written responses, however this was required to be copied out by the child before completing the task.

Social and emotional aspects of learning were a strength of this lesson, and consistently evidenced the importance of maintaining all children's self-esteem: appropriate behaviour was consistently praised and 'personal points' were awarded; children supported each other using positive comments. The class teacher sensitively commented on their work, giving clear teaching directions.

The plenary enabled consolidation of learning by reiterating the lesson targets, reinforcing and reframing them through careful questioning to ensure that the children had understood what was required. Children were given the opportunity to present their work to the class, those with reading difficulties were given thinking time and were supported in their reading by peers.

The interview triangulated evidence that the class teacher was aware of a range of learning styles. Despite little evidence of a multi-sensory approach in the lesson

observation, the teacher referenced working in a multi-sensory manner and voiced some frustration in wanting resources and teaching ideas to build his teaching in this style. He found mathematics easier to deliver using multi-sensory methods, but held the opinion that the numeracy strategy was 'quite wordy'; he suggested that ideas for kinaesthetic or multi-sensory approaches to lessons would be valuable. He reported that although he felt confident in general in supporting children with additional needs, he lacked confidence in specific areas such as adapting literacy planning. His commitment to inclusion was evident in his teaching and in his interview comments that dyslexic children should not be in a special school, but that more support was required in planning and adapting the curriculum and resourcing the mainstream classroom to meet their needs; 'we should be able to plan for them without it being different from what everyone is doing, whilst targeting what they need.'

Discussion and recommendations

PERCEPTIONS

Knowledge and understanding of dyslexia

Staff perceptions of the dyslexic child represented two areas: dyslexia as a concept and the inclusion of the dyslexic learner. All staff had a construct of dyslexia, ranging from Kussmaul's (1878) observation of 'word blindness'(Miles, 1999, p. 3) to evidence of understanding that it is a learning difficulty; 'a different style of learning linked to literacy.' Training delivered by the Senco, using 'Learning and Teaching for Dyslexic Children' (DfES, 2005b) would clarify and update staff understanding of how dyslexia is defined. It would be extremely valuable to broaden staff understanding of dyslexia to include those children who have dyslexic-type difficulties which would be supported by dyslexia-friendly teaching methods, for example, those children with identified speech and language difficulties.

One practitioner demonstrated a secure understanding of dyslexia, stating that severe dyslexic children require regular, direct, tuition over and above the generalised support of the dyslexia friendly classroom (DfES 2004c, p.39); it would be valuable to build existing staff understanding further by encouraging discussion and sharing skills and ideas. This could be achieved by CPD, with a mixture of informal sharing of best practice and formal training in understanding dyslexia and therefore the issues arising.

Experience

All except one respondent reported feelings of inadequacy or frustration when discussing their experiences of working with the dyslexic learner; had appropriate

training and support been in place, these feelings and associated unease with working with dyslexic learners need not have arisen. It is important to consider Wearmouth's (2004) concerns regarding a competency-based approach and to build in opportunities for reflective practice as part of training, building an opportunity to consolidate a wider understanding of issues in teaching the dyslexic learner rather than concentrating on a purely technical approach. Appropriate training, both within the setting and as part of a wider cluster of schools, embedding opportunities for discussion and reflection, and providing appropriate support systems (information, teaching and learning resources and human resource) within the setting and the extended network of schools should address these concerns.

Perceptions of inclusion

Commitment to inclusion was evident not only in the responses to the question of specialist schooling where 90% of respondents disputed that dyslexic learners should have to attend specialist schools, but in the observations of classroom teaching, where every child does, indeed, matter. This was evidenced in careful planning and differentiation in the lessons observed and a programme of social and emotional education embedded within school practice (case study setting, Ofsted, 2007).

Responses regarding including the dyslexic child in mainstream schools ranged from those firmly placed in the inclusive paradigm and those who regarded that the severe dyslexic may be better placed in a specialist setting away from mainstream. Responses demonstrated some understanding of the inclusive nature of working with a dyslexic learner, however there was a tendency to lack confidence in the self-perception of a classroom teacher being a teacher of all children. The majority of

respondents maintained the view that the learning needs of the dyslexic child needed to be catered for by 'experts', or someone other than a general class teacher; demonstrating the core of action needed: to rebuild staff confidence in working with children with additional needs through appropriate training and resourcing in order that the locus of intervention be located in mainstream settings where appropriate.

SKILLS

The Dyslexia Friendly Classroom

Supporting spelling

Support was given to spelling using a range of dyslexia friendly methods (DfES, 2002; BDA, 2005; DfES, 2005b), with children having access to word charts and methods of accessing unknown spellings using personal word books, electronic spell checkers and buddy systems. Embedding spelling support in research practice would enable staff to increase the personalisation of the spelling aids available. Sharing of skills and techniques used would be valuable in embedding a consistent methodology across the setting, giving the children and staff continuity.

