Inclusion versus specialist provision: Ideology versus evidence based practice for children with language and communication difficulties[1]

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1. Introduction

1.1 Background

There is a growing debate about the ways in which education of children and young people with special educational needs should be met (Cigman, 2007; House of Commons Education and Skills Committee, 2006). Debates revolve around the rights to be educated in mainstream settings (Lindsay, 2003; Rustemier, 2002) the most appropriate educational placement to raise achievements and well being (Dyson, Farrell, Polat, Hutcheson, & Gallannaugh, 2004; Zigmond, 2003) and evidence based pedagogical practices (Lewis & Norwich, 2005; Lindsay, 2007). The issues raised impact directly on the ways in which the needs of children with specific speech and language difficulties (SSLD) are addressed. This debate was reflected in a UK national study which highlighted the differences between the views of professionals in education services and health services regarding how best to develop services for children with SSLD. Typically education staff emphasized the development of inclusive education practices (Lindsay, Dockrell, Mackie, & Letchford, 2005a) while Speech and language therapy services highlighted the need to develop more specialist provision (Dockrell, Lindsay, Letchford & Mackie, 2006). The implicit assumption from both groups of respondents was that, independent of the causal origins of language problems, intervention can mediate or modify the effects of a developmental

[1] We would like to thank the organisations that have funded the data reported in this chapter: Gatsby Foundation, ESRC, Nuffield foundation and the DfES/DCSF. The project would have been impossible without the time and commitment of the professionals, parents and pupils. Special thanks to the steering group and Professor Klaus Wedell for continued support and guidance

language disorder. Importantly in both cases the focus was on the children's educational placement: mainstream or specialist provision.

Children with SSLD have a primary language problem, one that is not attributable to intellectual impairment, severe or profound hearing loss or lack of linguistic opportunity (Leonard, 1997). A variety of terms are used to describe these problems (see 1.3). The term SSLD is used to reflect the term in common usage in educational settings in the UK at the time of the studies reported. These children are educated in a range of different settings including mainstream and special schools and also special provision within mainstream schools for which different local authorities (LAs) use different terms. The term *integrated resource* is used to describe such provision in this chapter.

Currently in the UK the educational and speech and language needs of pupils with SSLD are met in a range of ways. At one end of the continuum pupils are placed in specialist residential settings, but as we shall argue, the majority are in mainstream schools with varying levels of additional support. The ways in which this support is provided varies across schools, services and educational phase. Table 1 provides details of the phases of compulsory education in England and points where compulsory assessments currently occur. In the first instance children may be provided with additional teaching but if their need is deemed to be greater than can be met by the school's resources a statement of special educational needs is actioned. Statements may specify the numbers of hours of additional support a child is entitled to. How this additional support is provided will vary according to the child's needs and the schools resources. The ultimate aim is to personalize the support provided to meet the child's learning needs. Speech and language therapy is an additional resource and must be specified. Many speech and language therapists (SLTs) are employed by the health authority and the ways in which speech and language therapy is provided will often depend on the organization of the child's health trust. Increasingly education services are employing SLTs. Pupils in special schools are likely to receive regular and intensive speech and language therapy (Lindsay, Dockrell, Mackie & Letchford, 2005b) while pupils in other settings may get some support in schools or clinics. .

Table 1 English Key stages for compulsory education

Key Stage	School Year	Age	Formal assessment
	Reception	5	
1	Year 1	5-6	
	Year 2	6-7	KS1 SATs
2	Year 3	7-8	
	Year 4	8-9	
	Year 5	9-10	
	Year 6	10-11	KS2 SATs
3	Year 7	11-12	
	Year 8	12-13	
	Year 9	13-14	KS3 SATs
4	Year 10	14-15	
	Year 11	15-16	GCSEs

In this chapter we explore the challenges raised for the education system by children with SSLD. We argue that a focus on children's placements alone is unhelpful and examine the ways in which teaching and intervention can be systematically developed to meet the language learning needs of children with SSLD (Justice, 2006).

1.2 Inclusion versus specialist provision

The respondents in the national survey focused on two different strategies for developing educational provision for children with SSLD (Dockrell et al., 2006; Lindsay et al., 2005a). Prima facie these appear to be opposites, in practice the distinction is not straightforward. Both inclusion and specialist provision have multiple meanings. For some practitioners and academics inclusion is synonymous with a location: that is, a placement in a mainstream school. For some this is a necessary, but not sufficient condition for inclusive education. This is but one of many positions on inclusion (Cigman, 2007) and is based on a values position that all children should be educated in mainstream schools, rather than evidence about the efficacy of the educational placements in terms of meeting children's needs (Lindsay, 2003). Values also should encompass a consideration of what systems meet a child's educational and social needs. From this perspective inclusion can best be described as

