



## **Language needs or special needs?**

### **The assessment of learning difficulties in literacy among children learning English as an additional language: a literature review**

**Tony Cline and Tatheer Shamsi**

**University of Luton**

The Views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education and Employment.

© Crown Copyright 2000. Published with the permission of DfEE on behalf of the Controller of Her Majesty's Stationery Office. Applications for reproduction should be made in writing to The Crown Copyright Unit, Her Majesty's Stationery Office, St Clements House, 2-16 Colegate, Norwich NR3 1BQ.

ISBN 1 84185 201 5  
January 2000

## Language needs or special needs?

### The assessment of learning difficulties in literacy among children learning English as an additional language: a literature review

#### Contents

	Page
<b>1. Introduction</b>	
Aims of this review	1
Children learning English as an additional language (EAL)	1
Methods used in the review	2
The analysis of learning difficulties in literacy	3
<b>2. Reading achievement and reading difficulties of children learning EAL</b>	
General levels of reading attainment	6
The incidence of individual reading difficulties	6
Access to support for specific learning difficulties	8
<b>3. Learning to read in a second or third language</b>	
The learning process for most children	12
Reading difficulties at word level	16
Reading difficulties at sentence and text levels: understanding and response	18
<b>4. Identification and assessment of learning difficulties: general issues in work with children learning EAL</b>	
Initial questions when embarking on any assessment	20
General principles of assessment applied to work with children learning EAL	21
Staffing issues	23
Early identification	24
<b>5. The first phase of work - collecting basic information and seeing children's attainments in context</b>	
Current practice	28
Language proficiency	29
Testing in a child's home language	30
Information on educational provision	31
National Literacy Strategy	32
<b>6. Strategies of identification and assessment</b>	

Minimising bias in the content of assessment materials	34
The process of decision making	37
Normative approaches to assessment	38
Curriculum related assessment	40
Dynamic assessment	41
<b>7. Assessment of reading attainment, literacy learning and dyslexia</b>	
Tests of reading, literacy and dyslexia	43
Classroom-based observation and assessment	45
Assessment of the cognitive processes that underpin literacy	47
<b>8. Guidance to schools and teachers from local education authorities</b>	53
<b>9. Summary and conclusions</b>	58
<b>Appendices</b>	
<b>1. Collecting basic information on a child's background</b>	65
<b>2. Commercially available tests</b>	67
<b>References</b>	74



# **1. Introduction**

## **Aims of this review**

It is important to identify special educational needs (SEN) in literacy in order to provide appropriate help at an early stage and avoid problems later on in a child's education. But it has been reported that there are particular obstacles to achieving effective identification in the case of children learning English as an additional language (EAL). The main aim of the review is to identify and appraise key findings on successful approaches to identification and assessment. An important element is to examine possible strategies for distinguishing between literacy problems which are due to EAL and those which are due to SEN such as specific learning difficulties. There is often a degree of confusion: a problem that arises solely because of language difference may be treated as a more deep-seated learning difficulty; alternatively, a severe problem of learning may be ignored because it is assumed that the child will overcome it as fluency in English improves.

It is widely recognised that teachers need more help to address these issues. An aim of the review is to identify developmental work and research that will contribute to meeting that need. There is an emphasis on work relating to the development of reading skills, since this is the area that has received most attention. A secondary aim of the review is to highlight the problem that wider aspects of literacy have not been investigated so fully in studies of children learning EAL who have learning difficulties.

The report is in three parts. Sections 1 – 3 introduce key concepts and research findings on EAL literacy and learning difficulties. These sections include reviews of the extent of the problem and of the take-up of special provision. They end with an analysis of the types of difficulty children learning EAL may experience when reading in their second language. That lays the basis for Sections 4 - 6 which discuss the central theme of the report - principles, methods and materials for identification and assessment. These sections address both general and specific questions about the assessment of learning difficulties among children learning EAL. How do general principles of assessment apply to this population? What staffing is required to address the challenge? Should children be assessed in their home language? How can cultural bias be minimised? How will the assessment needs of this group be best met within the National Literacy Strategy? Is Reading Recovery relevant to their needs? It is clear that many teachers are uncertain or confused when they attempt to respond to these questions? Section 8 considers the coverage of guidance to schools and teachers. Finally, the concluding section sets out suggestions for action.

## **Children learning English as an additional language**

The review is concerned with children for whom English is an additional language. In the academic year 1996/97 pupils learning EAL constituted 7.5% of the school population in English local education authorities (LEAs). The distribution was uneven with over half of the pupils learning EAL located in only 20 LEA areas. Many schools had no such pupils, while in a small proportion (4%) a majority of the pupils had EAL (DfEE, 1999).

The term generally used for our subject throughout the review is "pupils learning EAL". This term carries no specific implication about the level of children's proficiency in either their first language (L1) or their second (L2).

There is a tendency in the literature on learning difficulties to discuss bilingualism in cognitive terms alone and to ignore other dimensions of people's associations with the languages in their repertoire - their sense of cultural affiliation and their group identification (Fradd, 1987; Rampton, 1990; Leung, Harris and Rampton, 1997). Literacy is intimately bound up not only with our language knowledge but also with our feelings about our languages and about the social group with which they are associated. These dimensions should be borne in mind throughout.

The focus here is on children who learn to read at school in their second or third language where that language is different from their first language or the language spoken in their home. The review is not mainly concerned with learning difficulties experienced by children who speak a variety of English at home that is different from that used in the classroom.

The central theme is learning difficulties. The review inevitably focuses on areas of academic weakness in the populations that are studied. It would be very easy for a review of this kind to reinforce negative stereotypes of pupils learning EAL and appear to justify low expectations of their likely progress in schools where English is the main medium of communication. There are two correctives to that. Firstly, there is UK evidence that pupils learning EAL in some LEA areas show substantially improved mean academic achievement by the end of secondary school (Gillborn and Gipps, 1996). Secondly, there is international evidence that bilingual children do well where the extra intellectual and cultural capital that they bring with them is valued and incorporated in the school curriculum (Collier, 1992, 1995; Cummins, 1993). We are focusing on challenges that are overcome by the vast majority of pupils in this population and on exceptional difficulties that are experienced by a minority. That focus should not mislead anyone to expect problems where they need not occur. At the same time, if there is some underachievement because of reading difficulties, we hope to contribute to identifying the work that is needed to address the problem.

### **Methods used in the review**

The review looks at work published during the period 1987-99, referring to earlier work where necessary as background to recent developments<sup>1</sup>. The search involved electronic and manual research literature databases (PsycLit, ERIC and BEI) together with a selective search of Internet sources and consultation with presenters at a relevant conference organised by the British Dyslexia Association in June 1999. There is an extensive literature on the assessment of SEN and of reading difficulties and dyslexia which very rarely refers to children learning EAL and an extensive literature on learning to read in L2 which very rarely refers to learning difficulties. Our first aim in the review was to identify published work in English which spans these areas. Reference is made below to 102 journal articles and other publications on SEN and learning difficulties in pupils from ethnic and linguistic minority communities. Only 29 of these concern the identification and assessment of reading

<sup>1</sup> The review of tests (section 7 and Appendix 2) includes older material that is still in current use.

difficulties and dyslexia<sup>2</sup>. More selectively, we also aimed to identify material on the separate areas of SEN, assessment and literacy development which could contribute to illuminating the issues set out above. 263 published works are cited below in that category.

As had been anticipated, the research literature on some topics is very thin. But the review is not restricted to empirical work described as “research” and published in academic papers. Where relevant, it also refers to development work by teachers, psychologists and speech and language therapists and to policy statements and guidance from government agencies and local authorities. A postal survey of education authorities in selected conurbations with large linguistic minority communities was carried out to identify local reports and notes of guidance that are not published in a nationally accessible form (see section 8).

### **The analysis of learning difficulties in literacy**

The title of this project refers to learning difficulties in *literacy*. In much of the report the focus is on *reading*. This is because the relevant literature on learning difficulties mainly concentrates on the narrower range of abilities and activities involved in the reading task. The writing process has received less attention from those concerned with the identification of learning difficulties (Moseley, 1997; Turner, 1993b, 1997). While our review must necessarily reflect the balance of emphasis in the literature, we will suggest below that some re-balancing would be timely. The goal of the literacy curriculum is that children should be able to read *and* write and also that they should choose to engage with a wide range of texts and use their literacy skills to enhance their understanding and enjoyment of the world and their capacity for action (Hudelson, 1994). For children learning EAL biliteracy may offer a particularly rich range of options (Kenner, 1998; Wallace, 1993). But the wider definition of literacy is rarely mentioned in the literature on learning difficulties<sup>3</sup>.

#### *Two approaches to conceptualising reading difficulties*

At various points in the report we will refer to a simple distinction that is commonly made between two main approaches to conceptualising reading difficulties. The first is a categorical approach, in which difficulties are described with category terms such as *dyslexia* or *specific reading retardation* or *reading disability*. The problems would be thought of as qualitatively different from other (milder) reading difficulties, probably having distinct causes (with biological and genetic factors as prime targets for attention). The underlying condition will not change over time, even if the people concerned learn strategies that enable them to compensate for it. It is expected that they will show other difficulties besides reading. Perhaps they will have minor difficulties in fine coordination or in balance or in remembering instructions. Even when they overcome their initial reading problems, they may show residual difficulties in spelling or in the presentation of written work. For researchers and

---

<sup>2</sup> Seven of these papers report empirical studies of the reading process with quantitative data, seven report case studies, four report surveys, and eleven are discussion papers or describe development work in progress without new empirical data.

<sup>3</sup> Exploratory work on spelling difficulties in English of children learning EAL in South Africa has been described by Seef (1999).

educators who adopt a categorical approach to thinking about learning difficulties these additional and continuing problems will be evidence of the underlying condition that differentiates them from other poor readers.

The second approach to conceptualising reading difficulties involves a dimensional model in which individual differences in reading achievement are thought of as being distributed in a statistically normal way along a continuous dimension. "From this perspective, reading difficulties form the lower tail of a bell-shaped distribution that shades gradually into normal and superior ranges of reading abilities. The population distribution is bell shaped because relatively fewer individuals have extremely high or extremely low reading scores, and relatively more individuals have intermediate scores. The same factors - biological, cognitive, instructional - are assumed to influence differences in reading skill at all points along the continuum. Therefore, deciding on the precise point on the dimension at which to distinguish normal reading from reading disability is quite arbitrary." (Snow et al, 1998)

There are major theoretical differences between these two approaches. In most categorical definitions of literacy learning difficulties (e.g. in traditional and contemporary definitions of *dyslexia*) the fundamental problem is seen to be operating on the reading process at the word level - "inside the word recognition module" (Stanovich, 1994). When problems at the word level are overcome so that word recognition can become an automatic, unconscious process, the person with dyslexia is usually able to develop skills at the sentence and text levels comparatively smoothly. Problems at the sentence and text levels are not usually thought of in categorical terms, unless they are seen as stemming from (or as associated with) a word level problem.

#### *Characteristic reading difficulties of children learning EAL*

Research has indicated that most children learning EAL do not encounter particular problems in deciphering print at the word level, even in their second language. But they do face particular linguistic and cultural challenges with reading material at school at the sentence and text levels. That does not mean that no children learning EAL experience the difficulties associated with dyslexia. In fact, we argue that it is probable that many such children go unnoticed and are treated as though their problems are solely to do with limited knowledge of the language in which they are trying to read. It is important to keep in mind a crucial distinction. On the one hand, there is likely to be a substantial number of children learning EAL who experience reading difficulties in the early stages because of linguistic and cultural obstacles which they are not always given sufficient help to negotiate. On the other hand, there is a much smaller number who will experience severe and continuing difficulties at the word level that may go undiagnosed. We will move between these two groups in our discussion, and much of our analysis will apply to both groups equally. But a central aim of this report is to identify how the distinction between them can be made more confidently and accurately in assessment and teaching.



## **2. Reading achievement and reading difficulties of children with English as an additional language**

### **General levels of reading attainment**

Early local studies of the educational attainments of pupils learning EAL often employed crude, over-inclusive categories such as "Asian pupils". They generally indicated that groups that included children learning EAL had slightly lower average attainments in reading English than the groups comprising monolingual pupils (e.g. Phillips and Marvelly, 1984). Overall group means were shown to fluctuate with changes in social circumstances (Mackintosh et al, 1988), but there were other factors at play too. When pupils learning EAL were delineated with greater care, it was evident that children from diverse linguistic minority communities showed differences in their mean levels of reading attainment from an early stage of schooling. For example, in many local studies children from the Pakistani community had lower average reading scores at Key Stage 1 than were obtained by children from the Indian community (e.g. Leeds, 1992).

Much of the UK evidence reviewed in this report focuses on the two largest linguistic minority communities with below average levels of attainment in literacy in primary school - the Bangladeshi and Pakistani communities. However, while this emphasis reflects the balance of the UK literature, we should not forget two phenomena highlighted in recent reports. Firstly, children from these communities in some areas improve their performance markedly by the end of compulsory schooling (Gillborn and Gipps, 1996; Ofsted, 1999). Secondly, many schools have concerns about literacy achievement in other smaller groups such as pupils of Turkish and Somali origin (Ofsted, 1999, para. 28).

### **The incidence of individual reading difficulties**

As would be expected, children learning EAL are more likely to start school with relatively low scores in English than other pupils. Table 1 illustrates this with data from Birmingham collected through a Baseline Assessment scheme which predated the present national framework. Alongside that analysis, Bartlett (1995) reported cross-sectional data showing that by the end of Key Stage 1 the performance of Indian pupils was comparable to that of white and African-Caribbean groups. This was not the case for the Pakistani and Bangladeshi groups (cf. Shorrocks et al, 1992).

This review is concerned not with average group attainment but specifically with the identification of pupils with learning difficulties. In general, the published data allow progress through school to be charted in terms of mean group achievements in major areas of the curriculum but do not highlight the progress of children initially identified as performing below average and do not focus on reading or literacy specifically (Gillborn and Gipps, 1996).

Table 1 Baseline Assessment and Key Stage 1 Results for English in Birmingham  
(Adapted from Bartlett, 1995 Tables 3, 4 & 9)

	Baseline Assessment Results <sup>4</sup>		Key Stage 1 English Results	
	% pupils scoring 5 or above		% pupils scoring Level 2 and above	
	1993 N=5655	1994 N=9655	1992 N=14271	1994 N=4904
African-Caribbean	32.1	37.6	73.6	84.0
White	34.9	34.0	70.3	79.4
Indian	23.2	24.6	71.5	79.4
Bangladeshi	18.8	19.5	43.3	43.5
Pakistani	14.9	13.9	42.9	57.6

There is evidence from case studies of individual schools that pupils learning EAL who have learning difficulties may not receive specialist teaching that they need. For example, in a study of a comprehensive school Troyna and Siraj-Blatchford (1993) showed that 25% of a cohort of 72 students received special needs support in their first year in the school, while this was allocated to none of the 104 students of South Asian origin in that year. On the other hand, almost 40% of the South Asian students were identified as needing English as a second language (ESL) support, including six who had attended UK primary schools since the age of four. It is possible that some of this group had not received adequate EAL support at an earlier stage. But it is also likely that in Year 7 there was a failure to discriminate clearly between ESL and SEN support needs. At a later stage the same group was over-represented in low English sets, as Scarr et al (1983) had found Pakistani pupils were in another Midlands school a decade earlier.<sup>5</sup>

This observation highlights a key challenge facing professionals in this field - uncertainty in individual cases whether slow progress towards literacy is caused by serious and abiding learning difficulties or is simply the result of limited knowledge of the language in which teaching is offered. Such uncertainty is likely to lead to delays in arranging appropriate provision for those children learning EAL who do have underlying learning difficulties in literacy over and above any difficulties related to their language status. If this were a problem, it would be evidenced by children learning EAL being under-represented in such provision - an area to which we now turn.

### Access to support for specific learning difficulties

<sup>4</sup> In the Baseline Assessment scheme the criteria against which pupils were assessed were developed from elements of the National Curriculum statements of attainment and programmes of study in English for speaking and listening, reading and writing. A child scoring 5 or above showed elements of competence at Level 1 in at least two of the three areas. The criteria were intended to reflect the range of performance to be expected of pupils at the time of entry to school.

<sup>5</sup> HMI too have observed that, where schools emphasise tight setting, some groups learning EAL (notably pupils from the Bangladeshi and Pakistani communities) are likely to be placed disproportionately in low sets, especially in English. This might easily be overlooked. In a sample of 24 secondary schools only one monitored ability sets by ethnic group (Ofsted, 1999).

### *The background to concern about ethnic minority pupils in SEN provision*

In the 1970s and 1980s commentators on the position of minority communities in SEN provision were concerned about over-representation. Compared to their group size in the general school population there were excessive numbers of “West Indian immigrant children” in what were then termed schools for the “educationally subnormal” in the UK (Coard, 1971; Tomlinson, 1981) and Mexican-American children in schools for the mentally retarded in the USA (Mercer, 1973). The practice of labelling so many children from such groups as having special educational needs attracted criticism in understandably emotive terms. In North America, Jones (1988) wrote of a crisis in psycho-educational assessment, Cummins (1984) used the term “deportation” and de Blassie and Franco (1983) described the process of SEN assessment as “tantamount to a ‘rape’ of these children”. In the UK, Desforges (1997) suggested that ethnic minority parents could see the white professionals involved as “helping mainstream education avoid making the necessary changes to meet the particular needs of pupils from the various ethnic minority groups” (p. 28). A London-based Muslim newspaper headed an article on the subject with a caption describing educational psychologists as “immigration officials of a monolingual system” (Anon, 1988). Cummins and McNeely (1987) argued that “historically assessment has played the role of legitimising the previous disabling of minority students. In some cases, assessment itself may play the primary role, but usually its role has been to locate a problem within the minority student, thereby screening from critical scrutiny the subtractive nature of the school program, the exclusionary orientation of teachers toward minority communities, and transmission models of teaching that inhibit students from active participation in learning.” (p. 93)

In an attempt to avoid these problems the new legal framework for SEN assessment established in England and Wales in 1981 made it clear that “a child is not to be taken as having a learning difficulty solely because the language (or form of a language) in which he is, or will be, taught is different from a language (or form of a language) which has at any time been spoken in his home” (DES, 1981). Perhaps for that reason or perhaps because of community pressure, disproportionate placement in special schools for pupils with moderate learning difficulties has been reduced (e.g. ILEA, 1985). But, as Troyna and Siraj-Blatchford (1993) showed, pupils learning EAL have continued to be over-represented in low ability streams, sets and vocational courses in some schools at secondary level. At the same time some local studies have indicated that they are under-represented in the list of pupils receiving specialist SpLD support - a form of provision for low achievers that is often seen to have higher social status.

### *Regional and local surveys of specialist provision for specific learning difficulties*

In the UK there are no national statistics on the take-up of SEN provision by ethnic or language group. However, a small number of regional and local studies in different parts of the country have addressed the issue and, in some cases, their reports have included figures on specialist provision for children with specific learning difficulties (SpLD) or dyslexia. The first results were reported in the mid 80's by the Inner London Education Authority which included in a survey of SEN provision its area classes for pupils with SpLD in literacy (see Table 2).

Table 2 Special classes for children with SpLD in Inner London in 1984

(Adapted from ILEA, 1985)

	N	African-Carib.	Asian	ESWI*	Other
		%	%	%	%
All primary schools	131,415	15.7	11.1	55.9	17.3
SpLD Classes	300	19.0	2.3	64.7	14.0

\* English, Scottish, Welsh and Irish

It is clear that very few Asian children were admitted to this provision. As noted by Cline and Frederickson (1999), the majority of the children came from families speaking one of the South Asian languages at home - estimated on the basis of Kysel (1985) to be approximately 55% Bengali or Sylhetti, 17% Gujerati, 16% Urdu and 13% Punjabi.

Curnyn et al (1991) reported similar data on the representation of children learning EAL in SEN provision in Glasgow over the five year period 1984/85 to 1988/89 (see Table 3). The authors pointed out (p. 278) that the data relating to specific learning difficulties in literacy needed to be treated with some caution because of the relatively small numbers involved. However, their data is in line with other findings reviewed here, and a follow-up survey of Scottish schools across a much wider area confirmed a pattern of low identification of “suspected dyslexia” in bilingual pupils (Deponio et al, 1999).

Table 3 Pupils learning EAL as a percentage of the total school population and of the population of SpLD units in Glasgow 1984/85 - 1988/89 (Curnyn et al, 1991)

Year	Total School	%EAL/Total	Total SpLD	%EAL/SpLD
1984	106,413	3.83	87	1.15
1985	102,726	4.37	87	2.30
1986	99,014	4.38	94	1.06
1987	94,810	5.01	95	1.05
1988	92,012	5.09	93	1.08

One of the returns in our LEA survey (see section 7) is relevant in this context. In a metropolitan authority with 13% of ethnic minority pupils (mainly of Indian and Pakistani origin) the Principal Educational Psychologist reported that only one child from this group was referred for assessment for SpLD in 1998 (Table 4).

Table 4 Children referred for SEN assessment because of SpLD as a proportion of all SEN assessments initiated in 1998 (metropolitan authority)

	No. of statutory SEN assessments	No. referred for SpLD	% SEN assessments referred for SpLD
All pupils	380	99	26.0
Ethnic minority pupils	28	1	3.6

It must be acknowledged that the available data is patchy. Regular monitoring at national level would provide confirmation. But even without it across three urban LEAs and over a period of fifteen years the local surveys are consistent: there is very low representation of children learning EAL in local education authority lists of those receiving specialist support for pupils with specific learning difficulties<sup>6</sup>.