Supporting using ICT

ICT within the setting was used extensively across the curriculum and was an essential tool for dyslexia-friendly teaching and learning. This study's research evidence demonstrates that this is something this setting does very well; using ICT not only as a teaching tool for whole class teaching, for example, using a range of software and online resources and video clips, but also as a learning tool where children can access a myriad of interactive learning tools as well as using what are becoming standard writing and presenting tools, for example, Microsoft Word and

PowerPoint. Specialist teaching software for spelling and for numeracy were used extensively within the setting, however this was primarily viewed by teaching staff as the province of the specialist or Senco and it would be appropriate to explore embedding the use of these programmes within mainstream teaching and learning.

Supporting children with short-term memory difficulties

MacKay's (2005) dyslexic learners described the memory to be like a net, with holes of different sizes and who could never predict which bits would be remembered would be reasonably well supported in this setting as the evidence demonstrates a range of recognised support strategies and teaching methods for children with short term memory difficulties. However, this support would benefit from a fuller understanding and sharing of skills by this staff, who are willing to innovate. This would assist newer teachers who do not have their own experience to draw upon, seeking to develop methods of helping children with SEN. All staff would benefit from understanding the rationale for presenting information in an accessible manner (BDA, 2005; MacKay, 2005) and as a result would be able to make minor adjustments, such as writing on an electronic whiteboard and printing the screen display in order for the dyslexic child to have a paper copy on their desk, rather than having the child copying from a standard whiteboard. This would be achieved through formal CPD sessions and from focussed classroom observations followed by informal discussion between the Senco and class teacher.

Grouping

Grouping children is a complex issue; using purely attainment based descriptors can discriminate against children with 'hidden' abilities due to their learning difference

(Wearmouth, 2004). Wearmouth's analysis of the experiences of children who felt that they had wasted a great deal of time at primary school due to such grouping 'because the assumption had been made that because they could not read or write, they were not intelligent' (2004, p. 65) is partially reflected in the findings in this setting. Although children are grouped according to ability, and in some classes the groupings are changed according to the subject being studied, this is based on literacy ability, rather than on academic potential. Furthermore, a fuller exploration of alternative methods of recording would benefit all staff in order to facilitate removing barriers to learning for children who find written recording challenging. The BDA suggest grouping with a 'study buddy' who can be asked to clarify instructions for the dyslexic learner (BDA, 2005, p. 14) and specifically refers to grouping in the indicators for dyslexia friendly schools status: 'evidence that pupils are grouped according to abilities and needs'; 'evidence of support for pupils within their group , e.g. buddy system'. Training in Kagan's co-operative learning techniques would be valuable, as children would mix in less familiar groups and could be enabled to record findings in a range of styles (Kagan, 2001).

Alternative methods of recording

A range of strategies for recording were used within the setting, particularly effectively in the case of ICT, but it would have been useful to secure these methods in dyslexia friendly methodology (MacKay, 2005; Kagan, 2001; Gardener, 1999) and to share strategies amongst staff as there are pockets of excellent practice. Informal discussions to share best practice and formal planning meetings where teaching staff are grouped to support one another would be valuable strategies to facilitate development.

Brain Gym

Despite practitioners stating that it improved focus and readiness to learn, their responses demonstrate that brain gym is used more as part of a routine rather than a stimulation of both sides of the brain through cross lateral movements. Initial training and CPD in factors affecting the dyslexic learner, linking practice to theory (Corbett, 2001; BDA, 2005; Burden and Burdett, 2005), would be appropriate, since it would enable staff to prioritise when they use brain gym, for example, before a mathematics session and would encourage them to monitor pupil progression.

Mind Mapping

A member of staff co-ordinated the 'thinking skills' network and had extensive training in 'mind friendly learning'. Dyslexic pupils can find that their recall for diagrams and pictures is better than words and mind maps may be more effective than linear written notes (Pollock, Waller and Pollit, 2004, p. 160); this setting demonstrated good dyslexia-friendly practice in developing the use of mind mapping in every classroom. Furthermore, children were trained in thinking skills, using De Bono's thinking hats (1999), Tony Ryan's Thinking keys (2005), and the use of mind mapping as an alternative method of planning and presenting information. They were free to choose methods of planning according to which learning strategy best suited their learning style. Other settings benefited from this school's good practice, as it was disseminated regularly in cluster group training. It would be valuable to set up a similar cluster group to share further aspects of good practice for dyslexia friendly teaching.