a process by which a school attempts to respond to all pupils as individuals reconsidering its curricula, organization and provision (Sebba & Sachdev, 1997) and may be different for each child (Tomlinson, 1997). This definition allows a way to examine the evidence base for children with special educational needs. We can ask what are children's individual needs, how does provision address these needs and what are the best ways to meet these needs. The answers to these questions will vary across individuals and depend on an interaction between the child, the environment and time (Wedell, 2005). Children and young people can be excluded in mainstream classrooms or special classrooms from appropriate support, access to externally recognized qualifications, an appropriate curriculum and friendship groups. For example, a child with SSLD in a mainstream setting may not have access to the appropriate supports to help with peer relations and may, as a result, remain relatively isolated. By corollary a child with SSLD is a special school may be isolated from mainstream peers and mainstream social activities. Thus inclusion is simply a question of location but a process and, as such, exceedingly complex to evaluate (Lindsay, 2007). Educational provision for children with SSLD is generally in mainstream classrooms, with a minority in integrated resources or special schools (Lindsay et al, 2005a).

Mainstream schools are not homogeneous; they vary greatly in their social mix, levels of achievement and behavioural ethos (Office of Her Majesty's Chief Inspector, 2005). Mainstream schools drawing from similar populations may differ greatly in their levels of educational attainment, ethos and levels of inclusion. Integrated resources (IRs) also vary in their size, admissions policy and working ethos. Although previous research suggested that language units were relatively homogeneous in the children who were placed there (Conti Ramsden & Botting, 1999) more recent work challenges this assumption (Archibald & Gathercole, 2006). Special schools are similarly diverse. Special schools for children with language difficulties report that the children in their services experience a broad range of needs (Lindsay et al., 2005a). Thus there is considerable heterogeneity in the populations served by these different systems and the extent of overlap between the systems in relation to the pupils' level of need is largely unknown.

1.3 Why children with language difficulties raise challenges for the education system?

Children who enter schools with poor language skills are at a disadvantage both academically and socially. In contrast to many of their peers they will find the oral learning environment in the classroom challenging. Moreover, they will be disadvantaged in terms of the necessary building blocks required to develop their literacy and numeracy skills in the classroom. These challenges can be exacerbated when school staff are unfamiliar with their language learning needs (Dockrell & Lindsay, 2001; Mroz, 2006) and the ways to support oral language skills. A subgroup of children who exemplify these difficulties are children with SSLD.

The numbers of children with SSLD are significant. The most commonly reported prevalence rate is 7.4% for children of school entry age (Tomblin et al, 1997). In England statements of special educational need (SEN) will be required for entry into most integrated resources and special schools. Currently approximately 3% of all pupils receive statements of SEN although there is some variation by age and local authority (DfES, 2005). The majority of all children with statements of SEN (60%) are educated in mainstream schools, 7.7 % of whom are in resourced provision, integrated resources and special classes in mainstream schools (DfES, 2005). Children with SSLD will be a minority of all children with statements of SEN and relative to other categories of SEN there are proportionally fewer children whose primary need is a function of speech language and communication difficulties in special schools (DfES, 2005). From the analysis of current prevalence rates of SSLD and current practice for all children with SEN it follows that the majority of children with SSLD will be educated in mainstream settings. There is confirmatory evidence from the Manchester Language Study which identified all children spending 50% more of their time within language units. The total proportion identified was 0.07% at Year 2, substantially lower than the estimate of Tomblin et al., (1997). Since language units are more common at this point in time and many of the children in the study went onto mainstream settings it follows that teachers, special educational needs coordinators (SENCOs) and teaching assistants in mainstream settings will be addressing the needs of children with SSLD on a daily basis. It is not simply the extent of the problem that challenges education staff. The terms used to describe the pupil's difficulties, the nature of their language problems and the associated difficulties are problematic for staff who are not prepared by their initial training for meeting the needs of pupils' with language learning difficulties.

Identifying and understanding the children's needs is a complicating factor. Debates about the utility of the terminology used for children with language difficulties are long-standing (Aram, Morris, & Hall, 1993) and continue to concern the profession (Walsh, 2005). The range of terms used can lead to confusion within the field (Kamhi, 1998). The lack of consistent terminology and of a common framework leads to miscommunications with education staff and misunderstanding about the children's needs (Dockrell, George, Lindsay, & Roux, 1997). In a recent study in English and Welsh health trusts 10 different terms were being used by different speech and language services to refer to the same group of children (Dockrell et al., 2006). Virtually all highlighted the specificity of the children's problems although only 33% of the SLT services used the most commonly used research term, *specific language impairment* (Bishop, 1992) while 28% used SSLD the terminology preferred by education staff.