In the USA, Baca and Cervantes (1989, p. 15) suggested that under-representation came about "because many LEP (limited English proficiency) handicapped students are being placed in bilingual education as an alternative to special education". Others have concentrated on distortions in the referral process (Graf, 1992), possible sources of bias in the content of tests (Miller, 1984; Lam, 1993), problems in the way in which tests are administered and interpreted (Desforges et al, 1995) and a failure to contextualise the assessment (Cline, 1993). In relation to SpLD, Cline and Frederickson (1999) have argued that traditional ways of defining specific reading retardation and dyslexia may have contributed to the under-representation in provision for pupils with SpLD/dyslexia of children from minority linguistic or cultural backgrounds (see page 15).

The literature suggests three main reasons for concern:

### **Invalid procedures**

- The apparently careful procedures for identification and assessment may simply get it wrong: they may be invalid when applied to bilingual and multilingual pupils.

### **False Negatives**

- Children learning EAL who have learning difficulties may be missing out: "... students who truly need specialised assistance... languish in general education classrooms (without appropriate school-based support), benefiting little from conventional instruction" (Gersten and Woodward, 1994, p. 312).

<sup>6</sup> Crutchley et al (1997) reported that bilingual children in language units tend, on average, to have more complex and severe language difficulties than monolingual English-speaking children. This suggests that there may also be under-representation of children learning EAL in this type of special provision.

### **Inefficient Use of Resources**

- The whole enterprise of identification, assessment and EAL and SEN teaching is very expensive. If inappropriate methods are used for extended periods, scarce resources will be wasted because they are not available for allocation to those who could make good use of them. The task of this literature review is to suggest directions that might be promising if we are to develop approaches to work with children learning EAL that are valid, fair and efficient.

### **3. Learning to read in a second or third language**

#### **The learning process for most children**

This section outlines the most influential approaches to defining literacy (or literacies) and to investigating the development of reading ability. A key aim is to lay the basis for distinguishing clearly in later sections between literacy learning difficulties that are due solely to a child learning to read in their second or third language and literacy learning difficulties in the same population that are associated with SEN. We have not attempted to provide a comprehensive review of the literature in this section but just to set the scene for later sections of the report. The criterion for selecting material was its relevance to understanding learning difficulties in L2 reading.

#### *Approaches to research*

Different approaches to research on literacy in a second language have developed from different models of the reading process (Grabe, 1991) and different views of the uses of literacy (Baker, 1996). They lead to quite different approaches to teaching and assessing reading (McLaughlin, 1994). It is possible to think of this range as a continuum from psychological approaches at one end to studies of literacy as a social practice at the other. Table 5 follows August and Hakuta (1997) in simplifying the range into two broad categories at each end of the continuum<sup>7</sup>. The first approach, which grew from psychological research, is also termed a cognitive (McLaughlin, 1994) or component skills approach (Grabe, 1991). The second approach, which has developed more recently, had its roots in anthropology. Educators now generally reject teaching methods exclusively associated with one or the other end of this continuum, and the National Literacy Strategy is based on a different framework. But the work of many researchers can still be clearly located within these categories.

---

<sup>7</sup> Readers who are interested in a more detailed analysis of points on this continuum are referred to Baker (1996, chap. 15).

Table 5 Opposing approaches to research on literacy as viewed by Baker (1996) [Bak] and August and Hakuta (1997) [Aug]

	<i>Skills approach (Bak)</i> <i>Psycholinguistic definition (Aug)</i>	<i>Socio-cultural literacy approach (Bak)</i> <i>Social practices view (Aug)</i>
Focus of research	<p>Literacy is "a technical skill, neutral in its aims and universal across languages. The skills of reading and writing can be decomposed into vocabulary, grammar and composition." (Bak)</p> <p>Literacy is "a psycholinguistic process involving component subprocesses such as -</p> <ul style="list-style-type: none"> <li>• letter recognition</li> <li>• phonological encoding</li> <li>• decoding of grapheme strings</li> <li>• word recognition</li> <li>• lexical access</li> <li>• computation of sentence meaning, and so on" (Aug)</li> </ul>	<p>"Socio-cultural literacy is the ability to construct appropriate cultural meaning when reading... In reading and writing we bring not only previous experience, but also our values and beliefs enabling us to create meaning from what we read and insert understanding into what we write. Reading and writing is an act of construction by the individual." (Bak)</p> <p>"The uses of literacy, and thus the cultural meanings of literacy to which children are socialised, are conceptualised... as social rather than autonomous." The individual learner's role is de-emphasised, and little attention is given to developmental change. (Aug)</p>
Implications for teaching	<p>This definition of literacy "in general... tends to support the utility of explicit instruction about these subprocesses (e.g. phoneme-grapheme mapping, word-recognition strategies, identification of derivational morphological relations among words), as well as practice to achieve automatic processing of them." (Aug)</p>	<p>"The social practice view assumes that participation in a community that uses literacy communicatively is the crucial precondition for becoming literate: thus this view is associated with instructional practices such as encouraging children to write with invented spelling, exposing children to books by reading aloud, having tapes available, providing classroom libraries, and providing authentic reading experiences through the use of trade books rather than basal readers." (Aug)</p>
Implications for assessment	<p>The tests associated with this approach "tend to assess decomposed and decontextualised language skills, eliciting superficial comprehension rather than deeper language thinking and understanding." (Bak)</p>	<p>"The cultural heritage is discovered and internalised in reading. While reading and writing have certain overt, testable skills, there is also a more hidden information processing activity ensuring enculturation." (Bak)</p>

Some reviews and textbooks focus on one type of approach only (e.g. Grabe, 1991) or present them separately as distinct perspectives without attempting to integrate them (e.g. McLaughlin, 1994). Some authors who have adopted the latter course (e.g. Baker, 1996) have suggested that the two approaches are fundamentally opposed and cannot be integrated. Durgunoglu (1997) took up the challenge:

- 1 *Reading requires the activation and orchestration of linguistic, literacy, and background knowledge.*
- 2 *How the language and literacy development in the two languages of a bilingual interact is a challenge that the researchers have just begun to tackle.*
- 3 *Bilingual literacy acquisition and development cannot only be studied from a cognitive perspective, because they are strongly affected by sociocultural contexts and political concerns.*



4 *Although reader characteristics are an important source of variance in bilingual reading research, collaboration and integration across fields that focus on different bilingual readers can be very useful. (p. 272)*

This does not represent a unifying model that can clarify the interaction between different levels of engagement with print. Even so it takes account of the significant progress that has been made towards a more broad-based understanding of the acquisition of reading and literacy by L2 learners. Unfortunately that breadth of vision is not yet generally reflected in the literature on learning difficulties.

Whilst most practitioners draw from insights associated with both approaches, research has advanced by adopting a tighter focus. For example, investigators working within the skills paradigm have proposed models of cognitive routes through which looking at print might lead to the recognition of meaningful language (Adams, 1990). The process requires a wide range of skills that have to be deployed in a focused, largely automatised way by a fluent reader. The following list is derived from analyses by two reviewers concerned with L2 readers (Grabe, 1991; Durgunoglu, 1997):

- Automatic perceptual/identification skills at the level of the visual features of print, the letter and the word, e.g. pattern recognition, letter identification
- Phonological awareness
- Knowledge of the structure of the language that is being read, including its syntax and morphology
- Knowledge about the uses, purposes and conventions of literacy and of how texts in different genres are organised
- Vocabulary knowledge
- Ability to access lexical memory
- Content and background knowledge
- Activation of relevant concepts and prior knowledge
- Synthesising information in the text and evaluating it against other sources of information/knowledge
- Metacognitive knowledge<sup>8</sup>
- Monitoring own response to the text, e.g. recognising problems of comprehension

Each element is required by both monolingual and bilingual readers, but they might differ in which elements give them most difficulty. For example, there might be a greater emphasis on problems relating to linguistic knowledge in the case of L2 learners.

Print presents a complex stimulus from which the reader needs to construct meaning. A novice learner will approach the task in a different way from a skilled reader. Frith (1985) and others have developed models of stages of development through which it is suggested learners pass in acquiring the skill. However, evidence has accumulated

---

<sup>8</sup> Metacognitive knowledge has been defined as knowledge about our own thinking processes and the ability to adopt appropriate strategies to achieve particular goals. In relation to reading Grabe suggested that this might include "recognising the more important information in a text; adjusting reading rate; using context to sort out a misunderstood segment; skimming portions of the text; previewing headings, pictures and summaries; using search strategies..." (p.382)

that the sequential course of reading acquisition through the stages is not universal and may be influenced by the way children are taught and the language in which they learn (Snowling, 1998; Wimmer and Hummer, 1990; Wimmer and Goswami, 1994). In any case it is most unlikely that a stage model designed to account for L1 reading development will do justice to the acquisition process of L2 learners. For example, they face different challenges in the important developmental shift that occurs when children automatise the process of word recognition for most words that they encounter in print. This change means that readers can give more of their attention to understanding the text rather than concentrating on decoding individual words and searching for them in memory. L2 learners are likely to find this shift a greater challenge than L1 learners because their lexical memory access in L2 will be slower and more limited - a problem that appears to be exacerbated when reading text at the "frustration" level (Favreau and Siegel, 1983; Geva and Clifton, 1994).

### *The impact of literacy in another language*

One factor which the general models of reading development do not take into account is a child's prior exposure to print in other languages. It is possible to envisage various combinations of prior knowledge and experience that will have a differential impact on learning to read in a second or third language. Children may be able to read their first language fluently and write it confidently; they may have some familiarity with its print version from family letters, food packets and various domestic objects; or they may have had almost no exposure at all. Alternatively, they may be familiar with the print form of another language such as Arabic because of its use in religious ritual.

There is evidence that most children who have learned to read beyond a basic level in L1 transfer some of their literacy knowledge to the task of learning to read in L2 and make quicker progress in L2 reading than would otherwise have been the case (Lanauze and Snow, 1989; Baker, 1996). Most of this work has been conducted within the cognitive tradition. Many of the studies with positive results have investigated transfer of learning between similar languages such as Spanish and English (e.g. Durgunoglu et al, 1993). However, transfer of some skills and knowledge has been shown to occur even where the two languages have quite different writing systems such as Japanese and English (Cummins, 1991) or Chinese and English (Bialystok, 1997). There is not yet a full understanding of the cognitive processes underlying successful transfer, the conditions that optimise positive transfer, and the differences between those who manage transfer successfully and those who do not (August and Hakuta, 1997). In our review of the literature we did not find detailed cognitive studies of transfer and biliteracy in the UK. The language landscape in the UK is very different from that in North America and other countries where much of the work has been carried out. So it is possible that different results would be obtained in research investigating the transfer of literacy skills among emerging biliterate learners between the UK and elsewhere.

### *Findings from observational studies of children's L2 literacy learning*

The lack of cognitive studies in the UK has been balanced by a small number of illuminating observational studies in the sociocultural literacy tradition in urban areas.

Literacy in L1 and literacy in English have been shown to serve different functions, to be learned in different ways and to be associated with different practices in various samples of children and young people from linguistic minority communities - a Chinese child in a reception class in London (Gregory, 1993), Gujarati adolescents in Leicester (Martin-Jones and Bhatt, 1998), a Gujarati seven year old in London (Kenner, 1999), Bangladeshi families in the West Midlands (Blackledge, 1999), and Sylhetti pupils in Year 1 and their siblings in London (Gregory, 1998).

In a typical study, Gregory (1994) compared the experiences of children aged 5 - 7 from six East London Bangladeshi families in their local authority primary school and in the community school that they attended at the end of the day. She showed that children would read for longer in the community school, were expected to read for different purposes, used different types of reading material and were taught by different methods. Given the scale of the work, there is great variation between schools, and since this research was conducted, literacy practices in primary schools have changed dramatically. But that does not negate the substantive conclusion - that for some children literacy practices in their LEA school may contradict expectations they bring from their experiences elsewhere, whether at home or in a community school. Although there have been only a few such studies in this country involving children learning EAL, there can be some confidence in their findings because they are closely in line with observations in similar studies involving the majority community here (Baynham, 1995; Moss, 1996) and culturally diverse groups in Australia (Luke and Kale, 1997) and the USA (Heath, 1983; Volk, 1994). (Cf. Coulthard, 1998.)

Thus research within the socio-cultural literacy tradition has demonstrated that many children learning EAL in the UK experience severe cultural discontinuities between their home community and the local authority school over the development of literacy. For practitioners the implication for assessment is clear, though not always easy to implement. If children who are making poor progress in L2 reading are known to attend a religious or community class where reading is part of the curriculum, there are additional assessment questions to be addressed - how do they respond to the different literacy demands made of them in that setting, and what impact does that experience have on their perception of the reading task in school? More generally, how can teachers assess in an individual case of apparent learning difficulty whether discontinuities between home and school are inhibiting reading progress? The research base is now sufficiently well founded to justify a small-scale development project with the goal of producing materials or guidance to support such assessment.

### **Reading difficulties at word level**

We showed earlier that children learning EAL appear to be under-represented among those identified with literacy learning difficulties. It would be surprising if the biological and genetic factors that are assumed to underlie conditions such as dyslexia in monolingual children did not also have an impact on children learning EAL. So we would expect them to show evidence of problems in reading at the word level as often as other children. Research on this topic has gathered momentum over the last decade, and some clear conclusions are now emerging. Children with weak phonological skills in L2 tend to perform poorly in all aspects of L2 reading - as is

also found in monolingual learners (Frederickson and Frith, 1998). In addition, and more surprisingly, the ability of bilingual children to tackle phonological processing tasks in L1 is generally associated with success in word recognition reading tasks not only in L1 but also in L2, indicating cross-language transfer (Geva, 1999).

There is a cautionary note to be kept in mind in considering the implications of that research. We do not yet know how far and in what ways the characteristics of L1 and the closeness of its relationship to L2 may make a difference (Da Fontura and Siegel, 1995; Stuart-Smith and Martin, 1997). Also, the finding should not be over-generalised: low levels of L2 oral language proficiency are associated with weak reading comprehension (Chitiri et al, 1992; Geva and Ryan, 1993; Verhoeven, 1990). However, Geva (1999) took an optimistic view of the findings. Drawing on evidence from her own longitudinal study which to date has followed 331 children through grades 1 – 3 (aged 6 – 8) and relating it to findings from other work with older pupils, she argued that the general results of this line of research mean that literacy learning difficulties in L2 can be assessed cross-linguistically, even when oral language proficiency in L2 is not yet fully developed. "...provided that children have been exposed to appropriate literacy instruction, there is no reason why they should not be able to decode words, even when their L2 language proficiency continues to develop... Oral language proficiency plays only a marginal role in explaining why some young L2 learners continue to experience difficulties in reading words and pseudo words, in spite of adequate instruction (Geva, 1999, p.10). She concluded that for children the difficulties focused on the process of reading the words and did not simply arise from their general language limitations in L2.

Other aspects of L2 reading difficulties in English at the word level have not been studied to the same extent. There is no reason to assume that children learning EAL will encounter either more or less problems than L1 learners with tasks that are less closely related to language such as visual analysis. Gupta and Garg (1996) studied children in India who spoke Hindi as their first language and were showing difficulties when required to learn to read in their L2 (English). Two of the tests which discriminated between the successful and unsuccessful readers in L2 were visual discrimination and name copying. There is as yet very limited evidence as to how far visual and motor difficulties follow a similar developmental pattern in L2 learners to what has been observed in those learning in L1.

If children learning EAL can be expected to develop phonological processing skills in line with what might be expected of an L1 learner, what shall we think when an individual pupil fails to do so and at the same time shows severe and persistent problems in word reading? In the case of a monolingual pupil the possibility of dyslexia would at least be considered by many specialist teachers and psychologists (Pumfrey and Reason, 1991). However, until recently another factor has had to be taken into account in many education systems: what is the child's measured level of intelligence? Dyslexia has popularly been defined in terms of a discrepancy between (high) intelligence and (poor) reading, and many specialist practitioners continue to find this definition convincing and useful (e.g. Turner, 1997). However, Cline and Reason (1993) and Cline and Frederickson (1999) have argued that defining dyslexia in terms of an IQ-achievement discrepancy may contribute to the under-representation in provision for dyslexic pupils of children from minority linguistic or cultural backgrounds. It is widely accepted that there are problems of reliability and

validity in applying verbal IQ scores based on a test administered in English to bilingual children whose language proficiency in English is still developing (Ashby, Morrison & Butcher, 1970, Figueroa, 1989):

“When immigrant children are assessed on such tests, the gap between their mean scores and those of indigenous children becomes smaller the longer they have been in the country (Ashby, Morrison and Butcher, 1970). Over the 5-7 year period required, on average, for the development of cognitive-academic language proficiency in an additional language, English IQ tests under-estimate the cognitive skills of children for whom English is an additional language (Cummins, 1984). Consequently they may fail to meet Specific Learning Difficulties criteria and be deprived of additional resources. So where IQ tests are used with bilingual pupils, IQ is likely to be underestimated and with it the incidence of IQ achievement discrepancies... In addition, where IQ-achievement discrepancies are embedded in administrative eligibility criteria, avoidance of IQ testing with bilingual pupils will also lead to under-identification (Gersten & Woodward, 1994)". (Cline and Frederickson, 1999)

For other reasons there is a strong movement away from the use of this approach to defining dyslexia (Siegel, 1992; Frederickson and Reason, 1995; Lyon, 1995; Stanovich and Stanovich, 1997). If it is replaced by a definition that avoids reference to a discrepancy between IQ and achievement, that will remove one source of possible confusion in the assessment of reading difficulties at word level for children learning EAL. (Cf. BPSa, 1999.)

### **Reading difficulties at sentence and text levels: understanding and response**

Successful reading involves moving between the different levels of a text and putting together what it says and what it means from all the clues available. Children's errors at the word level are not always best explained at that level. Miscue analysis of the L2 reading of children learning EAL has shown that they fail to make as much use of contextual cues as L1 readers (Rodriguez-Brown and Yirchott, 1983; Collins, 1999). This is in line with the observation that their accuracy in reading aloud is often superior to their ability to understand what they are reading and that the relative deficit compared to L1 readers is often greater in comprehension than in accuracy (Frederickson and Frith, 1998; Landon, 1999). Children with a minor decoding problem may not be able to draw on the usual L1 resources to tackle it - a broad and well-catalogued vocabulary, a clear understanding of syntactic structures and a well-established feeling for the expectations linked to the genre of the passage. Above all, they may not have access to a range of cultural reference that the author takes for granted in the reader (Pritchard, 1990; Garcia, 1991; Parke, 1991; Nagy et al, 1993; Hudelson, 1994). Compared to problems in reading at the word level, the lack of access to these essential resources is likely to be a much more widespread and pressing problem for most L2 learners (Durgunoglu, 1997). It is necessary to be sensitive to that probability while not losing sight of the likelihood that *some* of those learning to read in their second or third language will have dyslexic-type problems at the word level.

#### **4. Identification and assessment of learning difficulties: general issues in work with children learning EAL**

##### **Initial questions when embarking on any assessment**

The guiding principles are that approaches to identification and assessment in work with children learning EAL should be *valid, fair* and *efficient*. In an analysis that reflected a consensual view, Harlen (1983) outlined these initial questions that need to be asked when embarking on any assessment:

- i) What is the purpose of the assessment?*
- ii) What information is required for that purpose?*
- iii) What methods will provide this information?*
- iv) How will the results be interpreted and used?*

The answers to question (iii) and (iv) will depend on the answers given to questions (i) and (ii). All the elements of the assessment plan are interdependent. In discussing general issues in work with children learning EAL, we will use Harlen's questions as a reference point. Issues have been raised in the literature about each question either generally in relation to all children or specifically in relation to children who are learning EAL.

##### *i) Clarifying the purpose of an assessment*

In this essential first step in the process it is important that the aims are sufficiently tightly defined to be practicable (McKay, 1996). Possible aims include:

- checking what has been learned;
- making comparisons;
- reporting achievements;
- diagnosing difficulties;
- evaluating teaching or the curriculum; and
- monitoring at school, LEA or national level.

Setting broad, multiple objectives is frequently seen as leading to a disappointing outcome (Gravelle, 1992; Gipps and Stobart, 1993; Goldstein, 1991). This problem may be exacerbated when the target group presents a complex challenge for assessment, as in the case of children learning EAL (Cummins, 1984).

##### *ii) Determining what information is required*

Information should be collected that will achieve the desired objectives (Harlen, 1983). For example, it is not helpful to collect normative test scores as a basis for planning what to teach next or how to teach it (Gravelle, 1992). A range of learning outcomes might be assessed - knowledge, techniques, problem solving strategies, creativity, confidence, the ability to work autonomously or the ability to work with others on solving problems and carrying out tasks (Harlen, 1983). In the past, the learning outcomes to be assessed have sometimes been determined on the basis of a very narrow view of the curriculum with a focus on skills and vocabulary to the exclusion of affective and motivational outcomes and those relating to social learning. That will carry particular risks in work with children whose motivation for learning and sense of their own identity are most at risk,

including those children who face the most challenging transition between home and school (Chavkin, 1993).