Multi-sensory work

Programmes developed as early as Hinshelwood's in 1917 recognise the value of multisensory working (Miles and Miles, 2001, p. 125). 'There is need for a programme that is at once: structured, sequential, cumulative and thorough ... the skills are to be learned through all the avenues of learning open to the student – visual, auditory and tactile-kinaesthetic in interaction (Rawson, cited in ibid, p. 127). It would be valuable for the staff to develop multi-sensory teaching and learning, particularly in the reading-heavy curriculum at KS2. MacKay finds that kinaesthetic learners form the majority in most classes, with the division between styles being about 37% kinaesthetic, 34% auditory and 29% visual (2005, p.103). Moving between learning styles is achieved with few problems, in MacKay's experience, however he cautions about working consistently in areas of weakness. The KS2 interview and the lack of confidence in planning for the dyslexic learner evidenced in the questionnaire supports this need for training, achieved through CPD and peer mentoring, and resourcing in the multi-sensory approach by providing a learning resources (lesson ideas and equipment).

Practitioner confidence in teaching the dyslexic learner

Nationally, practitioner self-confidence in teaching dyslexic children is low (NUT, cited in The Independent, 10.01.07); findings in the case study setting reflect the same issue; 40% of practitioners reported themselves not or not at all confident in planning and organising work for dyslexic children and 20% rated themselves as not confident in working with dyslexic children in their class. The TA interview concurred with teacher interviews and questionnaire responses regarding the value of training in

dyslexia: 'from a personal point of view, training would be helpful. [training has been] on the job training: it really helps me to deliver'.

Appropriate training using 'Learning and teaching for dyslexic children' (DfES, 2005b) and 'Including all Children in the Literacy Hour and Daily Mathematics Lesson' (DfES 2002) should address this misconception, helping staff to realise that they are, already, using dyslexia friendly methodology. The dyslexia friendly classroom statement cards issued with 'Including all Children in the Literacy Hour and Daily Mathematics Lesson' (2002, pp. 61-65) would be particularly helpful here as they would assist staff to audit which dyslexia friendly methods they are currently using and enable them to formulate appropriate future strategies. This training should be regularly updated and based on an analysis of the needs of staff and on pupil trends (Ofsted, 2006, p.10).

Practitioner confidence in maintaining the self-esteem of the dyslexic learner

A stronger picture emerged in the self-rating for maintaining the self-confidence of children with learning difficulties than the self-rating for confidence in academic teaching. This reflected the robust SEAL programme of learning which is embedded in school practice, alongside the commitment to the OLP, a project which focussed on building self-esteem and confidence in children and practitioners. Maintaining self-esteem is a vital factor (Humphreys, 2003) which can impact negatively on progress and can have wide ranging social implications (Humphreys, and Mullins, 2002a; DfES, 2006).

Impact on building dyslexia friendly school

Lambe and Bones (2006) identified positive teacher attitude as a predictor of successful classroom inclusion, a view which has a broad evidence base (Regan and Woods, 2000; Buswell Griffiths et al. 2004; Reid et al. 2005; DfES, 2006). There was a willingness amongst the case study setting's staff to innovate and to develop their teaching skills, evidenced in the wide range of training linked to the school development plan reported in teacher interviews. It is within this 'can do' and forward moving ethos that training will enable practitioners to consolidate and celebrate existing skills in order to develop further skills together to build a dyslexia friendly school.

Conclusion

This dissertation has examined how building teaching and learning skills and positive perceptions of dyslexia amongst teaching staff is an essential factor in creating a dyslexia friendly school (Riddick, 1996; Wearmouth, 2004; Nugent, 2007; Gilchrist, 1999). Without regular training, sharing of good practice and an embedded, inclusive ethos, there will be a loosely connected pedagogy which is not underpinned by research; a wasted opportunity for all. However, good practice enables children to learn to their potential, enabling parents and staff to celebrate as children enjoy and achieve. In the case of this setting, the evidence substantiates that the school is in a strong position to enact purposeful training, based on a thorough analysis of needs, and to begin the formal process of applying for the Dyslexia Friendly Schools Quality Mark.

Schools and their practitioners have the power to make change happen and it has been demonstrated in this dissertation that this setting has firm foundations and the potential to do this. 'Schools should not assume that children's difficulties always result solely, or even mainly, from problems within the child. A school's practices make a difference, for good or evil' (DfES, 2001b). Working together to evolve a dyslexia friendly school, building positive perceptions of disability and building and refining skills through regular and appropriate training, puts the power for change firmly into the hands of the stakeholders: children, staff and parents.

Appendix 1

The questionnaire.

Knowledge/understanding and experience

1.What, in your opinion/experience, is dyslexia?