The inconsistency in terminology is confusing but even when educational professionals are informed about the different terms in use this will not necessarily provide details about the child's specific language difficulties. There is variability in both the criteria and procedures used to identify the children (Lahey, 1990; Kamhi, 1998) which affects the nature of the population. Operational definitions that use non-verbal ability as an exclusionary criteria differ in their use of cutoff points, ranging from standard scores of 85 to 70 (Kamhi, 1998). Defining SSLD with exclusionary criteria does not identify a unique homogeneous group of language needs. Subtypes of language difficulties have been identified in clinical groups (Rapin & Allen,1987), by standardized assessments (Conti-Ramsden, Crutchley & Botting 1997) and genetic analyses (Bishop, 2006). The extent to which these reflect valid clinical groupings with implications for educational interventions is less clear. Indeed there are questions about the ways in which tests intended to measure the same domain lead to apparent differences (Tomblin & Zhang, 2006; Weerdenburg, Verhoeven, & Balkom, 2006) and the ways in which test use can alter a child's eligibility to services (Cole et al., 1992; Dockrell & Law, 2007).

The importance of subgroups for educational provision is further questioned by the significant movement between groups over relatively short periods of time (Conti Ramsden & Botting, 1999). Even when children demonstrate average performance on language measures, slower language processing may negatively

impact on cognitive resources necessary for holding and integrating information. These difficulties can directly impact on educational and social contexts.

Many children with SSLD have problems that are not specific to oral language but can be associated with oral language problems. Many of these problems directly affect access to the curriculum. Children experience a range of problems with literacy including reading decoding (Catts, Fey, Tomblin, & Zhang, 2002; Stothard, Snowling, Bishop, Chipchase, & Kaplan, 1998), reading comprehension (Nation, Clarke, Marshall, & Durand, 2004), spelling (Lewis & Freebairn, 1992) and writing (Bishop & Clarkson, 2003; Dockrell, Lindsay, Connelly, & Mackie, 2007). Problems with numeracy are also increasingly documented (Cowan, Donlan, Newton, & Lloyd, 2005). Problems that are indirectly related to the children's performance in the classroom are also common: motor incoordination (Hill, 2004), social emotional and behavioural difficulties (Beitchman, Wilson, Brownlie, Inglis, & Lancee, 1996; Fujiki, Brinton & Clarke, 2002; Lindsay, Dockrell, & Strand, 2007). Thus both teachers and learning support staff need to consider a profile of competencies beyond the pupil's specific language problems.

Patterns of performance vary over time in terms of linguistic skills (Law, Boyle, Harris, Harkness, & Nye, 2000), nonverbal ability (Botting, 2005) and academic attainment (Dockrell et al., 2007, Young et al., 2002). As children develop, earlier problems in areas such as phonology and morphosyntax may improve; however, more detailed testing may show problems with higher-level language , for example understanding of humor and idioms (Norbury, 2004). In UK post-sixteen educational contexts difficulties with basic skills serve as barriers to future educational and occupational opportunities (Dockrell et al., 2007). The relative importance of these factors will vary over the educational phases and with respect to the curricular demands being placed on the children.

A final complicating factor in meeting the needs of children with SSLD is the necessary interplay between health and education professionals. Effective collaboration between the key agencies to provide for the children's needs is advocated but there are significant difficulties achieving this (Dockrell et al, ,1997; Dunsmuir, Clifford & Cook, 2006). Major decisions on provision, facilities or patterns of practice, are typically not taken collaboratively (Palikara, Lindsay & Dockrell, in press). Some of these problems reflect different underlying philosophies. The conventional view of SLT practice places greater emphasis on within child

factors, while educational models focus on the influence of the learning environment. Recommendations from the different professionals for specific interventions and patterns of educational provision will reflect these different perspectives and may lead to a dichotomy between the views of education and health staff about the ways to meet the educational needs of children with SSLD.

2 The current context

2.1 UK provision

Debates about the nature and extent of the provision for children with language difficulties are not new. Concern in the UK in the 1980s highlighted the scarcity of language units for junior aged children (KS2) as opposed to infants (KS1) and the lack of provision in units at secondary school age (KS3 and KS4) (Hutt & Donlan, 1987). Concern was also raised about the variable criteria for admission to the units, the nature and extent of integration, the use of manual signing, and staffing ratios. However, at this point little was known about the provision for children who did not attend language units. In 2000 a study was carried out to investigate the policy and practice, at LA/health trust and school level, concerning the current provision for children with SSLD (Dockrell et al, 2006; Lindsay, et al, 2005a,b). The views of 97 LAs and 129 speech and language therapy (SLT) services in England and Wales were collected. The study mapped in detail the provision made by LAs and SLT services. The main source of quantitative data on provision was the two national surveys. The LA survey identified the range of educational provision, while the survey of SLT services explored the support offered by SLTs to educational provision, specifically for children with SSLD.