*iii) Determining what methods of assessment will provide the required information*

Those working with children learning EAL need to pay particular attention to the question of what assessment methods will provide the information that is required. Methods that would do so in the case of monolingual children will not achieve that objective with some bilingual children (Miller, 1984; Baca and Cervantes, 1989, chap. 8; Baker, 1996, chap. 13). Various options are available to overcome problems of communication. Language issues are discussed in more detail below. The assessment method will have the following components, each of which may vary:

- Ways in which the problems or tasks are presented: e.g. on paper; by demonstration; in a practical situation; through normal class work.
- Ways in which pupils can respond: e.g. selection of correct answer from multiple choices; writing; drawing, etc; constructing; speaking.
- Standards or criteria used in judging the response: e.g. comparing with standard of others; comparing with criteria of performance; comparing with pupil's previous performance.
- Ways of presenting the results of assessment: e.g. numbers of correct answers; grade; comment or qualitative categorisation.

*iv) Planning how to interpret and use the results*

The interpretation and use of any results may be flawed if professional or organisational concerns distort the decision-making process, e.g. where the conclusions drawn from an assessment are seen to be determined by the need to manage resources in a particular way (Fulcher, 1989; Galloway, Armstrong and Tomlinson, 1994). There will also be problems of interpretation when the assessment data is assumed to be more reliable or valid than is justified (Valdes and Figueora, 1994, pp. 152 - 171). On the other hand, when professionals are obliged to employ assessment tools in which they lack confidence, they will tend to interpret the results flexibly, introducing an element of personal and variable judgement. This may be particularly likely in work with children from linguistic minority communities where the assessment is carried out by a person who does not speak the child's L1 (Ochoa et al, 1997).

### **General principles of assessment applied to work with children learning EAL**

Harlen's list of questions was based on an analysis of the sequence of processes in assessment but was not underpinned by an integrated theoretical foundation. Gipps (1994) proposed a new theory of educational assessment to replace what she saw as discredited principles of psychometry that had often been applied to this field of activity in the past. Educational assessment, she argued, should have the learner at its core with a theoretical base in theories of learning, motivation and evaluation. In order to provide a rigorous framework for the wider range of assessment methods now current in education she proposed the following checklist of quality assurance indicators:

- *Curriculum fidelity*

This implies that the construct, domain or curriculum is well specified and there is a broad coverage of the curriculum (if not of each domain) in the assessment.

- *Comparability*  
This is achieved through *consistency of approach* to the assessment by teachers; *a common understanding of assessment criteria*; and that performance is evaluated fairly, that is, according to the same rubric by all markers. These can be achieved by a combination of training, moderation and provision of exemplars.
- *Dependability*  
This emerges from evidence of curriculum fidelity, consistency and comparability, as will
- *Public credibility*
- *Context description*  
This requires that the detailed information about context be available so that we may make informed judgements about transferability.
- *Equity*  
This requires that a range of indicators be used in an assessment programme to offer pupils multiple opportunities to achieve." (Gipps, 1994, p. 174)

Cline (1992) focused on SEN assessment and proposed four principles for evaluating different approaches to assessment in this context. As a later section of the review partly concerns baseline assessment, these principles are illustrated here with questions designed for the evaluation of schemes of baseline assessment (Blatchford and Cline, 1992):

- *Theoretical integrity*  
eg Are the objectives of assessment on school entry explicit and clear?  
eg Are the processes of data collection compatible with those objectives?
- *Practical efficacy*  
eg Does the strategy draw upon the richest source of information available?  
eg Is the information recorded on children accurate and reliable?
- *Equity*  
eg Are the rights of children and parents effectively protected?  
eg Is the process likely to operate without bias with respect to gender, social class, ethnicity, language use and religion?
- *Accountability*  
eg Is the process cost-effective?  
eg Is the process and the information it produces likely to be intelligible to children, parents and teachers?

The issues highlighted by Gipps are partially but not entirely covered in this list, but it gives more attention to issues affected by linguistic and cultural diversity. We will



now examine specific practical challenges that have to be addressed if there are to be significant improvements in the assessment of literacy learning difficulties of children learning EAL. These challenges should be considered in the light of the general principles highlighted in those lists.

### **Staffing issues**

Most authors agree that specialist EAL teachers, bilingual support staff and interpreters have an important role to play in collaboration with others, but conflicting opinions are expressed on the optimum scope of their involvement (Tomlinson, 1989; Mills, 1994; Fraser, 1997; South, 1998). Virtually all authors support the position that the task of assessment "requires a highly sensitive and sympathetic understanding of a child's community, culture, family life and individual characteristics" (Baker, 1996, p. 266). There is general support for the argument that this applies to the person who interacts with a child learning EAL during the assessment and to the person who interprets the results and draws conclusions from them about the child's education (Lam, 1993). Barona and Barona (1987), Graf (1992) and others have emphasised the need to consult minority community professionals during an extended "prereferral" stage.

A stronger statement on the contribution of L1 speakers was offered by Pema and Pattinson (1991). Along with Lacelle-Peterson and Rivera (1994), they argued that it is necessary for "assessment instruments or materials to be planned and devised by those who share most closely the experience and perspective of the target group" (p. 41). Cummins and McNeely (1987) went further. They did not express concern about the background of those involved in assessment but focused on how they interpret their function. They argued that external professionals such as psychologists should review their role and act as advocate for the child. This would mean that they would subject the societal and educational context to critical scrutiny. (Cf. Cummins, 1989, 1996).

Both monolingual and bilingual staff need training for the challenging tasks described here. There is anecdotal and survey evidence that unqualified staff, teachers and educational psychologists feel inadequately trained for the assessment of children learning EAL both in the UK (Mills, 1994; Verma and Firth, 1995; Ofsted, 1997; Veasey, 1999) and the USA (Figueroa, 1989; Ochoa et al, 1997). Surveys and inspection reports in England, Wales and Scotland have indicated that, in many cases, training has indeed left them unprepared (e.g. HMI, 1983, para. 1.6; Bourne, 1990; Ofsted, 1994, para. 44; Hill, 1994; CRE, 1996). Specific provision for protected training time for Section 11 funded projects had a beneficial effect, at least for the staff directly involved, but mainstream staff were not normally included (Ofsted, 1994, para. 45). Latterly, a concern has been expressed that LEAs do not monitor the impact of the conferences and project initiatives that are arranged (Ofsted, 1999). In the context of this review a specific concern must be that there may be, at best, only cursory coverage of EAL in the training offered to SEN staff and of SEN in the training offered to EAL and bilingual staff in both initial and post-experience programmes. It is notable, for example, that there is no relevant coverage in the Teacher Training Agency's National Standards for SENCO's (1998).

### **Early identification**

It is normally assumed that the priority should be to identify learning difficulties as early as possible. The result of delay will merely be greater frustration for the child (Winther, 1998). "The best way to tackle educational disadvantage is to get in early... early diagnosis and appropriate intervention improve the prospects of children with special educational needs and reduce the need for expensive intervention later on." (DfEE, 1997). In the case of children learning EAL those following that advice will need to take particular care to ensure that early diagnosis does not reinforce negative labelling and encourage low expectations among teachers. Extensive evidence has accumulated over thirty years that teachers tend to expect too little of children from linguistic minorities in historically monolingual Western societies. Such is the strength of this effect that sometimes when children learning EAL perform well, the results are simply dismissed as invalid (Lacelle-Peterson and Rivera, 1994, p. 72). Many writers have expressed the fear that early identification of learning difficulties will carry a particular risk of becoming a self-fulfilling prophecy in the case of children learning EAL (e.g. Levine, 1990, p. 282). A further problem is that children learning EAL may develop language and other skills particularly rapidly after school entry. This means that a very early assessment, including baseline assessment, may soon be out of date.

There is now a National Framework for Baseline Assessment. It is helpfully flexible within very clear parameters, and its aims are benign:

- ž to provide information to help teachers plan effectively to meet children's individual learning needs; and
- ž to measure children's attainment, using one or more numerical outcomes which can be used in later value-added analyses of children's progress  
(SCAA, 1997, p.1.)

A number of commentators have expressed doubts that it is possible for one scheme of assessment to achieve both types of aim set out by QCA (Fisher, 1998; Lindsay, 1998; Wedell, 1998). Singleton (1997) highlighted what he called the practicality-accuracy dilemma: a scheme with sufficient items to discriminate accurately between groups of children is likely to be so long and complex as to be impracticable in the classroom. His solution was to develop a computer-based system, the Cognitive Profiling System (CoPS) which can be shortened if an adaptive approach to testing is used (Singleton et al, 1999). This system has been trialled with a multilingual EAL sample in their first language. The results were reported to suggest "promising and speculative utility of CoPS1 when applied to EAL children" (Singleton and Fumoto, 1999).

In a recent NASEN seminar on Baseline Assessment, Hunt (1998) argued strongly that, if there is to be effective identification of learning difficulties, "additional and more sensitive screening will be essential before any progression to the *Code of Practice Stages*" (p. 42). He, like Lindsay and Wedell at the same seminar, was talking about the school population as a whole. Generally, in contrast to Singleton and Fumoto, commentators who have examined the challenge of using Baseline Assessment to identify learning difficulties among children learning EAL have anticipated acute problems. This is not because of the nature of the assessment tool - which was Singleton's concern - but because of variability in prior experience and the

learning trajectory shown by many of the children after school entry. In an analysis of 1994 data from Birmingham, Bartlett (1995) showed that children who had attended an LEA nursery class or school previously for at least one term did better, on average, in the Baseline Assessment results for English. Significantly, though, this association was especially strong for children learning EAL (see Table 7).

Table 7 Baseline Assessment results from Birmingham - English 1994 (from Bartlett, 1995)

% pupils scoring 5 and above by first language and nursery<sup>4</sup>

	Nursery	No Nursery
Bengali	26.5	4.6
English	36.5	31.6
Punjabi	22.7	7.2
Urdu	18.5	8.8

Another LEA to report authority-wide results for baseline assessment at an early stage was Wandsworth. Lindsay (1998) pointed out that, although children learning EAL obtained lower scores than others on average at that point, follow-up at the end of Key Stage 1 "showed this group to have made good progress, with scores comparable at that stage to monolingual English speakers". As noted above, there is considerable variation between groups in the amount of progress made. But for some groups at least the predictive power of baseline assessment is reduced because many children for whom English is an additional language learn a great deal in their early years of nursery/school that improves their performance on this kind of measure.

In a review of an earlier group of studies of what was then thought of as screening on school entry, Lindsay and Wedell (1982) concluded that predictions were not generally stable enough to enable teachers to predict *future* learning difficulties accurately. They did, however, consider that there was a strong case for using the instruments to identify *present* learning difficulties. Thus interventions could be designed to obviate the need for later special help. The implication of Bartlett's findings is that, in the case of children learning EAL, such a strategy would identify too many false negatives, i.e. it would appear to show that children were in need of special help when what they really needed was a longer period of induction to school and to the use of English.

Many early years educators are critical of the reductionist and decontextualised approach that has been adopted in some baseline assessment schemes. Commentators such as Burgess-Macey (1994) emphasise that "a child will perform better in those activities that have meaning in their own culture" (p. 53). In a list of principles for assessment at this stage Wolfendale (1998) included:

- ž that children's prior experience and achievements be valued and celebrated;
- ž that diversity and difference in children's experience be welcomed and respected.

In an influential analysis Cummins (1984) emphasised that a decontextualised approach to assessment or teaching penalises pupils learning EAL in particular. (Cf. Miller, 1984; Lam, 1993.)

NALDIC's response to the QCA consultation on its original draft proposals highlighted the language issue and argued that the dual aims were in conflict with each other in that context:

"The more the mother tongue is used the better the assessment will be in taking account of the child's abilities. The more the home experience is understood and taken into account the more valuable the assessment will be in relation to the individual child. This will be the case in relation to the formative and diagnostic purposes of the assessment. However the opposite is the case with respect to the application of standards for 'value-added' and accountability purposes. Here the purpose is to measure the progress of children from a given starting point in relation to a common standard. From this point of view it is important to record the limited responses and involvement that some children with EAL will have not only with regard to English language and literacy, but (because English is the medium used) for all areas of assessment as they enter the school. There is a fundamental opposition for the teacher between the desire to recognise experience and language use which may not conform to the expected 'norm' on the one hand, and on the other hand to record accurately the child's starting position in relation to common standards in the context of an English medium environment."  
(NALDIC, 1998)

There is general support for the principle that the performance of children learning EAL should be assessed over time in different situations (see section 6). Along with others, Lacelle-Peterson and Rivera (1994) phrased this in terms of a need to reorient assessment to "focus on students' progress over time towards established goals rather than on comparisons" (p. 69). A British Psychological Society working party has suggested that "the term 'identification' may imply too narrow a focus on within-child determinants of learning". They advocate an alternative, broader formulation which "would describe teachers and carers as *noticing* children's individual needs and then adjusting their responses accordingly. This interplay between 'noticing' and 'adjusting' would seem the most appropriate basis for monitoring the progress of young children at risk of reading failure." (BPS, 1999a, p.59).

This approach would seem likely to retain the advantages of early "identification" and reduce the risk of inappropriate labelling. The literacy skills of children who are perceived to be making limited progress can be closely monitored both in the Literacy Hour and across the curriculum. When combined with careful profiling and systematic recording, this can lead to appropriate further action, if necessary, within the framework of the SEN Code of Practice. Such an approach fits well with the prioritising of practical support in the recent Green Paper (DfEE, 1997).

## **5. The first phase of work – collecting basic information and seeing children’s attainments in context**

### **Current practice**

For any child with learning difficulties an assessment needs to take account of their position in society, their situation in their family, their educational history and the current educational provision, including language provision. Each of these issues requires more careful consideration in the case of a bilingual child (cf. Robson, 1987). The SEN Code of Practice (DfEE, 1994) advised that care should be taken "to consider the child within context of home, language, culture and community" (para. 2:18). While that may appear self-evident, the few studies that have been conducted in the UK indicate that such information may often not be collected or fully considered or recorded. Curnyn et al (1991) studied the Records of Need for 35 children with moderate learning difficulties and EAL attending Glasgow primary and secondary schools in 1990. There was a matched group of monolingual children, but this summary focuses on the EAL group. Their content analysis of the case papers indicated, among other things, that in the school’s form, language was only mentioned in describing the child's difficulties in about half the cases and bilingualism was referred to in the language assessment in less than a fifth of the cases. In the psychologist’s assessment of language reference was made to the child's bilingualism or ESL status in only two thirds of the cases, the child's first language was assessed in half of the cases, and the conclusion of the overall assessment of the child's linguistic and curricular attainments had a qualification relating to the child's bilingual or bicultural status in less than a fifth of the papers examined.

Cline (1991) studied the SEN assessment papers for 26 children aged 4 - 14 attending a day special school for children with moderate learning difficulties in an inner city area. eleven of the children were learning EAL, but a comment on their L1 proficiency could be found in the papers in only 2 cases. Desforges et al (1995) examined SEN statements for 300 children learning EAL written during 1989-91 in another urban area. The first language was not identified at all in 34% of cases and had been assessed in only 36% of cases.

A number of writers have offered checklists of the basic information that they suggest should be collected and recorded whenever a child learning EAL shows difficulties in the classroom or is formally assessed in relation to SEN (Frederickson and Cline, 1990; Graf, 1992; Siraj-Blatchford, 1994; Hall, 1995; Veasey, 1999). Without this information it will be impossible for a teacher or psychologist to determine, for example, whether any reading problems they identify are attributable to limited knowledge of L1 or lack of educational opportunity rather than to an underlying learning difficulty that is likely to persist. Appendix 1 lists the items of information featured in these sources under five key headings:

- Cultural and religious background
- Family details and history
- Language history, including current usage of L1 and L2
- School history, including past and current EAL and SEN support and attendance at community/religious classes
- Medical history

The relevance of all these headings will be obvious. The issues arising in relation to cultural and religious background, family details and history, and medical history will be clear. The headings in the list relating to language and school history require further comment.

### **Language proficiency**

The first step, before anything else is done, is to evaluate a child's knowledge and use of their home language and of English. It is important that attention is paid to their proficiency both in language for everyday, interpersonal communication and in language for academic purposes (Cummins, 1984; Carrasquillo and Rodriguez, 1996). All other steps in the process of assessment will need to take account of the implications of the language findings (Gavillan-Torres, 1984; Ortiz and Garcia, 1990; Hall, 1995; Baker, 1996; Cline, 1998). It will illuminate their emotional as well as their cognitive development (Fazal, 1997).

One reason for this emphasis on an initial assessment of children's overall language proficiency is that it will lay the basis for determining the language in which any assessment should be carried out. It is necessary to ensure that any instructions or communication in a child's L2 about test or assessment procedure does not disadvantage the child so that a misleading picture is given of their non-linguistic abilities (Lam, 1993; Lacelle-Peterson and Rivera, 1994). Some advocate that children should be encouraged to use their full linguistic repertoire in tackling assessment tasks, moving between their languages if that is necessary (Pema and Pattinson, 1991). Others argue simply for assessing children in their stronger language (Baker, 1996). However, it cannot be assumed that, because children have home languages other than English, they will be advantaged if educational assessment is carried out in their L1. They may rarely use that language for academic purposes and have no vocabulary in it for the things studied at school (SEAC, 1990; Gregory and Kelly, 1992; Gravelle, 1992). Where L1 is used, it is important that the variety or dialect that is chosen is the one with which the child is familiar.

Whilst all aspects of children's language repertoire need to be understood in order to lay the basis for assessing learning difficulties in literacy, the starting point will normally be to evaluate their command of English as this is the school's language of instruction. There has recently been some controversy about the most effective way of delineating progress in developing English as an additional language (Leung, 1995; OFSTED, 1997; NALDIC, 1997; Cameron and Bygate, 1997; Gardner and Rea-Dickens, 1998). The point at issue is whether English Language Scales should continue to be used or whether it is possible and preferable to integrate the assessment of children learning EAL with that of all other children by assessing their progress in English within the framework of the National Curriculum English levels. Whatever strategy is adopted for pupils learning EAL in general, there is a separate question to be considered in relation to the subgroup showing learning difficulties. It seems very unlikely that the information available through statutory NC English assessment and unstructured classroom observation will provide detail or precision in discriminating early stages of progress and uneven patterns of development.

For the purpose of analysing children's possible learning difficulties it is not sufficient simply to have an account of the stage they have reached in English language development. In order to appreciate the implications of that information in this context it is necessary also to have information on the child's history of using L1 and L2 in a range of settings. This will have both a diagnostic value and a formative value for planning classroom work. We noted, however, that there is little published work on the assessment of home language for children learning EAL who have learning difficulties. Mattes and Omark (1984), Hall (1993, 1995) and Haworth and Joyce (1996) outline approaches to assessment and recording that are adapted to the needs of those working with children who may have SEN. All of these approaches have significant advantages over the casual approaches that are more commonly used, but none is based on a programme of systematic research, and none takes full account of the range of language varieties encountered in UK schools. Mills (1995) has pointed out that there are complex methodological issues to be resolved if a reliable form of assessment is to be developed. Mobbs (1997) and Leung et al (1997) have shown that the resultant picture of an individual's language will be influenced in subtle ways by the dynamics of change in society and in each language community. If it is to lay a satisfactory basis for classroom planning in situations where a child is struggling, an L1 assessment strategy will need to cover not only linguistic exposure, knowledge and use but also the dimension of affiliation (Rampton, 1990).

The evidence from a range of studies indicates that teaching in L1 strengthens a child's performance in L2 (Fitzpatrick, 1987; Collier, 1989, 1995; Thomas and Collier, 1997). Bilingual teachers and support staff have a crucial role to play (Landon, 1997). Perhaps it is a symptom of the failure of the system to value this group appropriately that we could not find a survey of the views of bilingual staff themselves. In a small-scale study South (1998) showed that heads of services believe some of them lack confidence in their contribution to the assessment task. There is a need for a more detailed survey of the staff concerned with a larger sample that can more adequately represent the diverse range of people involved. This would help to inform future debate on their role and training needs in relation to the tasks that are the focus of this review.

### **Testing in a child's home language**

For children in the early stages of learning English testing in their home language may be necessary. Much of the research on test translation has focused on cross-national and cross-cultural studies (see review in Hambleton, 1993). In that context it is obvious that the translated material will not be experienced by a group in another culture in their home language in the same way as the original test was by monolingual children in *their* home language. When a test is translated for use within the same society, it is sometimes assumed that a closer equivalence will be achieved. There are many problems with that assumption. For example, studies showing that item difficulty is likely to change significantly in translation have included a range of types of test, including intelligence scales (reviewed in Valdes and Figueroa, 1994, pp.104 - 109), tests of dyslexia (Miles, 1999) and tests relating to the National Curriculum in Wales (William, 1994).

Whether a written translation is produced or an interpreter is used, it is essential to take account of the language variety spoken by the child at home. In a linguistic

minority community it will probably not be a standard version of the L1 but will be subject to complex dynamics of language shift (Linguistic Minorities Project, 1985; Rampton, 1996; Mobbs, 1997)<sup>9</sup>. Children may never have used L1 in the vocabulary domain covered by the test, e.g. an academic school subject such as science. This has been seen as a crucial factor in the guidance issued to schools for the National Curriculum assessment arrangements (SEAC, 1990).