2. Have you ever taught/worked with a child identified with dyslexia or with similar reading, writing and/or organisational difficulties?
If so, what are your comments on that experience?

3 What resources do you use to support spelling? (spellcheckers, word lists, etc)

4 Do you use the following to support class/individual work:

Tick all that apply	Yes	No	Sometimes
Word walls (topic)			
Word walls (high frequency)			
Number squares (wall or desk)			
Number lines (wall or desk)			
Other:			

5 How do you use ict to support learning?

Tick all that apply	yes	No	sometimes
Drafting/redrafting using computers			
Electronic whiteboard (used by staff)			
Electronic whiteboard (used by children)			
Wordshark/ numbershark			
Wordbar spelling			
Other: (please describe)			

6 How do you support children who cannot 'hold things in their heads' ?
(tick all that apply) post-it notes [ ] ; writing frames [ ]; bullet point instructions [ ] ; personal diary/notebook [ ] ; class noticeboard of events [ ] ; other[ ]

7 Grouping - what is your rationale for how you have grouped children with reading/writing/number difficulties?

8 Understanding - how do you check that children understand what you want them to do? (rather than what they think they should be doing)

9 Methods of recording other than individual writing. Tick any that you use: summarising as a mind-map [ ], a 'quick-jot' summary in the last 10 minutes of lesson [ ], paired writing [ ], recording [ ], other

10 How do you find that brain gym helps the children? Routine [ ] improves readiness to learn/focus [ ]; other

11 What, in your experience, are the advantages of mind mapping?

12 How do you find multi-sensory work (by doing/touching) helps the children?

13 To what extent do you feel confident about:

a. planning and organising work for children with dyslexia/dyslexic tendencies

5 (very) 4 3 2 1 (not at all)

b. working with dyslexic children in your class

5 (very) 4 3 2 1 (not at all)

c. maintaining the self-confidence of children with learning differences

5 (very) 4 3 2 1 (not at all)

14 Is there time in the literacy strategy for *all* children to consolidate their learning?

Yes usually often a problem no

15is there time in the numeracy strategy for *all* children to consolidate their learning?

Yes usually often a problem no

16. Do you think that dyslexic students should attend a specially-resourced school for dyslexic learners? Yes/no/ depends...

17.What do you think we do well <u>now</u> for children with dyslexia/dyslexic tendencies in our school?

18.What are the key issues for development in working with children with dyslexia/dyslexic tendencies in our school?

20 To what extent do you think more information about dyslexia/training would help you?

A great deal would be useful not a lot

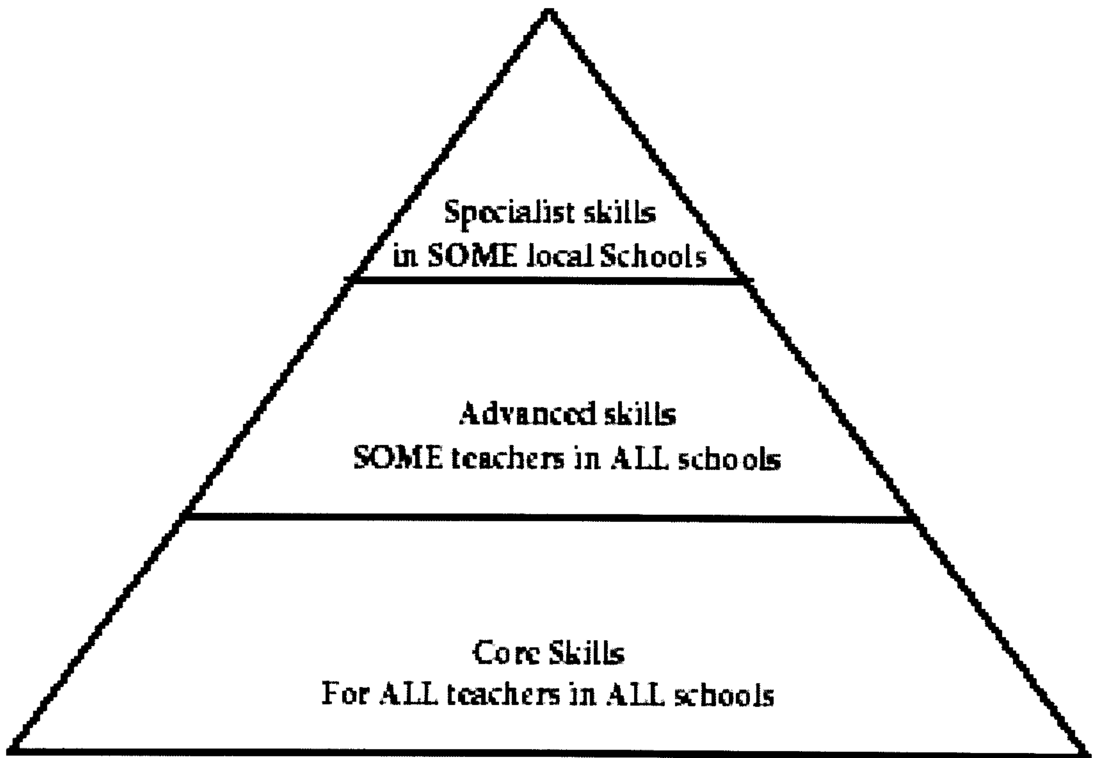
- Which KS do you teach?