The LA survey confirmed that support for children with SSLD was not simply provided in language units. At all stages from pre-school to Key Stage 4 (KS4), the large majority of LAs provided support in mainstream with 98.9% of the LAs reporting this at KS2. Language units, and other specialized language resources in mainstream were common at Reception and Key Stage 1 (90.7% LAs) and KS2 (84.2%), but less than a third of the LAs made this provision at Key Stage 3 or 4. Nevertheless, this was a major development since 1987 when language units were mainly provided at KS1. At Reception/KS1 and KS2, about half of LAs provide one language unit/integrated resource (IR) but other LAs reported two IRs and up to 5 or more. However, there was also evidence of placement of children with SSLD in other

IRs (e.g. for children with moderate learning difficulties, MLD). The use of special schools, however, had the opposite trend with relatively few LAs having special language schools (no more than 7.8%) while approaching two thirds used MLD schools for children with SSLD, and about half of LAs used other special schools. LAs also used provision made by others, whether other LAs or the voluntary sector, with increasing reliance from Nursery to KS3/4.

The position with SLT services also reflected this range of LA provision. Almost four out of five provided services to children with SSLD in mainstream schools up to KS2. Support for secondary schools dropped but was still provided by over half of the services, but fewer than 10% of the SLT services made provision to mainstream post-16 schools. Support to language IRs was highest at Reception/KS 1 (83.7%), lower at KS 2 (72.9%), but then dropped to 25.6% and 3.9% at KS 3/4 and post-16 respectively. SLT support for other forms of special provision (IRs, or special schools) was lower but, as with the LA's pattern of provision itself, more SLTs provided support to special schools than to special IRs.

The data from SLT services and LAs provide evidence for a complex pattern of provision. LAs had developed use of special IRs for children with SSLD, and SLT services were supporting children in these. On the other hand, LAs were using, and SLTs were supporting a range of other special schools and specialized IRs for other groups of children (e.g. MLD), while support for children with SSLD in mainstream was common across both LAs and SLT services,

The study also confirmed the earlier finding about the variability in language unit entry criteria, including: severity of language problem, nature of language problem, discrepancy criteria, primary speech and language problem, average cognitive or non-verbal skills. There was lack of consistency across LAs about placement decisions and who would quality for entry into a specialized service.

The survey highlighted the diversity of educational placements that were designated to meet the needs of children with SSLD but was not designed to provide a detailed picture of the children who were placed in the services, their level of needs and the ways in which teaching was specialized to the meet the children's needs.

3 Placements level of need, approaches to teaching and academic attainments

3.1 Examining need in two local authorities

To address some of the issues in relation to children's needs we draw on data collected from a cohort of children based in two local authorities in a 10 year longitudinal covering primary and secondary education. We identified children at the beginning of Key Stage 2 (Year 3, age 8). To ensure that the range of provision was not constrained by geographical and local policy decisions children were identified in two LAs, one urban and one rural. Our rationale for this design was:

1. Continued language difficulties were likely to be severe irrespective of the child's educational placement
2. Demands of the KS2 curriculum would bring to the fore the nature of the children's language learning needs
3. Staff would be aware of the children's needs

To control for selective access to services we identified children through a range of professionals who would be working with the children in different settings in the two LAs. Special educational needs co-ordinators (SENCOs), speech and language therapists and educational psychologists identified the children. This allowed a broader approach than defining the sample by focusing on provision types alone – language IRs, special schools or seeing a speech and language therapist. From the initial group identified we excluded any child who was reported to have an additional difficulty which might question the specific nature of the language problem. Fifty-nine children remained in the sample and this represented 0.75% of the Year 3 population across the LAs, a more representative sample of the population than children drawn from IRs alone. Participants were assessed on a range of language and literacy tasks (see Dockrell et al., 2007).

There was no difference by LA on any language, literacy or cognitive measure at any point of the study. At this point in time (age 8) participants had statistically significantly higher scores on the non-verbal measure than scores on all measures of language and literacy scores; all differences represented large effect sizes (Dockrell et al., 2007).

At age 8 children were variously placed across different types of educational provision. Forty children (68%) were in mainstream places with additional support, 9 (15%) were in special schools for children with language difficulties, 10 (17%) were in IRs. As Figure 1 shows over the following 8 years a total of 46% of pupils moved between different types of provision with 14 per cent moving more than once. Movements occurred between all types of provision at each point. Between Year 9

(14 years) and Year 11(16 years) pupils moved from mainstream to an IR (language), from an IR (general) to mainstream, from a special language school to mainstream and from MLD schools to both mainstream and an IR (language). Children in the urban LA moved significantly more often than those in the rural LA (t = -2.1, df = 53, p = .04). Thus our first analysis suggested that it was characteristics of the LA education system rather than pupils' needs that were influencing current placement.

To examine this further we considered the extent to which children's placements indicated level of need as assessed by standardized assessments. A sample of all Year 3 children who met the criteria for SSLD in two national special language schools were included to extend the population of children in specialist provision, providing a total sample of 69.