It is important to differentiate the assessment of other knowledge and abilities *through* L1 from the assessment of language proficiency *in* L1. Within the UK the only substantial body of work on assessment through L1 has been concerned with Welsh (Baker, 1988; Wiliam, 1993). A small-scale project on the work of bilingual assistants that was reported by Mills and Mills (1993) and Mills (1995) yielded insights into the complexity of the task in schools with linguistic minority pupils. They highlighted the heavy demands often made of untrained bilingual assistants. Only three of the 15 LEAs whose guidance to schools we analysed included guidance on working with interpreters (see page 51). Assessment through L1 is essential for a small number of pupils, and assessment drawing on both L1 and L2 is desirable for many others. There is a need for further foundation work so that these delicate exchanges can be placed on a firmer footing (cf. Levine, 1990; Gregory and Kelly, 1992).

### **Information on educational provision**

Evaluating information on a child's educational history is a crucial step in determining whether or not children may have enduring learning difficulties of a serious kind that need to be addressed in addition to their language needs. If, for example, fundamental language learning needs have not been adequately addressed, there is no point in looking further. The first step will need to be to find out how the child responds if appropriate educational provision is arranged. The minimum aim must be that problems that really arise from the setting are not defined as being located within the child.

Many writers have advocated that the learning context should be examined closely, adopting an ecological approach to assessment (e.g. Ortiz et al, 1988; Cloud, 1994; Cline, 1993). But strategies for evaluating children's learning environments for the purposes of SEN assessment are, as yet, at an early developmental stage (Ysseldyke and Christenson, 1993; Frederickson and Cline, 1996). Cline (1998) suggested that a full account would need to include detailed answers to the following:

- Where?                      Where does the learning take place?
- With whom?                With whom does the child associate while learning?
- From whom?                Who facilitates the child's learning?
- When?                        When is teaching scheduled and when are learning

---

<sup>9</sup> Outside Wales only one attempt has been made by a major UK publisher to produce parallel versions of a test in translation. This was the Sandwell Bilingual Screening Assessment which specifically aims to evaluate an aspect of bilingual language proficiency in Punjabi and English. Frederickson (1992) and Hall (1995) have pointed out that the differential rate of language shift across communities means that the applicability of such a test is quite limited. But a team including one of then original authors has recently reported its use for screening purposes in research (Stuart-Smith and Martin, 1997).



- What? opportunities used?  
What is the taught curriculum?
- How? What methods and materials are used for communication and teaching?

In that paper one of these questions, "With whom does the child associate while learning?", is addressed in relation to children with EAL who may have learning difficulties.

Further work is needed to relate this approach to theoretical models and empirical findings in the EAL literature. Ruiz (1989) described a case study of the implementation of the Optimal Learning Environment (OLE) Curriculum Guide, a Californian resource for "teachers of Spanish-speaking children in learning handicapped programs". It is claimed that the instructional principles of the Guide are based on EAL and SEN research. They appear to incorporate familiar aspects of good practice such as locating "curriculum in a meaningful context where the communicative purpose is clear and authentic". In the UK the educational context for literacy learning is now substantially determined by the National Literacy Strategy. It is necessary to examine the likely impact of that strategy on the performance of children learning EAL in general if the specific position of those with learning difficulties is to be clearly understood.

### **National Literacy Strategy**

The National Literacy Project that laid the basis for the National Literacy Strategy (NLS) targeted two key areas for improvement in 250 schools - the quality of literacy teaching in the classroom and the management of literacy at whole school level. An HMI evaluation reported that its carefully planned and highly structured approach had a positive impact overall on the reading test scores of pupils learning EAL, but there was also a note of caution: "...whatever their age, EAL pupils categorised as very fluent had scores that were higher than those of children with English as a first language - possibly reflecting the greater language skills of fluent bilingual children. Where pupils were not yet fluent in English, performance increased with the stage of fluency. All EAL pupils made progress over the life of the Project, but those who were just becoming familiar with English made less progress and needed more oral work within and outside the Hour; the needs of this group of pupils should be considered carefully when planning the Literacy Hour." (OFSTED, 1998) (The full data may be found in Sainsbury et al, 1998, Table A.2.8.)

It is beyond the scope of this review to examine in detail ways of ensuring that the now comprehensive Strategy has a positive impact for children at all levels of English language proficiency and reading ability. Collins (1999) pointed out continuities between the evidence coming from this initiative and evidence about the progress of bilingual pupils collected during Reading Recovery and Better Reading Partnerships projects. A NALDIC Working Party (1998) suggested that success in implementing the NLS framework with children learning EAL will depend on recognising their need for the following:

- building on previous experience and experiences beyond school
- comprehensible input with meaning supported by context, visuals and familiarity

- a positive stress-free environment
- plenty of active listening time, with respect for a silent period for new beginners
- good peer role models for oral language and literacy
- positive reinforcement and modelling of the target language
- modelling, scaffolding and peer interaction to enable active use of new language as pupils become more fluent and confident
- an emphasis on communication rather than correction until pupils are confident in English
- an appropriate level of cognitive demand matched to pupils' abilities (not just their current achievement in English)
- repetition and revisiting language. making connections between different contexts." (p. 12)

For pupils who are struggling with the reading process and for those at the very early stages of learning English as L2 it will be important that good use is made of the regular Literacy Hour routines to observe and evaluate their strengths and their difficulties in detail. It would be timely at this stage to mount a development project to identify and disseminate good practice in observing and responding to the difficulties of individual children with EAL and SEN in the context of the Literacy Hour. Important features of good practice will be exploration of the use of dual language texts and texts in languages other than English (White, 1998), the deployment of additional staff in the most effective way (OFSTED, 1998; NALDIC, 1998) and fine-tuning of differentiation within the Hour for those children who are only just becoming familiar with English as well as for those with SEN (Sainsbury et al, 1998). (At the time of writing it is too early to judge the impact of the Additional Literacy Support Programme within the National Literacy Strategy that was introduced into schools from September 1999.)

## 6. Strategies of identification and assessment

Writers working in the field have been keen to emphasise that "there is no single test... which can provide ready made answers" (Hall, 1995, p. 6). There is no single cause of the problems of assessing children learning EAL, and the solution will not be a single, simple strategy based on "*the* intelligence or achievement test" (Graf, 1992, p. 185). There are many advantages to drawing upon multiple sources of evidence. This may involve one or more of the following - sampling the child's performance and behaviour in different roles and in different situations (Hernandez, 1994); using multiple indicators to assess progress over time (Lacelle-Peterson and Rivera, 1994, p.68; Carrasquillo and Rodriguez, 1996, p. 32); sampling a child's reading across a range of texts and genres (McKay, 1996); comparing performance in settings where L1 is the main medium of communication with performance in the mainstream classroom. As noted above, in complex or puzzling cases part of this process might usefully involve consulting any religious or community school that children attend (Cline, 1995). If their progress in that setting is comparable to that of others while they are struggling in their LEA school, the implication must be that their difficulties may be defined by some feature that differentiates the two educational settings. The principle is that reliable assessment of children learning EAL may require greater efforts to secure multiple sources of evidence than are needed with monolingual children. At the same time the risks of depending on a single source of information are also greater because the children's performance is less stable over time and across settings.

### Minimising bias in the content of assessment materials

In the literature on the assessment of children from ethnic minorities concerns about test bias have had a central place. The issue has been hotly debated, and sometimes there has been more heat than light. It is generally accepted that some cultural bias is inevitable in the content of any assessment materials (e.g. Lam, 1993). It was advised in the SEN Code of Practice that one should "so far as possible, use assessment tools which are culturally neutral and useful for a range of ethnic groups" (DES, 1994, para. 2:18). Many writers have argued that it is impossible to develop tools that are culturally neutral or "culture-free" (e.g. Wood, 1991, p. 177), but it should be possible to remove some of the worst sources of bias and produce instruments that are fairer to all children. An overall strategy for minimising bias will involve not only giving attention to assessment materials but also considering how to reduce the impact of content bias by the way that the assessment is planned.

It is important to be clear what is meant by *bias* in this context. An assessment should not be thought of as biased merely because one group of people obtains higher average scores on it than another group. It is possible that the first group is actually superior at whatever task the assessment is measuring. For example, we might expect a group of racing car drivers to do better at a computerised reaction time test than a group of office workers. The test would favour the drivers but it would not be biased against the office workers. The key question is whether the assessment would make equally accurate predictions about both groups. If it showed the office workers to have slower reaction times than the racing drivers, would that turn out to be the case if you assessed their reaction time in another situation - not on the computer and not in a car (which really would favour the racing driver group)? In psychometric jargon,

a test is biased if it is "differentially valid for members of different groups" (Wood, 1991).

When bias in testing is discussed, the debate usually focuses on the content of tests. This section will reflect that emphasis. However, it is important to keep in mind that the content of test items is only one of many possible sources of bias. Testing takes place in the context of an overall assessment process. Each phase of that process has to be examined for possible sources of bias. For example, after children have finished working on a perfectly acceptable assessment, bias might creep into the evaluation of their performance or behaviour or into the interpretation of grades and scores or into the decision making process as to what the educational outcome could be.

Assessment may be based on a formal test situation or observation of classroom work or on the grading of work produced in the course of everyday life in the classroom. In each case it is not only the tasks that are set and the materials used in them that may be sources of bias but also the atmosphere in which the work is carried out (Miller, 1984). "Atmosphere bias" has been discussed less than "content bias", but it may be more pernicious, as it is more difficult to identify and more difficult to deal with.

It is good practice for a test developer to have a code of practice that covers the issue of content bias. In the USA the American Psychological Association has set standards which are nationally accepted (though not mandatory). In the United Kingdom it is a matter for individual companies and organisations, and it is sometimes ignored even by public bodies (Gipps and Stobart, 1993, p. 62). However, in its Code of Practice for the Development of Assessment Instruments, Methods and Systems the National Foundation for Educational Research has a section on Fair Assessment, which states that in order to produce fair assessments, NFER developers will:

- Review and revise questions, items or tasks and related materials to avoid potentially insensitive content or language.
- Enact procedures that help to ensure that differences in performance are related primarily to the knowledge, skills, aptitudes or attitudes being assessed rather than to irrelevant factors.
- Investigate the performance of people of different ethnic, gender and socio-economic backgrounds when institutions helping with trials are willing to provide this information and when samples of sufficient size are available.
- The investigation of performance of different groups will be carried out using data provided on the first actual administration of the assessment.
- Where feasible, provide appropriately modified forms of the assessment procedures for people with disabilities. (Whetton, 1999)

QCA specifications for National Curriculum test papers at KS2 have specified that the "test materials should avoid ethnic, gender and cultural bias and should not disadvantage pupils from particular backgrounds" (Rose, 1999, p. 10)

Where tests and assessment tasks are developed locally, it is possible to employ school-based review strategies for checking on possible item bias. The list of questions given here has been adapted from Berk (1984) and Tindal and Marston (1990). They designed a method of reviewing to assist in the identification of test items which may reflect gender, cultural, racial, regional and/or ethnic content bias

and stereotyping. Although there is a form for this purpose, the essential process can be followed through without elaborate form-filling. It is most effective if a number of people examine the test with the checklist in mind and if they come from a range of backgrounds. They should complete this task independently and only compare notes afterwards. Their first task is to identify any individual items to which they feel they cannot give an unequivocal answer “yes” for each of the following questions:

- (a) Is the item free of offensive gender, cultural, racial, regional and/or ethnic content?
- (b) Is the item free of gender, cultural, racial, regional and/or ethnic stereotyping? Is the item free of language which could be offensive to a segment of the examinee population?
- (c) Is the item free of descriptions which could be offensive to a segment of the examinee population?
- (d) Will the activities described in the item be equally familiar (or equally unfamiliar) to all examinees?
- (e) Will the words in the item have a common meaning for all examinees?

Ribeiro (1980) provided an illustration of some test items that proved easier than expected for one particular minority group - Portuguese children in the USA. They coped well with two questions in an advanced section of a test where they were failing most other items: "what is the meaning of 'migrate'?" and "why does oil float on water?" The explanations were simple: migration was a feature of their recent family history, and they were used to seeing oil float on water in an altar lamp in the Catholic church. On the other hand, Hannon and McNally (1986) showed that children learning EAL, like working class monolingual children and unlike a matched middle class monolingual group, did rather poorly when faced with reading comprehension items that incorporated assumptions about social conventions. For example, they chose the wrong word to fill in a gap in a sentence about what might be expected by someone who is a guest at teatime. An item bias review team should include sufficient people from the target minority groups to enable it to predict such patterns of response accurately.

In addition to having groups of people from different backgrounds inspecting test items for content bias, a test developer can carry out a statistical investigation. This will aim to find out "whether any questions are disproportionately difficult for a particular group once that group's overall test performance has been taken into account" (Gipps and Stobart, 1993, p. 60). Other statistical checks are possible both on individual items and on the test as a whole.

For the item bias review team it is not sufficient to look at the individual items separately. Each item may have little wrong with it in itself, but the cumulative effect of the test as a whole may still be biased against a particular subgroup of candidates. So, when the task of examining the items separately has been completed, it is necessary to consider the overall balance of the paper or tasks as a whole. There may not be many individual items that cause problems. But what of its overall balance?

It is not only aspects of content such as offensiveness or stereotyping that can give rise to bias. Work on gender bias has shown that the format of a test or exam may also have a differential impact between groups. We have found no recent evidence that test

format or test style might show bias in relation to ethnic or linguistic groups - except for the obvious expectation that language-based tests in L2 will tell one little about the possible future achievements of children learning EAL at an early stage of learning English.

In carrying out this review we have observed that it is relatively easier in the United States than in the UK to learn what measures have been taken to reduce bias in a particular test. The measures themselves may not always be impressive, and no educators there would claim that the outcome is educational equity. But the transparency of the process is an advance on what we have often found in this country.

### **The process of decision making**

The operation of bias will be moderated further if assessment teams adopt a hypothesis testing framework for assessment and intervention (BPS, 1999b). This contrasts with traditional ways of managing the process of “referral”. It involves a cyclical consultative process in which, once a problem is defined and hypotheses about it formulated, data is collected and analysed, and intervention is planned on that basis. When it has been implemented, the outcomes are evaluated and the problem is reviewed and redefined. The cycle of investigation, intervention and re-assessment places less onus on each individual stage in the process and may reduce the potential risks of bias (Cline and Frederickson, 1999).

Wright (1991) described an application of the hypothesis testing approach to the challenge of assessing children learning EAL who had reported learning difficulties. It was assumed that at the beginning of the assessment process teachers already have a good deal of information about the child and his/her home situation, classroom behaviour, academic performance, and so on. Wright’s paper set out some possible reasons for low achievement and suggested what to look for in seeking to eliminate each possible factor. A similar framework was offered subsequently by Hall (1995). Table 7 lists some of the hypotheses that are covered in these two accounts. Both authors provide some comments on the background to the particular hypotheses and list contraindications – evidence that would suggest that the hypothesis should be rejected in a particular case.

In effect this approach provides an agenda for decision making. In the context of widespread uncertainty about how to distinguish special needs from language needs a hypothesis testing framework could be helpful to many teachers and psychologists. An important advantage of the approach is that the hypotheses proposed by the authors are not set in stone. It would be expected that the particular hypotheses to be explored would change over time with new research findings and would vary according to the circumstances of the child and previous observations in school or elsewhere. That flexibility is at the core of the hypothesis testing approach.

Table 7 Hypotheses to be eliminated when attempting to explain depressed educational achievement by children learning EAL

Selected hypotheses listed by Wright (1991)	Selected hypotheses listed by Hall (1995)
The child is learning more slowly than others	The child is learning more slowly because of

<p>because the ethos and curriculum of the school are experienced as challenging and alien rather than welcoming and accommodating.</p> <p>The child is not learning because the child's good level of conversational English has misled the teacher into setting tasks that are too abstract for the child's current language level.</p> <p>The child is learning at an appropriate rate and just needs more time.</p> <p>The child has not attained a basic language proficiency in any language, as neither language has been given adequate opportunities to develop.</p> <p>The child is failing because of a preoccupation with environmental stress.</p> <p>The child has a general difficulty in learning, i.e. has special educational needs as defined by Warnock.</p> <p>The child is failing because of a specific language disorder.</p>	<p>basic factors to do with language development and/or task demands.</p> <p>The child is not learning because of environmental stress experienced inside or outside school.</p> <p>The child is failing because of a specific language disorder.</p> <p>The child has Special Educational Needs as defined by the 1981 and 1993 Education Acts.</p>
---	--

While this review focuses specifically on literacy, the impact of the wider social context on children's learning in general should not be overlooked. The hypotheses testing process may need to include an exploration of where children locate themselves in relation to their home and school cultures. In particular, it may be important to check for bicultural ambivalence or confusion - a lack of confidence in their cultural identity in either of the main settings in which they spend their time (Cummins, 1984; Duquette, 1991). In view of the existence of covert and overt racism and hostility (Macpherson, 1999), it is possible that social, cultural or language isolation or peer harassment are significant, exacerbating factors in a child's difficulties (Cline, 1995). This needs to be explored from the child's perspective too.

### **Normative approaches to assessment**

#### *Traditional methods of normative assessment*

The best established and most frequently used approach to the assessment of SEN and learning difficulties remains the normative approach (Desforges, 1995; Desforges et al, 1995; Pumfrey and Reason, 1991). This approach involves comparing an individual's performance with that of a large sample of children of the same age. Over many years critics have argued that this approach cannot be fairly be employed with children who are learning EAL because their prior experience is likely to be significantly different from that of the population on which the norms are based (Mercer, 1973, 1979; Chamberlain and Medeiros-Landurand, 1991).

Some defenders of psychometric tests have responded by examining the predictive validity of major normative tests such as IQ tests with different populations. In the United States they demonstrated that in large samples of children with a wide range of ability and achievement normative IQ scores predict achievement test scores as

accurately for ethnic minority groups as for children from the majority community with some tests (Reynolds and Kaiser, 1990), though not with all (Valencia and Rankin, 1988). Valdes and Figueroa (1994) have shown that these broad-based, positive correlations may conceal important individual anomalies. They posed the research question in the form - how likely is it that a "correct" or "incorrect" decision will be made about an individual on the basis of a score on this test? For a sample of Hispanic Americans followed over a ten year period they found that a more pessimistic view was justified particularly at the critical range below and up to an IQ of 85. "Together with all the other (evidence)... this empirical study supports one inescapable conclusion: Testing circumstantial bilingual individuals entails an inequitable and unknown degree of error." (Valdes and Figueroa, 1994, p. 171)

Similar notes of caution have been sounded by a number of UK commentators (Baker, 1996; Joyce, 1988; Gregory and Kelly, 1992). Some commentators have argued that norm-based instruments should be rejected altogether (e.g. Bryans, 1992). Others see new opportunities to develop local community norms through the use of computerised approaches to assessment (Beech and Singleton, 1997). The profiling of verbal and nonverbal abilities on norm-based tests is commended by some (Ofsted, 1999).

It is important to be clear about the limits of the argument. The evidence from Valdes and Figueroa relates to IQ scores and major placement decisions. It is possible for schools to employ standardised attainment tests to profile the educational achievements and needs of groups of children and use the results for planning purposes. HM Inspectorate evidence "suggests that it is in those schools with the best ethnic data that the performance of the minority ethnic pupils has improved most strongly". (Ofsted, 1999) This monitoring may focus on National Curriculum assessments rather than standardised tests, but the vital task of analysing the needs of new entrants at Year 7 is often hampered by logistical problems such as the late or non-transfer of National Curriculum assessment records as well as late admissions.

In this context materials such as the Cognitive Abilities Test (Thorndike et al, 1986) may assist teachers to plan the organisation of a cohort of pupils into groups or identify those students with unused potential by comparing ability with attainment. It is common for pupils learning EAL to obtain scores for nonverbal reasoning that are higher than their scores on L2 language and attainment tests (Valdes and Figueroa, 1994, Table 4.1). Analysing the profile of scores on this type of test battery can help to counter the low expectations that are sometimes held of children in the early stages of learning English. At the same time, while there is some support for a strategy of this kind (Ofsted, 1999), a note of caution is also required (Turner, 1994). If standardised tests are used for guiding even minor decisions about individuals learning EAL, particular care will always be needed. The appropriateness of the decision may be monitored by seeking confirmatory evidence from earlier school records, if available, or by reviewing any new arrangements or provision after an agreed fixed period on the basis of further teacher observation.

#### *The development and use of pluralistic or local norms*

If norm-based assessment is required and the available norms of a test are invalid for a particular group, one response might be to develop new norms that are appropriate



for that group. This approach was adopted on a large scale in California in the System of Multicultural Pluralistic Assessment (SOMPA) (Mercer, 1979). Separate norms were used according to the economic, cultural, social and linguistic characteristics of the child's family. This raised issues of principle for some commentators, and there were other problems which undermined the value of the instrument.

Firstly, the *content* of the tests that were used was not adapted, so that they did not sample those cognitive resources of the minority children that arise from their participation in a distinctive subculture (Figueroa and Sassenrath, 1989). Secondly, even in their own terms, Mercer and her colleagues failed to differentiate the population sufficiently precisely: the language background of the undifferentiated Hispanic American subsample included homes where only Spanish was spoken (32%), homes where English and Spanish were spoken (30%) and homes where only English was spoken (38%) (Valdes and Figueroa, 1994). This highlights what appears to be the major challenge for any attempt at local standardisation - to define the subpopulations for separate test norming in such a way that they both command consensual support in all the communities concerned and provide a simple and practicable framework during the development phase and when the test is being used in everyday practice.