*KS1/foundation (4) *KS2 (6)

Thank you very much for taking the time to fill in this questionnaire.

Appendix 2

Triangle of training needs.



(DfES, 2006, s.317)

Appendix 3

The Graduated Response

The Code of Practice (2001b) advocates a 'graduated response' to special needs.

Wave 1: 'Quality First' classroom teaching, where a teacher responds to children using appropriate planning and differentiation for all.

Wave 2: Small group intervention for children expected to 'catch up' as a result of intervention.

Wave 3: SEN interventions which are different from that which is provided as daily classroom teaching and learning:

School Action – intervention developed within the setting providing support additional to or different from that which is provided to other children (DfES 2001b).

School Action Plus – if a child at School Action does not make reasonable progress (DfES 2001b) an outside agency gives advice to be incorporated into the child's individual education plan (IEP).

IPF / Statement – if a child at School Action Plus does not make reasonable progress (DfES 2001b) the case is examined by independent multi-agency experts who will make a decision regarding funding support.

Appendix 4

Individual Pupil Funding (IPF)

Under the arrangements for IPF, SEN funding is laid out in 5 tiers:

Funding	To provide	Stage
Level 1 General special needs allowance; 5% mainstream AWPU	Specific interventions and support for individual pupils.	School Action/Action Plus
Level 2 Individual Pupil funding agreement	Identified individual funding.*For pupils with an identified SEN indicating a level of additional funding over and above that expected within a mainstream setting.* Criteria based system	IPF 2 • this level of need would currently require a statement
Level 3 Individual Pupil Funding agreement	Identified individual pupil funding. *For pupils with identified SEN indicating a high level of additional funding over and above that expected within mainstream setting.* Criteria based system	IPF 3 • this level of need would currently require a statement
Level 4 Statement Required: individual pupil funding into mainstream Or Resourced Provision		IPF 4 via statement
Level 5 Statement required: Individual pupil funding into mainstream Or Special School Placement		IPF 5 via statement

(case study LEA, 2007)

Statutory assessments will now only be implemented for pupils with the most profound level of needs at level four and five of the new funding structure. Funding for pupils who would formerly have been assessed through the statement process will now be accessed at different levels of need however, crucially, funding is to be accessed immediately the level of need is identified at fortnightly panel meetings, avoiding the former waiting time whilst a pupil was subject to further assessments and panel decisions. Schools are accountable on an annual review basis and must track and monitor pupil progress. IPF designates the 'area of need' of dyslexia as being level two funding, which at the time of writing stands at £4,230. Specialist teaching can be recommended and there is a growing bank of training dyslexia-trained teachers who have completed the County's accredited dyslexia course who are available to provide two hours' per week specialist literacy support which can be 'bought in'.

Appendix 5

Checklist of interventions to be enacted before applying for IPF.

Implementing recommendations and advice from an external agency; teaching specific multi-sensory reading and spelling programmes; breaking tasks down into very small steps; using a detailed tracking and monitoring system such as Pupil Indicators for Value Added Target Setting (PIVATS); providing opportunities for over-learning; using a wide variety of alternatives to written recording; teaching a cursive handwriting style; providing taped stories, games, visual prompts, aide memoirs and practical equipment to support learning in a multi-sensory and mind-friendly way; use peer mentoring strategies for reading, writing and spelling; using ICT support software; giving access to appropriately differentiated tasks; access to a PHSE programme; provide support from a key adult; provide opportunities for the pupil to demonstrate areas of strength to peers; class teacher, Senco or whole school staff have sought and received inset/training from outside agencies; access to specific, sustained and targeted adult support in all curriculum areas requiring literacy skills e.g. for a minimum of 4 terms (case study LEA, 2007).

Appendix 6

KS1 lesson observation

The lesson commenced using the interactive whiteboard, reviewing the previous lesson and displaying the lesson objectives clearly. The learning target (to identify a cartoon character from a selection of possibilities according to a description of how they were dressed) was modelled very clearly by using costumes from the dressing up box and a careful choice of children coming out to the front either to wear or to select the child wearing a given combination of colours or clothing. The teacher selected children who have difficulties concentrating to participate in this section of the lesson, ensuring their involvement and understanding. The class then moved to the computer suite for the independent work section of the lesson.