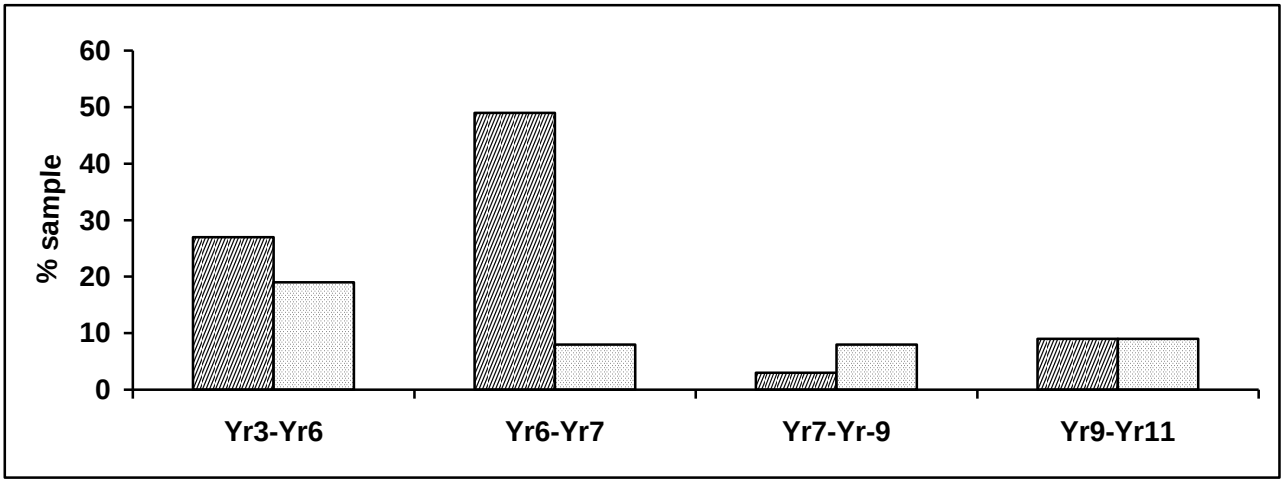

Figure 1. Percentage of sample that moved placement across the different assessment phases of the study

3. 2 Are pupils in specialist provision those with the greatest level of need?

We tested the hypothesis that children in different forms of provision were experiencing different levels of educational needs. At each point in time comparisons were made across forms of provision in relation to non-verbal ability, receptive and expressive language, reading decoding, reading comprehension and spelling. Additionally we examined the children's production of written text in Year 6 (age 11) and Year 9/10 (age 14-15).

The first hypothesis we examined was whether children in specialist provision (IRs and special schools) had higher levels of need than those in mainstream schools

for measures of language and literacy across three phases of the project - Year 3, Year 6 and Year 9/10. No measures differentiated the children in Year 3. In Year 6 both groups were performing significantly below average on measures of language and literacy but the only measure that differentiated the two populations was expressive language; the performance of pupils in specialist provision was significantly lower than that of pupils in mainstream schools. By the end of KS3 young people in specialist placement were performing significantly worse on non-verbal ability, expressive language, reading comprehension and writing. Apart from measures of non-verbal ability pupils in mainstream were also demonstrating significant levels of problems in the areas of language and literacy.

Grouping all specialist provision together might fail to discriminate the pupils' needs in terms of either the severity of the pupil's difficulties or the specificity of their language needs. By Year 6 sufficient numbers of children had moved to other specialist provision to allow a more detailed analysis by comparisons across these different cohorts of children.

The first analysis examined intensity of support: mainstream, IR, and special school. Analyses by intensity of provision revealed no significant differences on any measure in Year 6. A similar analysis for placements in Year 11 revealed significant differences for expressive language and reading comprehension. Pupils in IRs and mainstream settings performed significantly better than pupils in special schools on the measures of expressive language. For reading comprehension pupils in mainstream performed significantly better than those in IRs and special schools while those in IRs and special schools did not differ significantly. Again measures for all groups were significantly below expectation.

We next examined the differences between children in mainstream, those in language IRs and special schools for language problems (language provision), and those in other IRs and other special schools (other special provision). In Year 6 the only measure that differentiated the three groups was non-verbal ability where children in other special IRs and schools were performing significantly below the other two cohorts who were performing within the average range. By the end of Key Stage 3 the differences between the cohorts were evident for both non-verbal ability and expressive language but significant differences were evident only between the mainstream and other special provision. Young people in special language provision

did not differ significantly from either those in mainstream or those in other specialist services.

These analyses suggest that while all children have significant problems those children in specialist provision, on average, are more impaired on a minority of assessments. Although these differences are statistically significant their clinical or educational significance has not been established. Note also that since many pupils move between types of provision the data can not inform long term prognoses nor speak to the efficacy of the different settings.