Baker (1988) showed how this could be achieved on the basis of empirical investigation in the comparatively stable linguistic and social setting of Wales. Local norms of lasting value would be very much more difficult to establish for work with the rapidly changing linguistic minority communities in conurbations across the UK. This problem will not be overcome by the use of computerised testing, as advocated by Beech and Singleton (1997). An alternative, more modest strategy is for LEAs and schools to analyse their achievement data by ethnicity and language background on a routine basis and use group averages as a reference point (cf. Ofsted, 1999). This may be preferable to the development of local "norms", as there will be no temptation to give this data a status it does not deserve, as has often happened to normative data in the past.

### **Curriculum related assessment**

The most damaging criticism of normative instruments is not that their norms may be misapplied but that their results provide little in the way of diagnostic information to help plan teaching in the classroom (Cummins, 1984; Miller, 1984; Solity and Bull, 1987). Changes in the way SEN are conceived have led to changes in the purpose of SEN assessment. When SEN were thought of as a list of handicap categories, the purpose of assessment was accurate categorisation. Now that SEN are conceived as a mismatch between what a child needs and what the school normally provides, the purpose of SEN assessment is quite different - to identify changes that would enable the child to master more of the curriculum. This has led to an interest in curriculum related assessment (CRA) – a strategy that “directly assesses student performance within the course content for the purpose of determining that student’s instructional needs” (Tucker, 1985). It was seen particularly as an improvement on normative assessment for work with pupils learning EAL (Figueroa, 1983; Cummins, 1984; Frederickson, 1992).

However, Cummins also observed disadvantages in the use of the CRA techniques that were most popular at the time with EAL learners. Firstly, these techniques tended to present learning materials in a fragmented and decontextualised form - the opposite of what children learning EAL need. Secondly, they reinforced a transmission model of teaching which does not encourage teachers to draw upon children's previous knowledge and experience. A working group led by Frederickson and Cline (1990) adapted a framework that Cummins himself had developed in order to suggest an approach to CRA which would overcome some of these problems. Robson (1995), Hall (1995) and a number of authors in Cline and Frederickson (1996) reported on ways in which the approach had been implemented with bilingual pupils in practice. The application of the framework to a 1988 National Curriculum KS2 English target for reading may be studied in Frederickson and Cline (1990, pp. 33 – 35).

### **Dynamic assessment**

This approach to assessment grew out of a distinction made by Vygotsky (1978) between what he described as the Zone of Actual Development (ZAD) and the Zone of Potential Development (or Proximal or Next Development) (ZPD). The ZAD can be measured by traditional testing procedures, but the ZPD, the child's learning potential or learning ability, cannot. Suppose that the performance of two children on a "static" test is at the same level, equating to the performance of an average 8 year old. They are then retested with some adult help in the form of standard questions prompting them towards the correct solution of problems they could not solve before. One child now attains the score of an average 9 year old while the other reaches a level associated with 12 year olds. Vygotsky saw the difference between the ZAD (what children can achieve by themselves) and the level they can reach with adult help as an operational definition of the ZPD.

Proponents of dynamic approaches to assessment argue that traditional (static) tests establish current levels of performance but give little information about the processes that underlie that competence (Campione, 1989). They also ignore functions that have not yet matured but are in the process of maturing. They focus on the "fruits" of development rather than its "buds" and "flowers". They are retrospective rather than prospective. Observing emerging skills closely, it is claimed, will provide a better estimate of individuals' potential for proceeding beyond their present level of competence and will offer more useful guidance on the kind of teaching that will help them realise that potential.

Particular claims have been made for dynamic assessment in relation to children from ethnic and linguistic minorities. It was assumed that, because they have a different cultural or language background, they may have had limited opportunities to learn whatever is being tested in the context of the school. It was then argued that an assessment strategy based on static tests would show significant social and cultural bias. On the other hand, dynamic assessment which provides coaching or training for the assessment task would offer a counterbalance to inequalities in experience (Feuerstein, 1979; Sewell, 1987; Pena et al, 1992; Hamers et al, 1996). These claims have not gone unchallenged. Sometimes this approach results simply in a new form of abstract test like an IQ test designed to evaluate a single construct of "learning ability". This implies that individuals differ in learning ability along a single dimension irrespective of the domain to which attention is given (Hamers et al, 1991;

Hamers et al, 1993). Valdes and Figueroa (1994) argue that an approach of this kind is “particularly problematic” for children learning EAL because of the demand that is often made in such tests for decontextualised language (p.195).

Those criticisms would not apply to more “clinical” approaches to the assessment task in this paradigm in which the aim is to create optimal conditions for successful performance so that children show their full potential. In these approaches there is “an emphasis on evaluating the psychological processes involved in learning and change... The argument is that individuals with comparable scores on static tests may have taken different paths to those scores and that consideration of those differences can provide information of additional diagnostic value” (Brown et al, 1992, p. 140). A systematic analysis is made of the way in which the child responds to different forms of training, such as simple feedback, demonstration, or prompts or hints in the form of questions. In this version dynamic assessment becomes one of many ways of planning the assessment-teaching-assessment cycle, similar to proleptic teaching, reciprocal teaching and apprenticeship teaching (Daniels, 1992). There have been a small number of reports of the application of the dynamic approach specifically to the assessment of aspects of reading. Kletzien and Bednar (1990) presented a case study of an assessment that included a minilesson with a 10<sup>th</sup> grade student who had difficulties with reading comprehension. Carney et al (1992) described procedures that would be applicable across word recognition in isolation, word recognition in context and comprehension in oral and silent reading. Hamers et al (1995) developed a highly structured test of phonemic awareness on dynamic assessment principles. We did not identify any reports in this category which focused specifically on children learning EAL

## **7. Assessment of reading attainment, literacy learning and dyslexia**

### **Tests of reading, literacy and dyslexia**

There is no regular publication that provides an independent evaluation of the tests of reading and literacy currently available in the UK. In the 70's and 80's useful books for this purpose were published by Levy and Goldstein (1984), Vincent et al (1983), and Pumfrey (1976, 1985). More recently Pumfrey and Reason (1991) have offered evaluative comments on a short selection of tests and assessment techniques relevant to dyslexia and Turner (1997) and Reid (1997) have provided a fuller list of assessment materials for dyslexia with brief critical comments. Beech and Singleton (1997) have provided an extensive list of more detailed test reviews covering the general field of literacy assessment. (Cf. Turner, 1993a, b.) There is a further set of detailed reviews in the BPS working party report mentioned above. The authors aimed to evaluate a selection of commercially available tests designed to measure cognitive processes associated with dyslexia (BPS, 1999a).

None of these guides and commentaries has considered specifically questions that might arise when the tests they reviewed are used with children who are learning EAL. Where we were able to examine test manuals, they generally lacked such information too. Appendix 2 sets out basic information about each of the tests and batteries that we traced and, where available, provides references for published data and discussion on the use of the test with children learning EAL. (It should be noted that some test developers and test publishers produce a general statement on issues such as test bias and do not repeat it for each test in their catalogue.)

A wide range of materials has been published specifically to support the identification and assessment of dyslexia. The best-established published tests are included in Appendix 2 with reviewers' comments where available. In addition, it is worth reporting here two developments which have not yet reached the stage where validated materials can be published but which may offer promise for the future in relation to work with children learning EAL.

The first development concerns listening comprehension. Stanovich (1991) advocated the use of a measure of listening comprehension in place of IQ to support a discrepancy definition of dyslexia. There are technical problems in equating measures of listening comprehension and reading comprehension. For example, there is a greater memory load if the same language is presented orally in speech rather than visually in print (Aaron, 1991). In addition, it has been argued that such a measure is only appropriate for older pupils (Turner, 1997, pp. 32 – 34). However, progress has been made in piloting materials based on two related methods developed by Royer and his colleagues (Royer et al, 1986; Marchant et al, 1988). Bedford-Feuell et al (1995) developed a Sentence Verification Task for passages from a story reading test, and Fisher et al (1999) developed a slightly simpler Meaning Identification Scale for narrative texts used in previous years at Levels A and D of the Scottish 5 – 14 English language curriculum assessments. These techniques have some promise for work with children learning EAL precisely because they represent a very challenging test for them. When children learning EAL score markedly less well for reading

comprehension than for listening comprehension on matched passages, it seems unlikely that their reading difficulties arise solely from limited knowledge of L2.

The second development concerns the preparation of an International Dyslexia Test, a broad-based battery of tests with an established position in the dyslexia literature. The test has been translated into four languages, and further translations are planned. It has been used with Sylheti/English bilingual children in East London and shown to differentiate successful and unsuccessful readers on measures of phonological processing or awareness, working memory, sequencing and rapid naming (Adams et al, 1999). This is in line with findings outlined elsewhere in this review. The challenge of making the battery replicable across languages and cultures remains a formidable one (Smythe et al, 1999).

Literacy involves writing equally with reading. The emphasis in the learning difficulties literature is on the latter, particularly in relation to assessment. Yet writing difficulties are an important and persistent element in the experience of many people with dyslexia (Miles and Miles, 1990). However, Turner (1997, p. 208) stated emphatically that “no useful tests of writing under standard conditions exist”. Moseley (1997) offered a more positive evaluation, though acknowledging that most of the publications on the subject “lack a sound basis in empirical studies” (p. 205).<sup>10</sup> If the assessment of the development of writing skills relied solely on the existence of formal tests, this would be a serious deficiency. But that is not the case. The issue of how writing difficulties should be assessed raises the fundamental question of what contribution formal testing can make and what will be the role of classroom observation. In relation to writing the learning targets relating to the teaching objectives of the National Literacy Strategy (NLS) *Framework for teaching* are more balanced (QCA, 1999). These targets will be modified for individual children as needed. It seems likely that this approach will have an influence over time in increasing the attention paid to the assessment and teaching of writing for children who have particularly difficulties with aspects of writing technique (Alston, 1998).

With the introduction of the NLS target setting now provides the context for planning teaching and evaluating progress for all pupils. The general targets that are set for a class will need to be adjusted for some children with learning difficulties in literacy, and provision is made for this in the QCA Guidance. In the more severe cases where there is an Individual Education Plan (IEP), it will be important that the IEP targets link with those set for a child’s class as a whole. Smith (1998) hinted at a possible implication of all this for the future use of published tests. She suggested that, when designing IEP targets and monitoring progress towards them, teachers should “use the phonic order and the lists of core keywords rather than those from other sources” (p. 23). She pointed out that, because the NLS sets out short-term targets for all pupils, these could link relatively easily with IEPs for children with learning difficulties. It may be predicted that, if the Framework proves tight enough to facilitate the analysis of small steps of progress for children with SpLD, the use of some of the tests in Appendix 2 for that purpose will decline. As the next section will show, that will be a welcome development for some commentators.

---

<sup>10</sup> In work on spelling Brooks and Weeks (1998) showed how a precision teaching framework can be used to monitor detailed progress on a daily basis for pupils with dyslexic features. This strategy can be used for supporting and monitoring short periods of intensive teaching of specific writing skills with pupils with severe difficulties.

## **Classroom-based observation and assessment**

### *Pupil profiling systems*

Test results have been accorded high status in the past. Eventually there was a strong reaction internationally against traditional approaches in favour of forms of assessment that aspired to be authentic, continuous, multifaceted, multidimensional and collaborative (Valencia, 1990) and to support good practice with children learning EAL (Lewis-White, 1998). The implementation has not always matched up to the rhetoric (Gomez et al, 1991; Darling-Hammond, 1994), and much of the discussion has been muddled in its use of terms (Gipps, 1994). In the UK there has been less debate than in the USA on “authentic assessment” and more attention to pupil profiling systems (Shorrocks et al, 1991; James and Connor, 1993; Sheil and Forde, 1995). A profiling system normally comprises three elements:

### *Indicators*

Statements describing pupils’ achievements that are normally linked to the objectives of the curriculum.

### *Levels/bands*

Indicators are grouped together within what is thought to be the same broad developmental level or band of achievement. A pupil’s performance is rated as a whole across indicators so that a summary statement can be made about the level reached.

### *Assessment tasks and contexts*

Special assessment tasks may be set for the purpose or the assessment may be based on portfolios of pupils’ work or notes of observations made by teachers during everyday classroom activities.

For children learning EAL a system of this kind may have some benefits, quite apart from any advantages that apply to all pupils. The key factor is that in these schemes performance is rated over time so that any underperformance because of problems with the language or content of a particular text will be compensated for on another occasion if the foundation of competence in literacy is really established at the appropriate level. An ILEA study cited by Hester et al (1988) found that teacher ratings on a Reading Scale of this kind associated with the Primary Learning Record were less affected by the fluency in English of children learning EAL than were scores on the London Reading Test given at around the same time.

The focus of this review is on evaluating the progress of individual children with learning difficulties. For this purpose pupil profiling systems offer a framework within which an individual’s level of achievement can be compared with that of others, if that is what is required. Where the profiles are cumulative, they also allow the rate of progress to be evaluated (Sheil and Forde, 1995). In the case of a child learning EAL it might be expected that literacy progress, particularly reading comprehension, would speed up as oral language proficiency improved and L2

vocabulary increased.<sup>11</sup> The main difficulty with adapting most profiling systems for this purpose is that the categories that are employed are geared to what is required to monitor most children's progress, so that they prove to be too broad when used with a child with learning difficulties. The Literacy Hour and the NLS guidance for target setting provide a context within which close observation of selected children's individual progress will be possible, especially where there is additional SEN or EAL support in the classroom. The initial development work and guidance has necessarily focused on the needs of the majority of pupils. It would be timely now for a development project to be initiated with the aim of identifying and disseminating good practice in observing and responding to the difficulties of individual children with EAL and SEN in the context of the Literacy Hour.

### *Reading Recovery*

The Reading Recovery scheme, which originated in New Zealand, provides one-to-one support to selected six year olds who have shown difficulty in the early stages of learning to read. It has been introduced into a number of education systems with diverse school populations (Clay, 1991; Lyons et al, 1993). In general, the results achieved through the scheme have been impressive. For example, Clay (1990) reported on results in ten Education Board areas in New Zealand over the period 1984-88. Reading Recovery was offered to the lowest 20% of the age cohort through an intensive 12 - 20 week programme. Between the ordinary school programme and this intervention, she claimed, 99% of children aged 6 – 7 years were “reading and writing in relatively independent ways” with the rest identified for specialist attention and special help at the end of the programme. When evaluated in the UK, the scheme also had a strong record of success, notably with children receiving free school meals and those who had minimal reading skills at the outset. In a five year follow up these two groups had a six month advantage in reading age over controls (Hurry and Sylva, 1998). Although there have also been critics of the scheme (e.g. Grossen et al, 1999; Chapman et al, In press), the balance of comments has been positive (Ofsted, 1993; Gardner et al, 1996). When the Literacy Task Force set out their proposals for the National Literacy Strategy, they referred to this record of success and suggested that within the overall strategy Reading Recovery (with some modifications) might play a vital part. This would be to address “the specific reading difficulties of those who, in spite of being taught well, fall behind” (Literacy Task Force, 1997, para. 76).

In the context of this review it is relevant to note that the scheme has worked well in its original form in more than one setting with pupils learning EAL who had learning difficulties in literacy (Clay and Watson, 1982; Ballantyne, 1991). Hobsbaum (1997) reported on progress made by an English sample of just over 3000 children during 1993/94. Approximately one fifth of the children were learning EAL. Overall their outcomes did not differ, on average, from those of the monolingual pupils in the sample, although their performance on entry to the programme was significantly lower (Hobsbaum, 1997, Tables 12 – 13). As in the case of the National Literacy Project (see p. 28 above), fluency in English was a significant factor in outcome: “younger and less fluent bilingual children... have difficulties with the programme”. Hobsbaum interpreted this finding as a challenge “to find ways to match the early texts we offer them to their style and level of English” (p. 146).

<sup>11</sup> If that does not happen, it becomes more likely that the original obstacle to reading progress arose from learning difficulties relating to literacy and not simply a lack of knowledge of L2.

Gentile (1997) has examined ways to give particular attention to oral language development in the context of a Reading Recovery lesson for a pupil learning EAL. Thus there is some evidence that, for pupils learning EAL as well as for others, the scheme could fulfil the clearly delineated role that the Literacy Task Force envisaged for it (though the possible impact of the modifications envisaged by the Task Force has not been evaluated<sup>12</sup>). It would be important that the scheme was modified in multilingual schools to lay an even greater emphasis on the close observation of oral language use and the linking of reading comprehension to oral language development. There would then be a greater likelihood that, in those schools which also had strong EAL support arrangements, children learning EAL who have severe specific learning difficulties or dyslexia would be identified with greater confidence and accuracy. Clay has claimed that, where children fail to catch up with their peers during the intervention, the programme “does not harm the child... The time in Reading Recovery is long enough for a fair trial and a reliable assessment and makes clear that a longer period of help is required from teachers with more specialised training. Without loading specialist services with massive testing and impossible discrimination decisions, an education system could plan effective programming for such different groups of children after one year of school.” (Clay, 1991, p. 59)

### **Assessment of the cognitive processes that underpin literacy**

The previous sections of this part of the review have reported on the direct assessment of reading and literacy. In this section we will consider the assessment of the mental processes that underpin those skills. The challenge may be crudely divided into two parts – firstly, the assessment of children’s attitudes to and motivation for the L2 reading task and the learning styles they adopt in tackling it, and secondly the assessment of their capacity for the cognitive processing that underpins reading and writing, e.g. skills such as those listed on p. 12 above.

#### *Learning style*

Children’s perceptions of the process of literacy learning are affected by the expectations that they encounter from adults in different settings. If their approach to learning in general (their “cognitive style”) has been nurtured in a sociocultural context that is quite different from that of the school, they may find it difficult to understand what is expected of them at school and difficult to match the teachers’ expectations even when they do understand them. In North America these issues have been studied in different minority groups in terms of:

- use of holistic (vs. analytic) thinking processes by Native American children (Tharp, 1989);

---

<sup>12</sup> A key feature of the scheme is that each child is seen as an individual, teachers are trained to observe their reading behaviour closely and adapt to the child’s strengths in learning without wasting time. Extensive training has generally been a requirement when the scheme is introduced in new areas. The Literacy Task Force (1997) highlighted the cost of the scheme and expressed the hope that it could be made more cost-effective by, for example, “more systematic use of the staff and volunteers already working in many primary schools” (para 76).



- an emphasis on modelling and observational learning (vs. dependence on verbal instructions) in the work of an Inuit teacher with children from his own cultural group (Lipka, 1991);
- the involvement of different sensory modalities in work with African-American children (Allen and Boykin, 1991).

In the UK there has been less work designed to help teachers to adapt their teaching methods to the known learning styles of groups of minority children with whom they are working. Where this approach is based on the attribution of a particular learning disposition to all members of a group (e.g. Banks, 1981), critics have argued that “in seeking to generalise about the characteristics of ethnic minorities... this recommendation risks the substitution of new stereotypes for old” (Phillips, 1989, p. 111).

Most research studies of the impact of cognitive style on literacy learning focus on a single dimension. Two lines of enquiry have generated a significant volume of findings about pupils learning to read. The first involves differentiating children with an internal or external locus of control, e.g. distinguishing between those who attribute their successes to their own efforts and those who think that any success they may have is because of luck. (Pumfrey (1997a) and Crozier (1997) offer concise introductions to this work.) The second line of enquiry concerns the dimension of field dependence/independence (Witkin et al, 1977). People with an articulated field style (i.e. those who are field independent) will, according to Witkin, be more skilled than others at analysing and separating out a hidden perceptual object from its background. This is associated, it is claimed, with being more autonomous and less dependent on other people in social relations (Witkin, 1978), with relative success in learning a second language (Griffiths and Sheen, 1992) and with good progress in the early stages of learning to read (Davis, 1987; Davey and Menke, 1989).

The concept of field dependence/independence has been damagingly criticised in recent years because different instruments designed to measure it are not strongly correlated (Arthur and Day, 1991) and because it appears to function as a proxy dimension of perceptual ability rather than a learning style as originally conceived (Crozier, 1997). There was initially a great deal of interest in the concept in education (e.g. Cosan and Beaulieu, 1984), but a more recent review suggests that little evidence has accumulated to support the claim that matching teaching methods to learning style on this dimension will lead to improved results (McKenna, 1990).

A recent development of the concept by Riding appears to offer greater promise (Riding and Cheema, 1991; Riding and Pearson, 1994; Riding and Read, 1996). Learning style patterns within this paradigm have been compared across countries in samples of children with dyslexia (Gyamarthy et al, 1999), but we have not traced any published reports that investigate the relationship between these dimensions and progress in literacy learning among children learning EAL in the UK. It appears that, although there has been a significant body of work on the role of learning styles and personality dispositions in learning difficulties of *adult* learners of an additional language (Ehrman, 1996), there is relatively little work on the impact of these factors on children’s learning difficulties in L2 literacy.

In addition to those instruments which were derived from specific theoretical accounts, there are broader, empirically based approaches to evaluating a child's learning style in school. Reid (1997) included a list of features of learning style in his assessment framework for dyslexia. Stott (1978) developed a 15-item rating scale for observing learning behaviour and identifying "poor learning habits". Green (1985) and Green and Francis (1988) reported favourably on the reliability and predictive validity of the schedule. In a study in the West Midlands Philips (1989) showed that its results predicted future attainments in reading, spelling and number equally well for Asian and white pupils. With the introduction of the National Literacy Strategy there may be a place for a schedule of this type to support the recording of systematic observations of the learning behaviour of children at risk and children with learning difficulties during the different activities associated with the well-defined routines of the Literacy Hour. An adaptation of such a schedule could be made for children learning EAL. It is suggested that work relating to the assessment of learning style could be an option within the brief for the Literacy Hour development project referred to above.