Children worked in pairs on each computer, carefully chosen to give one another an appropriate level of support. Work was differentiated, giving differing amounts of text and outcomes. Children were able to access their work by clicking through clearly demarcated portals on screen. All children were on task and understood what they were doing. Further support with reading was offered by the software, as children were able to click on a word which would then be spoken by the computer.

The plenary was a 'teddy twins' activity, where children paired up and one gave directions for colouring in the picture. Each child coloured in their drawing as it was described and compared their pictures to see if they matched. This kept the children on task. The children with dyslexic type difficulties or auditory processing problems were grouped with children who were sensitive to the different speeds of work needed and were supported by the TA. The TA had prepared these children for what they

were to do, assuring understanding whilst the teacher gave instructions to the whole class. Pairs then fed back and shared their work with the whole class.

Appendix 7

KS2 lesson observation

The KS2 observation was of a newly qualified teacher (NQT) working with a class of 24 Y3 children, five of whom are on the SEN register with identified speech and language difficulties, such as speed of processing, difficulties with word finding and word ordering. The lesson was based on limericks and involved the children in finding rhyming words and analysing the structure of a limerick. The lesson was introduced with the class teacher reading a selection of limericks to the children and asking what they noticed. The class teacher used the interactive whiteboard to present different limericks in a written layout, asking children to find the rhymes. Each limerick in turn was read before the children did this. Children responded by putting up their hands and further into the lesson came out to underline rhyming words using coloured pens to demarcate the patterns formed.

Independent work was organised in ability groups, with the SEN group all working together. The teacher founds that he was able to support groups more effectively this way but uses a range of groupings appropriate to the activity and skills of the children for other lessons. Work for the SEN group was appropriately differentiated and scaffolded, the first task being to identify and underline the rhyming words in two limericks with appropriate vocabulary, the second task being to add their own rhyming words into the gaps left on two given limericks. The worksheet was clearly laid out, however there was a significant amount of reading for the children to do and some words which the children had to find rhymes for were phonologically difficult,e.g. 'Crewe'. A list of possible words was given to the children to refer to if

they needed. The class teacher explained that he would ensure that the class were all clear and on task before settling with this group in order to support them.

The plenary gave all children the opportunity to feed back and to have their achievements celebrated and the lesson targets reinforced. The teacher had observed that all children had met their targets during this lesson by doing a 'quick check' tour of the classroom during the lesson.

References

Ayres,D.B.(1996) Assessment of intelligence and metacognition;reflections, issues and recommendations. In G.Reid (Ed) *Dimensions of dyslexia: Volume one:Assessment, teaching and the curriculum* Edinburgh:Moray House Publications.

Bell, J. (2005) *Doing your research project* 4th Edition Buckingham: Oxford University Press

Boucher (1994) The Necessity of Including the Researcher in One's Research In Tormey, R, Good,A and MacKeogh,C (Eds.) *Post Methodology* Dublin: Trinity College

British Dyslexia Association (1999) Retrieved 30th June, 2007, from: http://www.bdadyslexia.org.uk/research.html

British Dyslexia Association (2005) *Dyslexia Friendly Schools Pack* Retrieved 30th June, 2007, from: http://www.bdadyslexia.org.uk/downloads/wholedocument.pdf

British Psychological Society (1999). *Dyslexia, Literacy and Psychological Assessment.* Leicester: British Psychological Services.

Burden, R. and Burdett, J. (2005) Factors associated with successful learning in pupils with dyslexia: a motivational analysis *British Journal of Special Education* 32:2 100-104

Buswell Griffiths, C., Norwich, B. and Burden, B (2004a) Parental agency, identity and knowledge: mothers of children with dyslexia *Oxford Review of Education* 30:3 417-433 Oxford: Carfax

Buswell Griffiths, C., Norwich, B. and Burden, B (2004b) "I'm glad that I don't take no for an answer": Parent-Professional relationships and Dyslexia Friendly Schools Retrieved 30th June, 2007, from: http://www.bdadyslexia.org.uk/extra62.html

Butterworth, B. (2005). The development of arithmetical abilities. *Journal of Child Psychology and Psychiatry, 46:1,* 3-18

Case Study School's County Council (2004) *Dyslexia Friendly Schools Quality Mark Guidance*

Cheminais, R. (2005) *Every Child Matters: A new role for Sencos* London: Fulton

Cheminais, R. (2006) *Every Child Matters: A new role for Teachers* London: Fulton