3.3 Is educational placement an indicator of support provided?

Children's needs in Year 6 were met in three ways; individual and group work by withdrawal or in- class support. Many children were receiving combinations of these approaches. All children in special schools received all modes of support whereas this was the case for only 50% of the children in IRs and mainstream. We also considered the professionals involved across settings and organisation. In all but one case pupils who were in special schools were receiving support from a combination of professionals including speech and language therapists, individually, in groups and within classrooms. Moreover for pupils in IRs individual work was either provided by a combination of professionals (including an SLT) or SLT alone. In contrast both group work and in class support were characterized by greater variation in the staff involved.

The pattern of support for children in mainstream was much more varied. Seventy-five per cent of the children received individual support: of these 45% received support from education support staff alone, 32% by SLTs and 22% by a combination of professionals. For both group and individual work the majority of children received their support in class (group work 85% and individual 91%). Children in specialist provision were therefore receiving higher levels of support and a greater range of professional involvement.

In Year 6 the ways in which staff worked with the children was explored in greater detail. We surveyed both teachers and SENCOs but discuss only teacher data as the response rate was higher (N = 66) and their responses revealed a greater awareness of what was happening in the classrooms for these pupils. Extra support was provided for all the pupils in special schools and IRs and for 74% of the children in mainstream settings, both within the class and by withdrawal. Teachers reported

differentiation of the curriculum for all pupils in special schools and IRs and 84% of pupils in mainstream classrooms. This was complemented by the use of different teaching strategies for children in mainstream (73%), IRs (90%) and special schools (69%) Teachers in mainstream provision were more likely to report setting easier work than teachers in IRs or special schools. This most likely reflects the difference in the range of pupils being taught in the different settings. Setting different objectives for the pupils was also frequently reported as was the use of specialist materials although in neither case did this differ statistically across settings. In contrast the use of special programmes was reported much more frequently in IRs and special schools.

In Year 7 data were collected from both SENCOs and teachers. Extra support was typically implemented in all or almost all settings (mainstream 96%, IRs 100% and special schools 94%) both within the class and by withdrawal. The data revealed a similar pattern to those collected in Year 6. Teachers reported differentiating the curriculum for all pupils in special schools, 75% of pupils in IRs and 84% of pupils in mainstream classrooms. This was complemented by the use of different teaching strategies for all children in IRs and special schools and 91% of the mainstream children. Teachers in mainstream provision were more likely to report setting easier work (71%) than teachers in IRs (50%) or special schools (31%). The latter result is unsurprising given the range of pupil abilities across the settings. Setting different objectives for the pupils was also frequently reported (mainstream 71%, IRs 88%, special schools 81%) as was the use of specialist materials (mainstream 38%, IRs 67%, special schools 88%). However there was no difference in the reported use of specialist programs (mainstream = 52%, IRs = 50% special schools = 69%..

A number of differences are therefore evident across the settings with respect to their systems to address the children's educational needs. These differences reflect general approaches to learning and instruction; objective data examining specific aspects of pedagogy were not collected. An important question remains as to whether these differences are reflected in pupil outcomes.

3.4 Educational achievement at school leaving

Attainments at the end of compulsory secondary schooling (Year 11, age 16) across the placements were examined from individual data provided by the DfES (DCSF) for pupils' GCSE points. In the UK pupils sit the General Certificate of Secondary Education in a range of subjects. They are graded A*-G, the target level being level 2

(A*-C). Pupils took an average of seven formal qualifications (range 0-14) with a mean of five GCSEs and with a smaller but sizeable proportion taking the lower level qualifications. Pupils passed an average of 5 GCSEs with the majority of pupils achieving their qualifications at level 1 (D to G). Nonetheless, 12.5% of the pupils achieved 5 GCSEs at level 2. These levels of achievement differ significantly from mainstream pupils in the respective LAs but are significantly better than pupils with other SENs (Dockrell et al., 2007).

Pupils' performance differed according to their educational placement (special or mainstream). Young people in special schools were more likely to take entry level qualifications and achieved fewer GCSE passes overall. There was a trend for pupils in other specialist provision to achieve lower results however, there were no statistically significant differences in the average number of points achieved, which is a grade-related rather than qualification-related criterion. Pupils in mainstream placements recorded the highest number of GCSE points (M= 178, SD = 172, range 0 - 816) but this did not differ significantly from either those in specialist language placements (M = 170, SD = 99, range 10-390) of other specialist provision in Year 11 (M = 89, SD =55, range 46 - 204). Mean scores are significantly different from the average GCSE points achieved by pupils attending comprehensive schools which was 348 in this year (2005). Interestingly every child in the specialist and language placements had achieved some GCSE points by the age of 16 but three pupils in mainstream settings had not achieved any points to date. Further examination of the GCSE data with larger samples and appropriate controls and conceptual analysis might help to further understand these patterns.