### *Measuring attitudes to reading*

Finding out how children perceive the reading task and how they evaluate their own progress in both language proficiency and academic achievement is important in any assessment. The assessment should represent "a vigorously active search for the child's best possible performance in relation to a particular learning objective and... therefore start from questions of what motivates a given individual to give her best.." (Pema and Pattinson, 1991, p. 41) When working with children learning EAL this is crucial as there is more likely to be an initial mismatch between their perceptions and those of their teachers (Gregory, 1994). The task is particularly challenging, because "far more effort has been put into the measurement of cognitive aspects of the reading process than has been spent on the measurement of attitudes towards reading". (Pumfrey, 1986) The same is true in relation to dyslexia (Turner, 1997). Yet it is widely recognised that attitude and motivation have a major role in affecting children's progress.

The relationship between attitude and attainment is not a simple one: "there are examples where pupils' attitudes to reading and their reading attainments are not positively correlated." (Pumfrey, 1997, p. 162. Cf. Davies and Brember, 1995.) But, in general, the basic conditions for successful reading include "motivation to read, attitude toward reading and content, and sociocultural values and beliefs (Ruddell and Unrau, 1994, p. 1001 cited Pumfrey, 1997). It may be that there are two kinds of threshold effect operating. Firstly, children whose attitudes or motivation are below some threshold level are prevented from engaging with the intellectual challenges of literacy learning and make poor progress. But increases in enthusiasm and commitment above that level do not automatically lead to improvements in attainment. Secondly, once children have attained a threshold level of basic competence in reading and writing, they will not lose those skills, even if there is a loss of interest and reduced motivation as they move through school (McKenna et al, 1995; Davies and Brember, 1995).

Pumfrey (1997) has provided a short introduction to the range of techniques that are available for assessing attitudes to reading. Among others he lists:

- A. Observational approaches
  - B. Direct observation by an adult of pupil behaviours in relation to reading materials whether in educational settings or elsewhere
  - C. Checklists of reading-related behaviours from which the pupil's attitudes towards reading can be inferred
- D. Self-report techniques
  - E. Scaling of various types, e.g. paired comparisons
  - F. Projective techniques
  - G. Semantic differential techniques
  - H. Repertory grid techniques

An important factor that requires specific attention is pupil's self-assessments of their academic attainments. Blatchford (1997) has shown ethnic differences on this measure in a longitudinal study of white and Afro-Caribbean children in a sample of London schools. We have not traced any survey reports on attitudes to L2 reading among children learning EAL in the UK, though there have been some illuminating individual case studies (e.g. Gregory, 1990; Peer, 1996).

#### *Assessment of cognitive-linguistic subskills*

Theoretical accounts of learning difficulties in literacy have highlighted a range of cognitive processes that are seen as essential to the successful development of fluent reading and accurate spelling. Recent examples include:

- processing sounds in the spoken language quickly and accurately (Snowling, 1995; Stanovich, 1998)
- automatising reading-related processes so that they can be performed without conscious attention (Nicolson and Fawcett, 1990)
- retaining digits, words or non-words in verbal memory after brief exposure (Wagner and Torgeson, 1987; Gathercole and Baddeley, 1993)
- transporting information efficiently through the transient visual system connecting the retina to the primary visual cortex

Researchers who have shown that such factors play a role in learning difficulties have frequently gone on to develop the measures employed in their initial studies as psychometrically sound tests for use by practitioners. In some cases the incidence or importance of the factor has been exaggerated. For example, in recent years it has increasingly been accepted that visual problems play a limited role in dyslexia compared to phonological problems, but this conclusion has been vigorously contested by some of those working on the assessment and treatment of visual problems (Evans, 1997; BPSa, 1999).

Some published assessment batteries investigate a range of cognitive processes, while other tests focus on a single dimension. Published instruments that have commonly featured in the recent UK literature are listed in Appendix 2. A sample of the cognitive processes covered by those tests is listed below:

<p>Auditory and verbal skills:</p> <p>Auditory discrimination Auditory/verbal associative memory Naming speed</p>	<p>CoPS CoPS DST/DEST</p>
<p>Phonological awareness/skills</p> <p>Speech rate Verbal/semantic fluency Working memory</p>	<p>DST/DEST CoPS Phonological Abilities Test PhAB TOPA Phonological Abilities Test DST Nonword Rec.</p>
<p>Cross-modal:</p> <p>Visual/verbal sequential memory</p>	<p>CoPS</p>
<p>Visual and motor skills:</p> <p>Balance Bead threading Shape copying Visual sequential memory</p>	<p>DST/DEST DST/DEST DEST CoPS</p>

In recent years researchers have begun to investigate the applicability of such tests to children learning EAL. It has become clear that a child's language background and cultural experience have to be taken into account very carefully when interpreting the results. This will be illustrated with reference to two test batteries that have been published recently in the UK.

Fawcett and Nicolson (1999) described a computer-based intervention carried out with two children, GA and SA who both originally came to this country from Somalia, as well as six others who were monolingual and born here. The children were screened for the study using the Dyslexia Screening Test (Fawcett and Nicolson, 1996). All the tests in this battery are timed in order to highlight the deficits in automaticity which the authors sought to identify. At the screening stage GA and SA scored relatively well on the nonverbal tasks that make up part of the battery but less well on some other components. How should this be interpreted? Slow responses might be attributed to a failure to automatise basic processes, but they might equally be a result of slow verbal processing because of limited language experience in L2.

Frederickson and Frith (1998) studied the performance on reading tests and the Phonological Assessment Battery (PhAB) of 50 children aged 10 – 12 years whose first language was Sylheti and who had been educated in English since the age of five. They were compared with children assessed as having specific learning difficulties and controls matched for age and IQ. The children with SpLD showed considerable degrees of phonological impairment compared to the controls, but the

bilingual children did not, although their performance on the reading tests was inferior. “The results... suggest that the phonological skills assessed by PhAB are similarly developed in bilingual children whose exposure to English has been sufficient to develop surface competencies, as in monolingual English speaking children. The relationship between phonological skills and reading accuracy likewise appeared to be similar in these two groups.” They concluded that, when working with children learning EAL, phonological dyslexia may be identified by means of phonological tests in L2 at an earlier stage than had previously been assumed. However, while there were similarities between the bilingual and monolingual children in that respect, the tests appeared to function quite differently when reading comprehension was taken into account. The children learning EAL performed less well in reading comprehension than in reading accuracy, while the reverse was true for the children with SpLD. This was presumably because those with SpLD were able to use their semantic knowledge to compensate for their poor decoding skills, while those learning EAL were able to develop good decoding skills even when they did not understand what they were reading. A simple guideline for interpreting the significance of scores on such batteries would be impossible. The specific experience and language proficiency of each individual L2 learner would need to be considered in order to draw safe conclusions from the results.

## **8. Guidance to schools and teachers from local education authorities**

There is considerable potential frustration for teachers in working with a child learning EAL who appears to be a fluent speaker in social situations yet fails to progress in key aspects of the curriculum such as reading. This frustration is increased when the teacher cannot identify the reasons for the child's difficulties (Landon, 1997). A recent local survey in a county LEA indicated that special needs coordinators in primary schools generally believed themselves ill-prepared for the assessment of dyslexia or specific learning difficulties in children learning EAL. All 39 respondents stated that they would find an "assessment checklist" helpful as a guide for this task (Veasey, 1999). It was partly an awareness that similar uncertainties had been expressed by other teachers in various settings that led to the commissioning of this review. As noted above, there is evidence that even the most fundamental of the principles of good practice set out in section 4 are often ignored (Cummins, 1984; Cline, 1991; Curnyn et al, 1991; Desforjes et al, 1995). Official guidance in this field is often dismissed on both sides of the Atlantic as "too general and non-prescriptive to be useful to practitioners" (Lam, 1993, p. 180) or needing "to be much more specific and detailed" if it is to "foster good practice in a difficult area" (Cline and Frederickson, 1999).

What guidance is offered to schools and teachers by local education authorities? We carried out a survey of the authorities with the largest linguistic minority populations to find out. 25 replies were received in time for analysis. Of these one presented a distinctive approach, three were in the process of developing guidelines, and eight submitted papers that were not really guidelines and did not come within the scope of the survey. 15 respondents enclosed booklets that were designed for teachers in primary and secondary schools. These booklets varied greatly in length (11 - 67 pages) and in target readership (teachers/schools in general or specific specialist groups such as SENCO's or language support teachers). In general, they covered the whole range of SEN and were not concerned solely with SpLD or dyslexia. Table 8.1 summarises the coverage these booklets offered.

The status of the documents we examined varied a great deal. Some were "official" communications from a senior LEA officer or were produced by a specialist team within the LEA with a foreword or introduction by a senior officer. There were sometimes professionally designed and printed, conveying the impression of authoritative advice and LEA commitment. In a minority of cases a section on bilingual children and SEN was included in general guidance on all aspects of work with children learning EAL. A few of the documents that were received were produced by a small group or an individual within a specialist service and were copied cheaply and given a limited circulation. In some cases guidance had been prepared to be ready "to be given to professionals as the need arises". This was more likely in shire authorities where there were many isolated bilingual families scattered thinly across a large area.

Within our small sample there was no relationship between the size of the population of children learning EAL in an authority and the nature of the documentation produced for teachers on this subject: authorities with a relatively small EAL population sometimes produced ambitious guidance, while there were authorities with

a much larger apparent need which submitted very limited documentation. We were aware that our survey happened to coincide with a period when Section 11 services were being reorganised. It may be that returns were adversely affected by this factor.

Where the guidance had a section on general principles, it usually referred to relevant parts of the Education Act 1993 and/or the 1994 Code of Practice, including:

*A child must not be regarded as having a learning difficulty because the language or form of language of the home is different from the language in which he or she will be taught. (Education Act 1993, Section 156)*

Commonly caution was expressed about the risk of identifying pupils as having SEN when the underlying problem was simply one of language difference. But, beyond that, the emphasis varied markedly between documents. In the first of the extracts below the ultimate aim appears to be to identify a small group of children who have severe difficulties; in the second the focus is entirely on improving the learning environment for all pupils:

*Minority ethnic pupils bring a rich variety of linguistic and cultural experiences into schools. Where expectations are high and the school ethos and curriculum are responsive to this diversity of abilities and cultural experiences, then the learning of all pupils will be supported and most will make appropriate progress. A small number of pupils however may continue to experience difficulties accessing the curriculum. In the case of an emergent bilingual pupil this will be a temporary difficulty while the pupil attains functional competence in English. For other minority ethnic pupils modifications to the curriculum, individual pastoral support or the wider school context may reduce the difficulty. Some of these pupils will however have special educational needs arising from longer term difficulties. It is important that assessment distinguishes between these types of need.*

(Hertfordshire Education Dept., 1997)

*The notion that it is possible to differentiate between pupils who do and those who do not “have” learning difficulties downplays the impact of context and tends to equate learning difficulties with inherent intellectual limitations. In fact this within-child view of learning difficulties has been rejected by many educators in favour of a more interactive multidimensional view: that learning difficulties arise through the complex interaction of a multitude of factors associated not only with the pupils themselves but with the immediate and wider learning environment. This is of particular significance for bilingual learners whose progress is seen as causing concern. It is important to be aware of the assumptions that we are making. We need to consider carefully the context in which these pupils are operating and the different perspectives they bring to the learning situation. If we take an interactive view, the main task for teachers is to understand the interplay of the different factors. We can then explore how best to revise and reshape features of the learning environment in order to facilitate more successful learning.*

LCAS, 1999

Most of the documents place the guidance in the context of the authority's general policies on entitlement, race equality and/or cultural diversity. Typically the analysis refers to the importance of respecting and celebrating children's home culture and language and (in a smaller number of booklets) to the need for *a safe, supportive school environment which does not tolerate racism*.

The booklets often included advice/guidance designed to enhance the education of pupils learning EAL generally. This tended to cover issues relating to whole school/curriculum organisation but (perhaps surprisingly) did not often include discussion of work with parents or home activities on the one hand or classroom activities and strategies to support differentiation on the other. Most documents emphasised a commitment to inclusive education wherever possible but relatively few built into this guidance detailed or specific advice on how the early stages of assessment within the Code of Practice might be followed through to maximum effect. A document which clearly aimed to offer such advice was structured around the sequence of stages of assessment within the Code. At Stage 2 advice was organised under these headings:

- Complete the Stage 1 checklist*
- Register the pupil at Stage 2*
- Observe the pupil in various settings*
- Draw up an individual education plan*
- Agree strategies for differentiation*
- Ensure that the pupil's parents are informed*
- Monitor the pupil's progress*
- Review the pupil's progress*
- Consult the problem solving model and inform the head teacher*

Task 6 on agreeing strategies for differentiation is covered in five pages of detailed notes. Under the heading of "Writing" one section reads:

<b><i>Concern - writing</i></b>	<b><i>Comments</i></b>
The child is slow to produce written work, which is often short with dull, 'safe' words being used. It may also be muddled or unstructured. Spelling is often difficult to decode with the same word having several different incorrect spellings. The child may reverse letters or words when reading or writing (e.g. was for saw) or may have the correct letters arranged in the wrong sequence (e.g. brid for bird, gril for girl).	
The quality of written work may not reflect verbal skills	
Opportunities to verbalise before writing	
Modelled tasks (by peer or adult)	
Differentiated tasks	
Pictorial recording	
Oral recording on tape	
Access to a computer/word processor (with use of spellcheck)	
Shared writing with an adult/peer to scribe	
A bank of topic/personal/high usage words	
Ensure the child written work by:	



<p>reading aloud for the sense, including punctuation;  reading aloud to listen for errors in grammar and sequencing;  reading a third time, silently, looking for spelling errors and correcting them with use of a dictionary.  The child can work on above with peer/adult support if appropriate.</p>	
---	--

(Hillingdon, 1998)

In most cases the guidance followed the stages/structure of the SEN Code of Practice, but, as has happened in discussions of the Code generally, most attention was given to the later stages and to procedures for involving external specialists. The coverage reflects themes from the literature reviewed earlier in this report. For example, four booklets commend to schools the hypothesis testing framework for investigating children's needs. The authors of one booklet suggest that the 1994 Code did not pay sufficient attention to an interactive understanding of children's difficulties and uses a simple, challenging question as its reference point:

*How can we be sure that we have carried out an adequate analysis of all factors at play before making judgements about pupils' achievements and learning needs?*

LCAS, 1999

Table 8.1 Topics covered in 15 LEA publications for teachers and schools

<b>General information on the document</b>	
Purpose: Distinguishing between EAL and SEN pupils	9
Addressing the needs of bilingual pupils	4
Has a section on general principles	10
Places guidance in the context of language research	8
Places the guidance in the context of general policies on entitlement, race equality and/or cultural diversity	11

<b>Advice/guidance designed to enhance the education of pupils learning EAL generally</b>	
Suggestions for classroom activities/strategies to support children learning EAL	6
Suggestions for classroom activities/strategies to support differentiation	3
Suggestions for home activities/strategies to support children learning EAL	3
Commentary on relevant aspects/issues in whole school/curriculum organisation	9
Includes section on the education/assessment of refugee children	5

<b>Advice/guidance on assessment</b>	
Lists basic family details to collect	10
Lists language background details to collect	14
Gives detailed recommendations about a staged or other method of recording language proficiency in L1	5
Gives detailed recommendations about a staged or other method of recording language proficiency in L2	7
Highlights structural aspects of example language(s) with/without typical errors	1
Suggests that data is provided on earlier involvement of Language Support Service (or equivalent)	0
Suggests aspects of child's performance/behaviour in school on which information should be collected	14

Sets out an action plan or flow diagram for the procedure for assessment	14
Follows stages/structure of the SEN Code of Practice	11
Proposes a hypothesis-testing structure for investigating children's needs (with hypotheses that relate to the EAL issue)	4
Provides guidance on whether to proceed with EAL and/or SEN assessment where these are treated as separate	9
Suggests school ethos/provision/curriculum that should be considered	11
Emphasises/clarifies duty to involve parents in identification and assessment	7
Refers to need to appoint a Named Person in the case of formal SEN assessment	10
Provides guidance on arranging interpreters	7
Provides guidance on working with interpreters	3
Comments on the pros and cons of different approaches to assessment	1
Recommends the monitoring/auditing of referrals (by ethnicity, etc)	2

<b>Information listed</b>	
Lists definitions of key terms	1
Lists useful contact addresses in the area (relating to minority communities)	7
Lists useful contact addresses in the area (relating to SEN)	3
Lists other relevant local and/or national documents	4
Lists languages spoken in the area (with/without a brief commentary)	4
Lists suggested further reading	8

## 9. Summary and conclusions

The key findings of this review are:

### *The scope of the literature*

- There is an extensive literature on the assessment of SEN and of reading difficulties and dyslexia which very rarely refers to children learning EAL, and there is an extensive literature on learning to read EAL which very rarely refers to learning difficulties. The literature on learning difficulties in second language literacy is very limited in quantity, reports little empirical research and focuses on basic reading skills to the exclusion of other aspects of literacy.

### *Literacy learning and teaching*

- Internationally research has shown that most children learning to read in a second language show relatively little difficulty in developing skills in sounding words out and reading them out loud. The failure to do so after normal teaching is exceptional and, in a child learning EAL, may indicate literacy learning difficulties that are not just a result of speaking a different language in the past or at home.
- The texts employed in schools present children learning EAL with a greater challenge in terms of vocabulary, syntactical knowledge and cultural reference than is experienced by monolingual learners. Thus their accuracy in reading aloud at the word level is very often superior to their ability to understand what they are reading, and their relative deficit compared to L1 readers is very often greater in comprehension than in accuracy
- Evaluation studies of results from general literacy initiatives such as the National Literacy Project and initiatives focused on children with learning difficulties such as the Reading Recovery programme have consistently shown benefits for children learning EAL in general. These benefits have been most limited for children at the early stages of learning English.

### *The identification and assessment of learning difficulties*

- The available evidence is patchy, but local and regional surveys have indicated that children learning EAL are underrepresented among SEN statemented children receiving specialist support for pupils with specific learning difficulties. For example, studies in two cities showed that children in some groups were four times less likely to receive such help than might of been expected on the basis of their numbers in the school population.
- For two reasons the early identification of learning difficulties in literacy carries additional risks with readers learning EAL. Firstly, there is a greater likelihood than with other children that there will be errors in identification. Secondly, the action of labelling them as slow learners carries a particular risk of becoming a self-fulfilling prophecy.

- Important background information is frequently omitted in assessment reports on children learning EAL who have learning difficulties. For example, three studies of SEN (Curnyn et al, 1991; Cline, 1991; Desforges et al, 1995), found no reference to a child's first language in one fifth to one third of cases where children were learning EAL.
- There is no simple and universal answer to the question of whether the abilities of children learning EAL should be assessed in L1 or L2. The use of L1 will only advantage children if they have regularly used it for learning in the past in the subject area covered by the assessment.
- The development of a single special test will not constitute an adequate response to the challenges of assessment in this field. There is more support in the literature for a multifaceted strategy for assessment and consultation which draws on multiple sources of evidence.
- When different strategies of assessment are evaluated for their efficacy in use with children learning EAL, the approach that is usually least favourably reviewed is the one that appears to be most commonly used - normative assessment. Reviewers have consistently judged other approaches to assessment to show greater promise in this context.

### **Methods used in the review**

The review looks at work published during the period 1987-99, referring to earlier work where necessary as background to recent developments. There is an extensive literature on the assessment of SEN and of reading difficulties and dyslexia which very rarely refers to children learning EAL and an extensive literature on learning to read in L2 which very rarely refers to learning difficulties. Our first aim in the review was to identify published work in English which spans these areas. Reference is made in the review to 102 journal articles and other publications on SEN and learning difficulties in pupils from ethnic and linguistic minority communities, of which only 29 concern the identification and assessment of reading difficulties and dyslexia. More selectively, we also aimed to identify material on the separate areas of SEN, assessment and literacy development which could contribute to illuminating the issues set out above. 264 published works are cited in that category.

In addition to empirical research, the review also covered development work by teachers, psychologists and speech and language therapists and to policy statements and guidance from government agencies and local authorities. A postal survey of education authorities in selected conurbations with large linguistic minority communities was carried out to identify local reports and notes of guidance that are not published in a nationally accessible form.

### **Main Findings**

The title of this project refers to learning difficulties in *literacy*, but the focus of the report is largely on *reading*. This is because the relevant literature on learning difficulties mainly concentrates on the narrower range of abilities and activities

involved in the reading task. The writing process has received less attention from those concerned with the identification of learning difficulties.

The main findings of the review are presented in the form of answers to questions that are commonly asked about work with children learning EAL who are thought to have learning difficulties in reading.

*a) Do children learning to read in EAL experience difficulties that are different from those with which teachers are familiar in monolingual children?*

The literature suggests that, when analysing the reading difficulties of children learning EAL, a crucial distinction has to be kept in mind. On the one hand, there is likely to be a substantial number of children learning EAL who experience reading difficulties in the early stages because of linguistic and cultural obstacles which they are not always given sufficient help to negotiate. On the other hand, there is a much smaller number who will experience severe and continuing difficulties at the word level that may go undiagnosed.