Chinn, S. and Ashcroft, R. (2004) *Mathematics for dyslexics: A teaching handbook* London: Whurr Publishers Ltd

Coffield, M. and O'Neill, J. (2004) The Durham Experience: Promoting Dyslexia and Dyspraxia Friendly Schools *Dyslexia* 10: 253-264

Cohen, Manion and Morrison (2005) *Research Methods in Education, 5th Edition* London: Routledge Farmer

Corbett, J. (2001) Teaching approaches which support inclusive education: a connective pedagogy *British Journal of Special Education* 28:2 55-59

Cowling,K and Cowling, H. (1993) *Toe-By-Toe* Toe-by-Toe

Cowling, H. (2002) *The Hornet Literacy Primer* Wasp Publications

DeBono,E. (1999) *Six Thinking Hats* London:Penguin

DES (Department of Education and Science) (1978) *Special Educational Needs* (Warnock Report). Cmnd 7271. London: DES

DES (1988) *The Education Reform Act* London: Department for Education and Skills

DfEE (1996) *Education Act, 1996* London: Department for Education and Employment

DfEE (Department for Education and Employment) (1997) *Excellence for All. Meeting Special Educational Needs.* London: Department for Education and Skills.

DfES (2001a) *Inclusive Schooling: Children with Special Educational Needs.* London: Department for Education and Skills

DfES (2001b) *Special Educational Needs Code of Practice* London: Department for Education and Skills

DfES (2002) *Including all children in the literacy hour and daily mathematics lesson* London: Department for Education and Skills

DfES (2003) *Every Child Matters* London: Department for Education and Skills.

DfES (2004a) Removing barriers to achievement: The government's strategy for SEN London:Department for Education and Skills

DfES (2004b) *Assessment for Learning* London: Department for Education and Skills

DfES (2004c) *A Framework for Understanding Dyslexia* London:Department for Education and Skills

DfES (2004d) *Every Child Matters – Outcomes Framework* London: Department for Education and Skills

DfES (2005a) *Promoting Inclusion and Tackling Underperformance* London: Department for Education and Skills

DfES (2005b) *Learning and teaching for dyslexic children* London: Department for Education and Skills

DfES (2005c) *Excellence and Enjoyment: Social and Emotional Aspects of Learning* London: Department for Education and Skills

DfES (Department for Education and Skills) (2006) *Special Educational Needs: Third Report of Session 2005-2006* London:Department for Education and Skills

Gardner (1991) *The Unschooled Mind: How Children Think and How Schools should Teach* New York:Basic Books

Exley, S. (2003) The effectiveness of teaching strategies for students with dyslexia based on their preferred learning style. *British Journal of Special Education* 30(4) 213-220

Gardner (1999) *The Disciplined Mind* London: Simon and Schuster

Gathercole, S.E, (1998) The Development of Memory. *Journal for Child Psychology and Psychiatry, 39:1, 3-27* Cambridge:CUP

Gathercole, S and Pickering, S (2001) Working memory deficits in children with special educational needs. *British Journal of Special Education,28* (2). 89 – 97

Gilchrist,P.(1999) The Educational Psychologist. In P.Thompson andGilchrist,P. (Eds). *Dyslexia, a multidisciplinary approach* London:Chapman and Hall

Gray, E. and Tall, D.O. (1994) Duality, Ambiguity and Flexibility: A Proceptual View of Simple Arithmetic, *The Journal for Research in Mathematics Education,* 26 (2), 115–141.

Griffiths and Burden (2005) Dyslexia - friendly schools and parent partnership; inclusion and home-school relationships *European Journal of Special Educational Needs. Vol 20, 2*

Hegarty (1987) in *Attitudes to Disability – Changes in Policy and Provision*

Henderson, A. (1997) *Maths for the dyslexic: A Practical guide* London: Fulton

Hitchcock, G. and Hughes, D. (1999) *Research and the teacher: a qualitative introduction to school-based research* London: Routledge

Hopkins, D. (2002) *A Teacher's guide to Classroom Research* Buckingham: OUP

Hornsby (1999) *Alpha to Omega* London: Heinemann

Humphrey, N. (2002) Teacher and Pupil ratings of self-esteem in developmental dyslexia *British Journal of Special Education* 29 (1), 29-35.