3.5 Summary

Children presented similar patterns of language and cognitive needs across the different types of provision. These needs were characterized by marked difficulties with language and literacy. Differences between settings on these measures were small, and were only evident for the measures of expressive language, reading comprehension and non-verbal ability. The needs of the children were typically met by an emphasis on curriculum differentiation and changing objectives to include children in the curriculum both at primary and secondary school. Analysis of academic attainment at GCSE based on grade related criteria revealed no statistically significant differences between the settings.

4. Meeting the educational needs of children with SSLD

Children with speech and language difficulties, at different points in their development, require specialist support from speech and language therapists either directly or indirectly. It is less clear whether there a special pedagogy for children with SSLD. Distinctive group characteristics do not necessarily mean different approaches to teaching are required or are differentially effective. As in other areas of special need there is little reliable and valid data to support the view that children with SSLD require distinct kinds of teaching or educational programs (Lewis & Norwich, 2005). Indeed the evidence from therapy studies questions the specific nature of the children's language needs. Children with below average non-verbal IQ benefit as much from therapy as do children with average non-verbal abilities (Cole, Dale & Mills, 1992; Fey et al., 1994).

There are however, a set of critical features that are applicable to all learners although different emphasis on the particular features will be required for different children and at different time points (Brown, 1988; Anderson, 1990). These principles can be applied to optimize learning but these must be both conceptualized and operationalised in relation to the individual child's learning and developmental needs and to the setting in which the teaching and learning are to take place (Lewis & Norwich, 2005). The underlying tenet is that those learning more slowly need more time to learn and more deliberate planning to ensure progress (Reason, 1998). Lewis and Norwich have formalized a taxonomy of pedagogic strategies that are relevant to supporting the educational needs of children with SSLD. The underpinning notion in this taxonomy is intensification. In addition the strategies identified concern the process of learning rather than where learning takes place. These strategies are premised on an understanding of the cognitive demands of the task, ways to intensify instruction and criterion-referenced tools for monitoring progress. The importance of the nature rather than the mere amount of resources is also stressed by a recent Office of Her Majesty's Chief Inspector,report (2006) which concludes that:

> The provision of additional resources to pupils – such as support from teaching assistants – did not ensure good quality intervention or adequate progress by pupils. There was a misconception that provision of additional resources was the key requirement for individual pupils, whereas … key factors for good progress were: the involvement of a specialist teacher; good

assessment; work tailored to challenge pupils sufficiently; and commitment from school leaders to ensure good progress for all pupils. (p. 2)

Table 1 (modified from Lewis and Norwich, 2005) provides indicative guidelines of strategies that support effective learning and ways in which they can be intensified to support learners who are struggling with the curriculum. Examination of the research literature provides experimental evidence demonstrating the relevance of a number of these high intensity strategies for children with SSLD.

Table 1

Effective pedagogic strategies for children with SSLD

Examples of pedagogic strategies	Continua of strategies for perceived attainment levels		Experimental evidence demonstrating relevance for children with SSLD
	High intensity	Low intensity	
Provide opportunities for transfer	Explicit and teacher led	Autonomous – teacher led	Teaching grammar to school aged children (Ebbels, 2007)
Provide examples to learn concepts	Many and varied but maximal difference on single criterion stressed	Few examples provided	Children benefited from frequent and widely spaced presentations for verb learning (Riches, Tomasello & Conti Ramsden, 2005)
Provision of practice to achieve mastery	Extensive and varied	Little	Children performed significantly better in a morpheme acquisition task in an imitation condition than a simple exposure condition (Connell & Addison

			Stone, 1992)
Provision of task linked feedback	Immediate, frequent explicit focused and extrinsic	Deferred moving to self – evaluation	Facilitating the correction of reading miscues during the oral reading of children with SLI (Kouri, Selle, & Riley, 2006)
Checking for preparedness of the next stage of learning	Explicit and frequent teacher monitoring emphasized	Fleeting (by teacher) self monitoring stressed	
Shape task structure	Small discrete steps short-term objectives emphasized	Larger steps, longer term goals emphasized	

Note: After Lewis and Norwich (2005)

Thus, there is evidence that modifications of instructional approaches can support learning for a range of pupils with different learning needs. There is increasing evidence that children with SSLD will benefit from learning environments which are sensitive to these pedagogic approaches.

These teaching approaches have been recorded in LAs judged to be providing good practice for children with SSLD (Lindsay & Dockrell, 2005). SENCOs in good practice LAs reported breaking tasks into small steps 89 per cent always or often and for 100% at least sometimes. Verbal repetition by the adult was also very common (81.2% and 99.2% respectively), although the nature of this verbal input was not examined (see Radford, Ireson, & Mahon, 2006).