*b) Do children learning EAL with learning difficulties in literacy have access to the specialist support that they need?*

There is no regular monitoring at national level of the allocation of SEN support to children learning EAL, and the available data is patchy. However, local surveys have indicated that children learning EAL are underrepresented in LEA lists of those receiving specialist support for pupils with specific learning difficulties. For example, in one urban study 5% of the total school population was learning EAL but this group comprised only 1% of the roll of SpLD provision. The numbers are small in each individual survey, but the picture is consistent across areas.

Studies of the impact of initiatives such as the National Literacy Project (directed at all pupils) and the Reading Recovery programme (directed at pupils at risk) have shown a positive outcome for pupils learning EAL in general. But there is evidence that the benefits from such initiatives are significantly reduced in the case of children at the early stages of learning English.

*c) Should literacy learning difficulties be identified as early as possible with children learning EAL?*

According to conventional wisdom, learning difficulties should be identified at the earliest possible stage. However, there are grounds for concern that, in the case of children learning EAL, the likelihood of inaccurate identification is higher than with other children and the action of labelling them as slow learners will carry a particular risk of becoming a self-fulfilling prophecy. There is a balance to be struck between the advantages of early identification and the need to take every possible step to prevent the development of inappropriate low expectations of pupils learning EAL.

There are some problems when current Baseline Assessment schemes are employed to identify learning difficulties among children learning EAL. Although some authors are seeking to produce improved instruments, there are good reasons to believe that it is going to be extremely difficult to achieve reliable and valid prediction from

baseline assessment, except in extreme cases. This is partly because many members of this population show rapid learning after school entry. Claims from authors and publishers that Baseline Assessment schemes can deliver valid and reliable screening of learning difficulties with multilingual populations should be treated with scepticism.

It has been suggested that, instead of concentrating on identifying within-child learning problems, we should think of "teachers and carers as *noticing* children's individual needs and then *adjusting* their responses accordingly" (BPS, 1998). The advantage of this approach is that it seems likely to retain the advantages of early "identification" while reducing its risks. The literacy skills of children who are perceived to be making limited progress can be closely monitored both in the Literacy Hour and across the curriculum. When combined with careful profiling and systematic recording, this can lead to appropriate further action, if necessary, within the framework of the SEN Code of Practice.

*d) What role should specialist EAL teachers, bilingual support staff and interpreters play in the identification and assessment of learning difficulties, and what training do they and others need?*

While most commentators agree that this group of staff has an important role to play in collaboration with others, conflicting opinions are expressed on what that role should be and how it would best be exercised. It appears that the views of bilingual staff themselves have not been surveyed.

Both the staff themselves and outside observers have commented on a general lack of confidence and expertise in this field. No published UK surveys or reports were traced that related specifically to the identification of training needs in EAL and SEN.

*e) Should a special test be developed to overcome the problems of assessment in this field such as cultural bias?*

An analysis of the literature strongly suggests that a single test could not deal with the challenges posed by this task. Both because individual tests and observations tend to be less reliable with this population and because the performance of children learning EAL is exceptionally variable across settings, it is important to look for multiple sources of evidence wherever possible and sample children's performance and behaviour in different roles and different situations. Thus the answer to the challenges posed in this review will not be a single, simple set of assessment materials but a multifaceted strategy for assessment and consultation.

Some of those working on methods of normative assessment have suggested that the problems encountered in using their materials with children learning EAL could be overcome by translating well-established tests or by developing pluralistic or local norms. The evidence suggests that the technical obstacles to the successful use of tests in translation and to the development of pluralistic or local norms are not insurmountable. However, the use of such materials will be of limited value in supporting the planning of classroom initiatives to help individual children with EAL to overcome learning difficulties. Translated tests will not meet the needs of all children from a particular linguistic community, and local norms are likely to change

fast. It is doubtful that these strategies are cost-effective or educationally valid - except in a very limited range of situations.

When different strategies of assessment are evaluated for their efficacy in use with children learning EAL, the approach that is usually least favourably reviewed is the one that appears to be most commonly used - normative assessment. There is a case for prioritising research and development work on curriculum related assessment, dynamic assessment and a hypothesis testing framework for assessment over further work on variants of a normative approach.

The use of an IQ-achievement discrepancy definition of dyslexia has been criticised on several grounds. One of the alternatives advocated in the literature is a discrepancy definition in terms of listening and reading comprehension. For children learning EAL who have reached a sufficient stage in oral English proficiency the application of this criterion appears likely to help identify those whose reading difficulties are not mainly a factor of limited oral language proficiency.

No test can be "culture-free", but test developers can do a great deal to reduce unfair bias in test content. It is recommended that they adopt a good practice that covers this issue fully. Where tests and assessment tasks are developed locally, it is possible to employ school-based review strategies for checking on possible item bias.

*f) Should children learning EAL be assessed in their first language or in English or in some combination of them both?*

The first step in any assessment is to evaluate a child's knowledge and use of their first language and of English. All other steps in the process of assessment will need to take account of the implications of the language findings - an apparently obvious principle which studies in different areas of the country have shown to be often ignored in practice.

There has been only limited development work on the evaluation of children's command of minority languages where they have learning difficulties, and there has been controversy about the most effective way of delineating progress in developing English as an additional language.

There is no simple and universal answer to the question of whether the abilities of children learning EAL should be assessed in L1 or L2. It cannot be assumed that, because children have a first language other than English, they will be advantaged if educational assessment is carried out in their L1. They may rarely use that language for academic purposes and have no vocabulary in it for the things studied at school. A decision as to the appropriate language of educational and psychological assessment for individual children is best taken on the basis of an initial evaluation of their exposure, use, proficiency and affiliation in relation to each of their languages.

*g) What background information is needed when the learning difficulties of a child with EAL are assessed?*

When children have a minority cultural background or a complex language history, accurate identification and assessment of learning difficulties will be impossible

without detailed background information. There is broad agreement about what items of information should be taken into account and reported when the learning difficulties of a child with EAL are assessed. Yet researchers have identified key information as missing in a significant proportion of the case papers examined in studies in different parts of the country.

An important part of the background information to be taken into account will be an account of the child's educational history and current educational provision. There is a lack of systematic, theoretically informed developmental work on strategies for evaluating the school learning environments of children with EAL for the purposes of SEN assessment.

There is evidence that some children learning EAL may experience severe cultural discontinuities between literacy practices at home and in a community or religious class on the one hand and at their school on the other. When severe reading difficulties are observed in L2 and the child attends a community or religious class, an insight into their progress with literacy in that setting may prove illuminating.

## **Recommendations**

### *Research and development*

1. That there is a shift in the balance of research and professional effort in the field of learning difficulties to reflect a broader and richer definition of literacy including all aspects of reading and writing.
2. That priority is given to theoretically informed, multidisciplinary development work on classroom-based strategies for assessing the language history and full bilingual language competence and affiliation of children with EAL who appear to have learning difficulties.
3. That priority is given to a development project to identify and disseminate good practice in observing and responding to the difficulties of individual children with EAL and SEN in the context of the Literacy Hour.
4. That a survey is carried out of the views of a sample of all adult stakeholders on arrangements for the identification and assessment of learning difficulties in children learning EAL, covering, among other things, the contribution to the process of bilingual staff and the training needs of all staff.
5. That research and development on other approaches to assessment is prioritised over work on normative assessment, because these approaches offer greater promise with this population. The specific approaches recommended for further research and development are -
  - curriculum related assessment
  - dynamic assessment
  - a hypothesis testing framework for assessment with children learning EAL who may have learning difficulties.



6. That further development work is carried out on matched assessment materials for listening and reading comprehension, so that the contribution that such materials could make to the assessment of specific learning difficulties in literacy with children learning EAL can be evaluated.
7. That work is undertaken to develop theoretically based strategies and materials for evaluating the learning environments at school of children learning EAL who may have SEN.
8. That a small-scale development project is established with the goal of producing materials to support the collection of evidence on children's literacy performance in religious and community classes.

#### *Policy*

9. The information requirements for work with children learning EAL are covered in general guidance on SEN assessment (e.g. in the revised Code of Practice) in order to foster the wider adoption of well-established principles of good practice.
10. That teachers, other professionals, schools and LEAs in multiethnic and multilingual areas are encouraged (a) to purchase assessment materials only from publishers who make an explicit commitment to a code of practice of this kind and (b) to employ formal school-based review strategies when developing local tests.

#### *Monitoring*

11. There should be regular monitoring at national level of the allocation of SEN support to children learning EAL.

## **Appendix 1: Collecting Basic Information on Child's Background**

Checklists prepared by five authors were compared (Frederickson & Cline, 1990; Graf, 1992; Hall, 1995; Siraj-Blatchford, 1994; Veasey, 1999). Their suggestions regarding the basic information that should be collected showed a high degree of consensus. For each item in the list below the number of mentions is recorded in brackets.

### **1. Cultural and religious background**

- Family religion (4)
- Dietary requirements (4)
- Festivals/customs observed (3)
- Cultural and religious factors affecting dress (1)
- Social and cultural background (1)

### **2. Family details and history**

- Details of family members (4)
- Recent or past separations from family (2)

### **3. Language history, including current usage of L1 and L2**

- Language(s) spoken at home (5)
- Reading/writing skills in home language(s) (3)
- Experience/competence in English (3)
- Any other languages spoken with family/community (1)
- BICS/CALP (1)
- Extra English tuition (1)

### **4. School history<sup>13</sup>**

- Previous schooling in the UK and abroad (3)
- Community/religious school attendance (3)
- Extended visits abroad (2)
- Environment/opportunity to learn (1)

### **5. Medical history**

- Relevant/important medical information (5)
- Physical development (2)
- Emotionally stressful periods (1)
- Social conditions (1)

We compared that list with the checklists included in the sample of LEA notes of guidance reviewed in Section 8. There is considerable overlap but also some variation. Further information suggested in LEA guidance notes that was not mentioned by those authors included:

#### **Family details and history**

Trauma ensuing from experiences of a new cultural/linguistic/educational Environment or the reason for the move to a new country

<sup>13</sup> One of the authors, Siraj-Blatchford, was writing for early years education so that this heading did not apply.

Extent to which the family has support within the community and is not isolated

**School history**

Child's familiarity with learning and teaching styles

**Medical history**

Use of aids for learning

Experience of speech difficulties; details of treatment received

## **Appendix 2: Published tests of reading, literacy and related abilities**

For each test information is given under the following headings:

1. Type of test
2. Age range
3. Stated objectives
4. Skills tested
5. Information on use with bilingual learners
6. Key extracts from critical reviews (where available)

Note that tests developed and used mainly in the USA, Canada or Australia and not specifically designed or re-standardised for use in the United Kingdom have not been included in this list unless they have been commonly cited in the UK literature.

### **Word reading tests**

The format of each of these tests is similar – a list of unrelated words graded for difficulty that are to be read aloud in sequence until a ceiling level is reached.

#### **British Ability Scale (BAS) Word Reading Test** Elliott (1996) **Second Edition**

1. Individual
2. 5 - 14 years
3. To obtain a summary measure of overall reading attainment that may be compared with results on a general intelligence scale that was standardised on the same population.
4. Word recognition; reading accuracy.
5. None available.
6. "Up-to-date, simple, quick and reliable measure of word reading" (Thomson, 1997). Facilitates comparison with the related BAS measures of intellectual abilities. Prone to a ceiling effect: "one or two words can make a great deal of difference" (Thomson, 1997).

#### **Macmillan Graded Word Recognition Test** Macmillan Test Unit (1985)

Now distributed by NFER-Nelson with the title *Graded Word Reading Test*

1. Individual
- 2.
3. 5 – 12 years
4. To obtain a summary measure of overall reading attainment
5. Word recognition; reading accuracy. The existence of two parallel forms allows for repeat testing to evaluate progress.
6. None available.
7. Turner (1997) reported that it is experienced by children as more difficult than earlier tests of the same type developed by Burt and Schonell. Graded word reading tests have been severely criticised because they present words without a meaningful context and assess a very limited range of reading subskills. Turner stressed the important role of automaticity in the early

development of reading and argued that “the rapid, accurate identification of single words out of context forms a vital component – perhaps the most vital – in the acquisition of reading”. (p. 198)

### **Reading Tests that assess comprehension as well as accuracy**

#### **Diagnostic Reading Record**

Arnold (1998)

1. Individual/Group
2. 6 – 11 years
3. A means of assessing reading development through the observation and analysis of the oral reading of a short, complete text, followed by a discussion of what has been read.
4. Reading accuracy and response to text with narrative and information passages; processes of word reading, including the use of grapho-phonetic, syntactic and semantic cues.
5. None available
6. “...probably the most convenient and accessible introduction to the technique of miscue analysis. Although there must be reservations about its interpretative framework... a very usable means for teachers to engage with individual readers in a structured way.” (Vincent, 1997, p. 39) “The scoring system for evaluating response to text is limited in that it makes provision for only a very simple classification of a child’s response into one of three levels (with definitions for the categories for which no empirical support is given in the manual).” (Cline and Cozens, In press)

#### **London Reading Test**

Hagues (1993)

1. Group/Whole class
2. 9 years 7 months – 12 years 2 months
3. A reading comprehension test (mainly using cloze technique) designed to provide information around the time of secondary school transfer. Parallel forms available.
4. Word and sentence reading; the ability to extract information and draw inferences from text.
5. None available
6. A “useful coarse first filter” to differentiate those who should be able to cope satisfactorily at secondary school. (Beech, 1997a)

#### **Macmillan Individual Reading Analysis**

Vincent and de la Mare (1990)

Now distributed by NFER-Nelson with the title *Individual Reading Analysis*

1. Individual
2. 5 years 6 months – 10 years
3. A series of narrative and expository passages designed primarily to test oral reading ability, though comprehension questions are also included. Diagnostic use of miscue analysis is supported. Parallel forms available.
4. Reading accuracy; reading comprehension skill; reading strategies.
5. None available
6. “Teachers of children with reading difficulties may find the optional miscue analysis and reading strategy observations particularly helpful... although this test

will be useful those interested in assessing reading accuracy, it will not provide a reliable indicator of comprehension skill” (Cain, 1997). “... a niche test (enabling) younger and less able readers.. to approach connected passages and make interpretations of meaning early on in the process of learning to read ” (Turner, 1997). If standard scores are required, English users may consult Dorset norms reported by Sawyer and Potter (1994).

**Neale Analysis of Reading Ability  
(Second Revised British Edition)**

Neale et al (1997)

1. Individual
2. 6 – 12 years
3. Tests oral reading of passages through measures of accuracy, comprehension and speed. There is a set of supplementary tests for diagnostic assessment.
4. Rate of oral reading; oral reading accuracy; oral reading comprehension.
5. Sheppard (1987) commented adversely on the previous edition. His comments on content are not directly applicable to this version.
6. Oakhill (1997a) described it as having “a number of attractive properties”, and Turner (1993) wrote of it as “the Rolls Royce of individual reading testing”. But in the first revised edition one of the forms was criticised for gender bias and inappropriate grading of the comprehension questions (Stothard and Hulme, 1991). Their observations were followed up by Gregory and Gregory (1994) with a subsequent defence of the test by Halliwell and Feltham (1995). In a study in which it was compared with a test employing cloze technique the Neale Analysis was the more effective in assessing reading comprehension (Nation and Snowling, 1997). Its easiest passages are more difficult than those in the Macmillan Individual Reading Analysis, which may make it less attractive as a test for use with the least able children (Turner, 1997).

**Suffolk Reading Scale**

Hagley (1987)

1. Group
2. 6 – 12 years
3. Assessment of general reading ability.
4. Sentence completion with a multiple-choice format. Parallel forms may be used to prevent copying in a group.
5. None available
6. This test is easy to administer and spans a wide age-range but the norms are now dated (Oakhill, 1997b). As the test is group administered, it is impossible to ascertain (on the basis of the test result alone) why a child performs poorly, but a factor analytic study suggested that it “is more a test of reading accuracy than of reading comprehension” (Nation and Snowling, 1997).

**Wechsler Objective Reading Dimensions**

Rust et al (1993)

1. Individual
2. 6 – 16 years
3. To assess competencies in three areas: basic reading, spelling, and reading comprehension. The assessments can be used separately, or together to give an overall assessment. The latter measure of overall reading attainment may be

compared with results on a general intelligence scale that was standardised on the same population.

4. Word recognition; phonetic and word analysis; pictorial recognition; ability to comprehend orally presented questions
5. None available
6. “..attractively presented and easy to administer... time-consuming” and therefore most suitable for detailed work with children who have reading difficulties (Oakhill, 1997c). Praised for employing a wider range of types of comprehension question than the Neale Analysis – “...the pupil has to predict, infer, understand cause and effect or combine new with old knowledge to reach a synthesis” Turner, 1997).

**Reading Test Batteries** (includes all other tests with more than one type of item)

**Effective Reading Tests**

Vincent and de la Mare (1989)

1. Group
2. 6 – 12 years
3. To assess overall progress and provide diagnostic information on reading skills. The tests are offered at five levels in a book format that is designed to appear indistinguishable from other non-fiction books children might use in their everyday reading.
4. Using relationships within text, eg following the thread of sentences and using context clues; acting upon text, e.g. interpreting or recognising text; employing reading strategies appropriate to text and purpose, e.g. skimming and scanning; making an affective, imaginative or personal response to reading, eg responding to figurative language; critical awareness and evaluation, eg distinguishing between fact and fiction; location and selection, eg using alphabetical order, reference skills
5. None available

**Literacy Assessment Battery (LAB)**

Doctor (1996, 1997)

1. Individual
2. Not specified
3. To provide a fine-grained and systematic analysis of reading and spelling difficulties, ranging from letter recognition to the comprehension of sentences.
4. Six assessment tasks are set, exploring strengths and weaknesses in orthographic, phonological, morphological, syntactic and semantic processing. spelling
5. None available

**An Observational Survey of Early Literacy Achievement** Clay (1993)

1. Individual
2. Children of primary school age
3. The text offers teachers detailed descriptions of classroom strategies for observing reading behaviour and evaluating skills such as letter identification and concepts about print. Illustrated with examples of running records and other forms.
4. Reading level and reading strategies working with everyday texts.
5. None available

**Wordchains (Standardised Edition)**

Miller-Guron (1999)

1. Individual or group.
2. 7 years to adult.
3. A timed word reading test designed to screen for specific learning difficulties.
4. To assess fluent word identification out of context. Words are presented in chains of three or four adjoining words and the child is asked to identify target words.
5. Miller-Guron (1999) compared errors of L1 English speakers and L1 Swedish speakers working in their own languages.
- 6.

**Tests relating to dyslexia****Aston Index (Revised)**

Newton and Thompson (1982)

1. Individual
2. 5:06+ (Level 1)  
7:00+ (Level 2)
3. With younger children - to diagnose potential language problems, thereby assisting in the early identification of children who are at educational risk. With older children who are making poor progress - to identify possible barriers to learning.
4. *General underlying ability and attainment*: picture recognition; vocabulary scale; Goodenough “draw-a-man” test; copying geometric designs; grapheme/phoneme correspondence; Schonell Graded Word Reading Test R1 or other reading test; Schonell Graded Word Spelling Test B or other spelling test. *Performance items*: visual discrimination; child’s laterality; copying name; free writing; visual sequential memory (pictorial); auditory sequential memory; sound blending; visual sequential memory (symbolic); sound discrimination; grapho-motor test
5. None available
6. “Whilst some progress has undoubtedly been made in meeting criticisms of earlier versions, a great deal of further work remains to be done if the Index is to fulfil its authors’ intentions” (Pumfrey, 1985). The assessment of intelligence is based on a draw-a-man test “which is an extremely crude measure” (Singleton, 1997). “The use of the outdated Schooner Reading and Spelling Tests is also disappointing” (Vincent et al., 1983). “...there are some traps for the unwary: because a test is presented visually it does not follow that those who find it difficult can usefully be described as having “visual” problems” (Miles and Miles, 1999). “Overall the test seems rather dated... While particular tests may be valuable for investigating various aspects of a child’s functioning, there are questions about the construction, standardisation and validation of the Index as a whole.” (BPS, 1999a)

**Bangor Dyslexia Test**

Miles (1983)

1. Individual
2. 7 - 18 years
3. To help understand an individual's learning difficulties. Not intended to support definitive diagnosis on its own. Should be used as part of a wider assessment.



4. Knowledge of left and right (body parts); repetition of polysyllabic words; subtraction; multiplication tables; verbal sequencing; b-d confusion; familial incidence.
5. Versions now exist in English, German, Greek, Japanese, Spanish and Welsh.
6. Appeals to many practitioners but has been severely criticised on technical grounds (Puffery and Reason, 1991; Pumfrey, 1997). Criticised for lacking an “objective or independent validation” (Singleton, 1988). Not seen as a psychometric instrument or a standardised test but thought of rather as “a means for systematic observation and comparison of the judgements of those involved”, drawing on Miles’ syndrome theory of dyslexia (BPS, 1999a).

**Dyslexia Screening Instrument (DSI)**

Coon et al (1996)

1. Individual and Group
2. 6 – 21 years
3. “A starting point for identifying students at risk for dyslexia” (Manual). A teacher rating scale that is designed as an initial screening instrument to discriminate between students who have dyslexia and those who do not. Computerised scoring to facilitate screening of large numbers of pupils.
4. Rates the child on a list of 33 behavioural characteristics associated with dyslexia
5. None available
6. Pumfrey (1997c) commended the use of computer technology but questioned the validity of the discriminant analyses on which the scoring system is based. He pointed out that the single yes/no conclusion about dyslexia fails to distinguish between different types of dyslexia.