Humphrey, N. (2003) Facilitating a positive sense of self in pupils with dyslexia *Support for Learning* 18 (3) 130 - 136

Humphrey, N. and Mullins, P. (2002a) Personal Constructs and Attribution for Academic Success and Failure in Dyslexia *British Journal of Special Education* 29 (4) 196-203

Humphrey, N. and Mullins, P. (2002b) Self-concept and self-esteem in developmental dyslexia *Journal of Research in Special Educational Needs* 2 (2)

Hunter-Carsh, M.(Ed.) (2001). *Dyslexia: a psychosocial perspective*. London:Whurr

The Independent Newspaper, 10th January 2007, retrieved from the internet 30th June, 2007 from http://education.independent.co.uk/news/article2140269.ece

ISIS (The Inclusion and School Improvement Service) (2004) *Dyslexia Friendly Schools Quality Mark: Guidance Booklet* Chester: Cheshire County Council

Kagan, S. (2001) *Cooperative Learning* :Kagan Publishing

Kjellin, M. and Wennerstrom, K. (2006) Classroom Activities and Engagement for children with Reading and Writing Difficulties *European Journal of Special Needs Education* 21 (2), 187-200

Konur,O. (2006) Participation of Children with Dyslexia in Compulsory Education: Current Public Policy Issues *Dyslexia* 12:1 51-67

Lambe, J. and Bones, R. (2006) Student teachers' perceptions about inclusive classroom teaching in Northern Ireland prior to teaching practice experience *European Journal of Special Needs Education* 21 (2) 167-186

MacKay, N. (2005) *Removing Dyslexia as a barrier to achievement* SEN Marketing:Wakefield

Miles, T.R. and Miles, E. (1999) *Dyslexia a Hundred Years On.* 2nd Edn. Buckingham: OUP

Mortimore, T. (2003) *Dyslexia and Learning Style, A practitioner's handbook* Whurr:London

Mortimore. T (2005) Dyslexia and Learning Style, a note of caution *British Journal of Special Education 32,3* 145 - 148

Norwich, B. and Kelly, N. (2006) Evaluating Children's Participation in SEN Procedure: Lessons for educational psychologists *Educational Psychology in Practice 22:3, pp.255-271*

Norwich, B., Griffiths, C. and Burden, B.(2005) Dyslexia-Friendly schools and parent partnership:inclusion and home-school relationships *European Journal of Special Needs Education* 20:2 147-165

Nugent, M (2007) Comparing inclusive and segregated settings for children with dyslexia – parental perspectives from Ireland *Support for Learning* 22:2 52-59

Ofsted (2006) *Inclusion: Does it matter where pupils are taught?* Ofsted (2633)

Lancashire County Council (2005) *PIVATS* (Performance Indicators for Value Added Target Setting) Lancashire County Council

Nugent, M. (2007) Comparing inclusive and segregated settings for children with dyslexia — parental perspectives from Ireland *Support for Learning* 22(2) 52-59

Pollock, J., Walker, E. and Politt, R., (2004). *Day-to-day dyslexia in the classroom (2nd ed).* London: Routledge Falmer

Piotrowski, J and Reason, R (2000) The National Literacy Strategy and dyslexia: a comparison of teaching methods and materials *Support for Learning* 15:2 51-57

Regan, T. and Woods, K (2000) Teachers' Understanding of Dyslexia: implications for educational psychology practice *Educational Psychology in Practice vol. 16, no 3.*

Reid, G. (2003) *Dyslexia: a practitioner's handbook. (3rd ed).* Chichester: John Wiley and Sons Ltd.

Reid. G.. Deponio, P. and Davidson Petch, L. (2005) Identification, Assessment and Intervention – Implications of an Audit on Dyslexia Policy and Practice in Scotland *Dyslexia* 11:3 203-216

Riddick (2001) Dyslexia and Inclusion: time for a social model of disability perspective? *International Studies in Sociology of Education 11*:3 223-235

Rowcliffe, S. (2002) Catering for dyslexia – how others benefit *School Science Review;* June 2002, 93 – 100

Ryan, T. (2005) retrieved from the internet 30th June, 2007, from: http://www.primary-teacher-uk.co.uk/weblog/2005/12/ryans_thinkers_.html

Sandstrom Kjellin, M. and Wennerstrom, K. (2006) Classroom activities and engagement for children with reading and writing difficulties *European Journal of Special Needs Education* 21:2 187-200

Tall, G.E. (1988) Why Use a Questionnaire? – The Questionnaire as an Evaluation Tool in Schools *Pastoral Care* 33-36

Thomas,G., Walker, D. and Webb, J. (1998) *The Making of the Inclusive School*

UNESCO (1994) *Salamanca Statement of the UNESCO world conference of special needs education: Access and Quality*

Warnock (1981), retrieved from the internet 30th June, 2007, from: http://www.publications.parliament.uk/pa/cm200506/cmselect/cmeduski/478/5103104.htm

Wearmouth, J. (2004) Learning from James: lessons about policy and practice for schools' special provision in the area of literacy difficulties *British Journal of Special Education* 31:2 60 – 66