5. The way forward

Research, policy and practice evaluations indicate that it is not *where* but *how* support occurs which is crucial. The first step (Tier 1) in addressing the needs of children with SSLD should be the provision of an appropriate learning environment, typically driven by an understanding of the principles of learning and the cognitive

prerequisites of the task to be learnt. In these contexts support will typically involve integrating language learning and subject learning (Wellington & Wellington, 2002). There is no evidence from the current data to suggest that the children should experience a qualitatively different curriculum in the first instance. Establishing that appropriate opportunities exist for a child to learn and that the strategies are in place to support this learning is an empirical question. Appropriate methodologies are required to achieve this objective.

Where the teaching and learning contexts meet these criteria and children have had access to such learning environments on a regular basis but difficulties persist a second tier of intervention needs to be considered. Interventions need to be strongly associated with the target skill, evidence based and match the educational context (Gillam & Gillam, 2006). As Justice (2006) argues interventions at this stage need to be systematic, explicit and intense**.** They also need to be monitored using the appropriate criterion referenced measures (Dockrell & Law, 2007). This supplemental support will typically be provided in small groups or one to one settings. Key principles which optimize achievement for those with literacy difficulties have been identified and have been shown to apply to children with speech and language problems (Gillon, 2000).

Treatment resistors following second tier interventions create particular challenges – but these pupils are likely to be rare. Suggestions have been made that these pupils should be provided with more intensive intervention possibly by short-term pull-out intervention (Fuchs et al., 2003; Vaughn & Fuchs, 2003; Vaughn, Linan-Thomson, & Hickman, 2003) or placement in settings where staff knowledge and expertise can meet the specific needs at the specific point in time and responses to the more specialist interventions can be monitored.

The introduction of tiered interventions requires that specialists work in a collaborative format to establish the intervention in the mainstream classroom (Kowaleski, 2002). This ensures treatment fidelity and overcomes ad hoc solutions to children's difficulties (Flugum & Reschly, 1994). This stepwise system means that interventions are evaluated at each stage. Response to intervention (RtI) can provide both data for effective interventions for children with language learning problems and a rationale for providing more specialist services or support. An intervention oriented service delivery is thereby constructed (Reschly & Ysseldyke, 2002).

With the RtI approach there is general agreement that classroom instruction

must be adequate in the first instance and that interventions should occur regardless of student category but there is less agreement about whether tier 2 interventions should be generic or specialised and at what point treatment resistors should be identified. The model also has potential implications for collaborations between professionals. Thus, greater 'value-added' may be provided by involvement of SLTs in early phases of education. In the later phases of compulsory education literacy experts and subject specialists may provided greater 'value –added' for pupils.

There are a number of strengths of this approach for children with SSLD. Firstly, it addresses the range of additional problems experienced by children with SSLD. Children's needs are targeted directly. It is based on children's language learning needs in the educational setting and thereby circumvents some of the problems with diagnosis. The decision about support is based on the child's progress and is therefore less susceptible to the vagaries of different service models. It also has the potential for providing clinicians with a method of allocating limited resources and it is not limited by the child's placement.

By corollary there are a number of significant challenges. The success of the approach is premised on educational staff and therapists working together, and there are well documented difficulties with this (see 1.3). Monitoring change depends on the design of appropriate criterion based measures to evaluate change and requires reliable and valid indicators of language skills beyond the age of five. It is not clear that such measures exist. Implementing tier 1 levels of teaching is dependent on a skilled workforce and there is a well-documented gap in teachers' knowledge and understanding of the different kinds of special needs (Scruggs & Mastropeiri, 1996) and SSLD in particular (Dockrell & Lindsay, 2001). Given the level of responsibility placed on TAs for many pupils their lack of training is a major concern for successful undertaking of a pedagogic role (Blatchford et al., 2004; Riggs & Mueller, 2002) although there is some promising indicative evidence for TAs' involvement (Lindsay, 2007). There are also challenges in evaluating evidence to introduce evidence based practice at tiers 2 and tiers 3 (Gillam & Gillam, 2006; Fey, 2006).

6. Conclusions

This chapter has explored the challenges for meeting the educational needs of children with SSLD. The current analysis suggests that the key dimension for raising the achievements for the children is how teaching occurs, rather than placement in

mainstream or specialist provision. There are a number of implications which follow from this analysis. A basic prerequisite is the provision of sufficiently intensive and monitored support. This requires teachers who are trained and sensitive to the needs of diverse learners and experienced and knowledgeable in implementing appropriate pedagogical modifications. Moreover, some teaching adaptations may require reduced pupil:teacher ratios and specialist training. Support provided depends on the identification of pupil's individual needs and addressing these needs should be complemented by working with SLTs using interventions which are effective and linked to the children's educational priorities. Both education staff and SLTs will require an expertise in ensuring the fidelity of interventions and appropriate monitoring techniques.

This chapter has focused solely on the academic dimensions of a pupil's schooling. The extent to which such conclusions hold for areas of social and emotional development and behavioural challenges, independence and self esteem are yet to be evaluated.

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