**Dyslexia Screening Test**

Fawcett and Nicholson (1996)

**Dyslexia Early Screening Test (DEST)**

Fawcett and Nicholson (1996)

1. Individual
2. DST: 6.5 – 16.5 years DEST: 4.5 – 6.5 years
3. To screen children with dyslexia and provide a profile of strengths and weaknesses that can be used to guide the development of support.
4. Incorporate a range of subtests including measures that are found in many similar batteries such as rapid naming and phonological discrimination and measures that are associated with their theoretical model such as bead threading and balance (Nicholson and Fawcett, 1990).
5. See brief discussion on p. 46.
6. “..a promising addition to the screening repertoire.. (but).. for the time being an unknown quantity” Singleton (1997). In a university-led evaluation of the DST a sample of teachers in six schools commended its diagnostic value and the clarity and rapid availability of the results, suggested it could be used by SENCO’s for the assessment of individual pupils at risk, and criticised the postural ability subtest. (Lawrence and Carter, 1999)

**Tests of phonological and other basic reading-related skills**

**Phonological Abilities Test**

Muter et al (1998)

1. Individual
2. 5 – 7 years

3. To identify children at risk of reading difficulties and to assess the nature and extent of phonological weaknesses diagnostically.
4. Examines four aspects of phonological awareness, speech rate and letter knowledge.
5. None available.

**Phonological Assessment Battery (PhAB)**                      Frederickson et al (1997)

1. Individual
2. 6 – 14 years
3. To assess phonological skills that are important for progress in reading and to provide a profile that will support the planning of teaching.
4. Skills in non-word reading, rhyme, alliteration, naming speed, rhyme and alliteration fluency, and the detection and solution of Spoonerisms.
5. See account of a study of L2 learners on p. 46.

**Word Recognition and Phonic Skills (WRAPS)**      Carver and Moseley (1994)

1. Group
2. 4 – 7 years
3. A word recognition test for early readers which also provides a profile of strengths and weaknesses in phonics.
4. Letter knowledge; word-building skills.
5. None available
6. “It may prove slightly problematic for children who are poor at listening to English as they have to clearly understand the words being spoken and match these to one of the items before them” (Beech, 1997b)

## References

- Aaron, P. G. (1991). Can reading disabilities be diagnosed without using intelligence tests? *Journal of Learning Disabilities*, 24, (3), 178 - 186.
- Adams, E., Everatt, J., & Smythe, I. (1999). *Dyslexia screening measures and bilingualism*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.
- Adams, M. J. (1990). *Beginning to Read: Children Thinking and Learning about Print*. Cambridge, Massachusetts: MIT Press.
- Allen, B. A., & Boykin, A. W. (1991). The influence of contextual factors on Afro-American and Euro-American children's performance: effects of movement opportunity and music. *International Journal of Psychology*, 26, 373 - 387.
- Alston, J. (1998). *Assessing and Promoting Writing Skills - New Edition*. Tamworth, Staffordshire: NASEN.
- Anderson, E. (1984). Reading and the Bilingual Child - Assessment and Remediation. In N. Miller (Ed.), *Bilingualism and Language Disability* (pp. 154-165). London: Croom Helm.
- Anderson, V., & Roit, M. (1996). Linking Reading Comprehension Instruction to Language Development for Language-Minority Students. *The Elementary School Journal*, 96, (3), 295-309.
- Anon. (1988, May 1988). Educational Psychologists: Immigration officials of a monolingual system. *The Muslim Voice*, pp. 5 - 6.
- Arnold, H. (1998). *Diagnostic Reading Record*. London: Hodder & Stoughton.
- Arthur, W. J., & Day, D. V. (1991). Examination of the construct validity of alternative measures of field dependence/independence. *Perceptual and Motor Skills*, 72, 851 - 859.
- Ashby, B., Morrison, A., & Butcher, H. J. (1970). The abilities and attainments of immigrant children. *Research in Education*, 4, 73 - 80.
- August, D., & Hakuta, K. (1997). Cognitive aspects of school learning: literacy development and content learning. In D. August & K. Hakuta (Eds.), *Improving Schooling for Language-Minority Children: A Research Agenda* (pp. 53 - 75). Washington, D.C.: National Academy Press.
- Baca, L. M., & Cervantes, H. T. (1989). *The Bilingual Special Education Interface*. Columbus, Ohio: Merrill Publishing Co.
- Baker, C. (1988). Normative testing and bilingual populations. *Journal of Multilingual and Multicultural Development*, 9, (5), 399 - 409.
- Baker, C. (1996). *Foundations of Bilingual Education and Bilingualism*. (Second ed.). Clevedon, Avon: Multilingual Matters.
- Ball, M. (1984). Phonological Development and Assessment. In N. Miller (Ed.), *Bilingualism and Language Disability* (pp. 115-130). London: Croom Helm.
- Ballantyne, A. B. (1991). *Reading Recovery with bilingual readers: a study of the effectiveness of a metacognitive intervention on two groups of bilingual pupils experiencing reading difficulties*. Unpublished MA, University of London Institute of Education, London.
- Banks, J. (1981). *Multi-Ethnic Education: Theory and Practice*. London: Allyn and Bacon.
- Barona, A., & Barona, M. S. (1987). A model for the assessment of limited English proficient students referred for special education services. In S. H. Fradd & W. J. Tikunoff (Eds.), *Bilingual Education and Bilingual Special Education: A Guide for Administrators* (pp. 183 - 210). Boston: College-Hill Press.

- Bartlett, D. (1995, 27 - 28 April 1995). *Educational performance in the early years in Birmingham LEA with particular reference to children with English as an additional language and those from minority ethnic groups*. Paper presented at the Invitational Conference on Teaching and Learning English as an Additional Language, London.
- Baynham, M. (1995). *Literacy Practices: Investigating literacy in social contexts*. London: Longman.
- BDA. (1999, 17 - 19 June 1999). *Multilingualism and Dyslexia, including the teaching of Modern Foreign Languages to dyslexic students*. Paper presented at the Multilingualism and Dyslexia, Manchester.
- Bedford-Feuell, C., Geiger, S., Moyse, S., & Turner, M. (1995). Use of listening comprehension in the identification and assessment of specific learning difficulties. *Educational Psychology in Practice*, 10, (4), 14 - 21.
- Beech, J. R. (1997a). Review of the London Reading Test. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 308 - 309). London: Routledge.
- Beech, J. R. (1997b). Review of Word Recognition and Phonic Skills (WRAPS). In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 339 - 340). London: Routledge.
- Beech, J. R., & Keys, A. (1997). Reading, Vocabulary and Language Preference in 7-to 8-year old Bilingual Asian Children. *British Journal of Educational Psychology*, 67, 405-414.
- Beech, J. R., & Singleton, C. (Eds.). (1997a). *The Psychological Assessment of Reading*. London: Routledge.
- Beech, J. R., & Singleton, C. (1997b). The psychological assessment of reading: theoretical issues and professional solutions. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 1 - 26). London: Routledge.
- Berk, R. A. (1984). Conducting the item analysis. In R. A. Berk (Ed.), *A Guide to Criterion-Referenced Test Construction* (pp. 97 - 143). Baltimore, MD: John Hopkins University Press.
- Bialystok, E. (1997). Effects of bilingualism and biliteracy on children's emerging concepts of print. *Developmental Psychology*, 33, (3), 429 - 440.
- Blackledge, A. (Ed.). (1994). *Teaching Bilingual Children*. Stoke-on-Trent: Trentham Books.
- Blackledge, A. (1999). Reading interactions at the threshold of power: home and school strategies in hearing young Bangladeshi children read. In H. South (Ed.), *Literacies in community and school* (pp. 30 - 50). Watford, Hertfordshire: NALDIC.
- Blatchford, P. (1997). Pupils' self assessments of academic attainment at 7, 11 and 16 years: effects of sex and ethnic group. *British Journal of Educational Psychology*, 67, 169 - 184.
- Blatchford, P., & Cline, T. (1992). Baseline assessment for school entrants. *Research Papers in Education*, 7, (3), 247 - 269.
- Bourne, J. (1990). Local Authority Provision for Bilingual Pupils: "ESL", Bilingual Support and Community Languages Teaching. *Educational Research*, 32, (1), 3-13.
- BPS. (1999a). *Dyslexia, Literacy and Psychological Assessment*. Leicester: British Psychological Society.
- BPS. (1999b). A Framework for Psychological Assessment and Intervention: January 1999 Revision. *Newsletter of BPS Division of Educational and Child Psychology*, 89, 6 - 9.
- Brown, A. L., Campione, J. C., Webber, L. S., & Winnikur, D. W. (1992). Interactive learning environments: a new look at assessment and instruction. In B. R. Gifford & M. C. O'Connor (Eds.),

- Changing Assessments: Alternative Views of Aptitude, Achievement and Instruction* (pp. 121 - 212). New York: Kluwer Academic Publishers.
- Bryans, T. (1992). Educational psychologists working in a biased society. In S. Wolfendale, T. Bryans, M. Fox, A. Labram, & A. Sigston (Eds.), *The Profession and Practice of Educational Psychology: Future Directions* (pp. 137 - 151). London: Cassell.
- Bryant, P., & Goswami, U. (1990). Open Dialogue - Backward and Normal Readers: Comparisons Between Backward and Normal Readers: A Risky Business. *Education Section Review (BPS)*, 14, (2), 26.
- Burgess-Macey, C. (1994). Assessing Young Children's Learning. In P. Keel (Ed.), *Assessment in the Multi-Ethnic Classroom* (pp. 47 - 60). Stoke-on-Trent: Trentham Books.
- Cain, K. (1997). Review of the Macmillan Individual Reading Analysis. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 310 - 311). London: Routledge.
- Cameron, L., & Bygate, M. (1997). Key issues in assessing progression in English as an additional language. In C. Leung & C. Cable (Eds.), *English as an Additional Language: Changing Perspectives* (pp. 40 - 52). Watford, Herts: NALDIC.
- Campione, J. C. (1989). Assisted assessment: a taxonomy of approaches and an outline of strengths and weaknesses. *Journal of Learning Disabilities*, 22, (3), 151 - 165.
- Carney, J. J., & Cioffi, G. (1992). The dynamic assessment of reading abilities. *International Journal of Disabilities*, 39, (2), 107 - 114.
- Carrasquillo, A. L., & Baecher, R. E. (Eds.). (1990). *Teaching the Bilingual Special Education Student*. New Jersey: Ablex Publishing Corporation.
- Carrasquillo, A. L., & Rodriguez, V. (1996). *Language Minority Students in the Mainstream Classroom*. Clevedon, Avon: Multilingual Matters.
- Carver, C., & Moseley, D. (1994). *Word Recognition and Phonic Skills*. London: Hodder and Stoughton.
- Chamberlain, P., & Medeiros-Landurand, P. (1991). Practical considerations for the assessment of LEP students with special needs. In E. V. Hamayan & J. S. Damico (Eds.), *Limiting Bias in the Assessment of Bilingual Students*. Austin, Texas: Pro-Ed.
- Chapman, J. W., Tunmer, W. E., & Prochnow, J. E. (In press). Why reading Recovery does not work: a longitudinal study in a whole language context. *Thalamus*.
- Chavkin, N. F. (Ed.). (1993). *Families and Schools in a Pluralistic Society*. New York: SUNY Press.
- Chitiri, H. F., Sun, Y., Willows, D. M., & Taylor, I. (1992). Word recognition in second language reading. In R. J. Harris (Ed.), *Cognitive Processing in Bilinguals*. Amsterdam, Holland: Elsevier Science.
- Clay, M. (1991). Reading Recovery Surprises. In D. E. DeFord, C. A. Lyons, & G. S. Pinnell (Eds.), *Bridges to Literacy: Learning from Reading Recovery* (pp. 55 - 74). London: Heinemann.
- Clay, M. (1993). *An Observation Survey of Early Literacy Achievement*. Auckland, New Zealand: Heinemann.
- Clay, M. M. (1990). The Reading Recovery Programme 1984 - 1988: coverage, outcomes and Education Board district figures. *New Zealand Journal of Educational Studies*, 25, (1), 61 - 70.
- Clay, M. M., & Watson, B. (1982). *The success of Maori children in the Reading Recovery programme* (Child Study Research Group Project No. 1). Auckland: Department of Education, University of Auckland.

- Cline, T. (1991). Professional constructions of the concept of moderate learning difficulties. In P. L. C. Evans & A. D. B. Clarke (Eds.), *Combating Mental Handicap: A Multidisciplinary Approach* (pp. 86 - 100). Bicester, Oxon.: A.B. Academic.
- Cline, T. (1993). Educational Assessment of Bilingual Pupils: Getting the Context Right. *Educational and Child Psychology, 10*, (4), 59-68.
- Cline, T. (1995). The Code of Practice on Special Educational Needs: A Short Guide for those Working with Bilingual Pupils (Vol. Occasional Paper 4, pp. 17): NALDIC.
- Cline, T. (1998). The assessment of special educational needs for bilingual children. *British Journal of Special Education, 25*, (4), 159-163.
- Cline, T., & Cozens, B. (1999). The analysis of aspects of classroom texts that challenge children when learning to read in their second language: a pilot study. In H. South (Ed.), *Literacies in community and school* (pp. 21 - 29). Watford, Hertfordshire: NALDIC.
- Cline, T., & Frederickson, N. (1996). *Curriculum Related Assessment, Cummins and Bilingual Children*. Clevedon, Avon: Multilingual Matters.
- Cline, T., & Frederickson, N. (1999). Identification and assessment of dyslexia in bi/multi-lingual children. *International Journal of Bilingual Education and Bilingualism, 2*, (2), 81 - 93.
- Cline, T., & Reason, R. (1993). Specific Learning Difficulties (Dyslexia): Equal Opportunities Issues. *British Journal of Special Education, 20*, (1), 30-34.
- Cloud, N. (1994). Special educational needs of second language students. In F. Genessee (Ed.), *Educating Second Language Children: The whole child, the whole curriculum, the whole community* (pp. 243 - 277). Cambridge: Cambridge University Press.
- Coard, B. (1971). *How the West Indian Child is made Educationally Subnormal in the British School System*. London: New Beacon Books.
- Collier, V. P. (1989). How Long? A Synthesis of Research on Academic Achievement in a Second Language. *TESOL Quarterly, 23*, (3), 509-531.
- Collier, V. P. (1992). A synthesis of studies examining long-term language minority student data on academic achievement. *Bilingual Research Journal, 16*, (1 - 2), 187 - 212.
- Collier, V. P. (1995, 27 - 28 April 1995). *The education of language minority students: United States policies, practices and assessment of academic achievement*. Paper presented at the Invitational Conference on Teaching and Learning English as an Additional Language, London.
- Collins, K. (1999, 17 - 19 June 1999). *Supporting emergent bilingual learners to literacy*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.
- Coon, K. B., Waguespack, M. M., & Polk, M. J. (1996). *Dyslexia Screening Instrument (DSI)*. San Antonio: Psychological Corporation.
- Cosan, R. J., & Beaulieu, R. P. (1984). Cognitive tempo, perceptual style and knowledge of letter names in kindergarten children. *Reading Improvement, 21*, 227 - 231.
- Coulthard, K. (1998). *Worlds of literacy worlds apart*. London: NATE.
- CRE. (1996). *Special Educational Need Assessment in Strathclyde: Report of a Formal Investigation*. London: Commission for Racial Equality.
- Crozier, W. R. (1997). *Individual Learners: Personality Differences in Education*. London: Routledge.

Crutchley, A., Conti-Ramsden, G., & Botting, N. (1997). Bilingual children with specific language impairment and standardised assessments: preliminary findings from a study of children in language units. *International Journal of Bilingualism*, 1, (2), 117 - 134.

Cummins, J. (1984). *Bilingualism and Special Education: Issues in Assessment and Pedagogy*. Clevedon, Avon: Multilingual Matters.

Cummins, J. (1989). A theoretical framework for bilingual special education. *Exceptional Children*, 56, (2), 111 - 119.

Cummins, J. (1991). Interdependence of first- and second-language proficiency in bilingual children. In E. Bialystok (Ed.), *Language Processing in Bilingual Children* (pp. 70 - 89). Cambridge: Cambridge University Press.

Cummins, J. (1993). The research base for heritage language promotion. In M. Danesi, K. McLeod, & S. Morris (Eds.), *Heritage Languages and Education: The Canadian Experience* (pp. 1 - 22). Oakville: Mosaic Press.

Cummins, J. (1996). *Negotiating Identities: Education for Empowerment in a Diverse Society*: California Association for Bilingual Education (Available in UK through Trentham Books, Stoke-on-Trent).

Cummins, J., & McNeely, S. N. (1987). Language development, academic learning and empowering minority students. In S. H. Fradd & W. J. Tikunoff (Eds.), *Bilingual Education and Bilingual Special Education: A Guide for Administrators* (pp. 75 - 98). Boston: Little, Brown and Co.

Curnyn, J. C., Wallace, I., Kistan, S., & McLaren, M. (1991). Special educational need and ethnic minority pupils. In Scottish Education Department/Regional Psychological Services (Ed.), *Professional Development Initiatives 1989 - 1990* (pp. 271 - 300). Edinburgh: Scottish Education Department.

DaFontura, H. A., & Siegel, L. S. (1995). Reading, syntactic and working memory skills of bilingual Portuguese-English Canadian children. *Reading and Writing*, 7, (1), 139 - 153.

Daniels, H. (1992). Dynamic assessment: pitfalls and prospects. In T. Cline (Ed.), *Assessment of Special Educational Needs: International Perspectives* (pp. 168 - 183). London: Routledge.

Darling-Hammond, L. (1994). Performance-based assessment and educational equity. *Harvard Educational Review*, 64, (1), 5 - 30.

Davey, B., & Menke, D. (1989). The importance of cognitive style in children's acquisition of reading skill. *Early Child Development and Care*, 51, 49 - 64.

Davies, J., & Brember, I. (1995). Stories in the kitchen: reading attitudes and habits of Year 2, 4 and 6 children. *Educational Research*, 37, (3), 305 - 313.

Davis, J. K. (1987). The field independent-dependent cognitive style and beginning reading. *Early Child Development and Care*, 29, 119 - 132.

DeBlassie, R. R., & Franco, J. N. (1983). Psychological and educational assessment of bilingual children. In D. R. Omark & J. G. Erickson (Eds.), *The Bilingual Exceptional Child* (pp. 55 - 68). San Diego, California: College-Hill Press.

Deponio, P., Landon, J., Mullin, K., & Reid, G. (1999, 17 - 19 June 1999). *An audit of the processes involved in identifying and assessing bilingual learners suspected of being dyslexic: a Scottish study*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.

DES. (1981). *Education Act*. London: HMSO.

DES. (1994). *Code of Practice on the Identification and Assessment of Special Educational Needs*. London: Department for Education.

- Desforges, M. (1995). Assessment of special educational needs in bilingual pupils: changing practice? *Schools Psychology International*, 16, 5 - 17.
- Desforges, M. (1997). Ethnic minority communities and values and special education. In G. Lindsay & D. Thompson (Eds.), *Values into Practice in Special Education* (pp. 27 - 42). London: David Fulton.
- Desforges, M., Mayet, V., & Vickers, M. (1995). Psychological assessment of bilingual pupils. *Educational Psychology in Practice*, 11, (3), 27 - 35.
- DfE. (1994). *Code of Practice on the Identification and Assessment of Special Educational Needs*. London: Department for Education.
- DfEE. (1997). *Excellence for All Children: Meeting Special Educational Needs. Green Paper*. London: Stationery Office.
- DfEE. (1999). *Ethnic Minority Pupils and Pupils for whom English is an Additional Language: England 1996/97. Statistical Bulletin No. 3/99*. London: HMSO.
- Doctor, E. A. L. (1997). Assessment of Reading and Spelling: the Importance of Differential Diagnosis for Intervention. *British Journal of Curriculum & Assessment*, 7, (3), 24-26.
- Doctor, E. L. (1996). The Devil's in the Detail. *Special Children*, 7-8 (March).
- Duquette, G. (1991). Cultural processing and minority language children with needs and special needs. In L. Malave & G. Duquette (Eds.), *Language, Culture and Cognition: A collection of studies in first and second language acquisition* (pp. 120 - 136). Clevedon, Avon: Multilingual Matters.
- Durgunoglu, A. Y. (1997). Bilingual reading: its components, development and other issues. In A. M. B. de Groot & J. F. Kroll (Eds.), *Tutorials in Bilingualism: Psycholinguistics Perspectives* (pp. 255 - 278). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Durgunoglu, A. Y., Nagy, W. E., & Hancin-Bhatt, B. (1993). Cross-language transfer of phonological awareness. *Journal of Educational Psychology*, 85, (3), 453 - 465.
- Ehrman, M. E. (1996). *Understanding Second Language Learning Difficulties*. Thousand Oaks, California: Sage.
- Elliott, C. D. (1996). *British Ability Scale Word Reading Test*. (Second ed.). Windsor: NFER-Nelson.
- Evans, B. J. W. (1997). Assessment of visual problems in reading. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 102 - 123). London: Routledge.
- Favreau, M., & Segalowitz, N. S. (1983). Automatic and controlled processes in first and second language reading of fluent bilinguals. *Memory and Cognition*, 11, 565 - 574.
- Fawcett, A., & Nicolson, R. (1996). *The Dyslexia Screening Test and Dyslexia Early Screening Test*. London: Harcourt, Brace and Company.
- Fawcett, A., & Nicolson, R. (1999). *Systematic identification and intervention for reading difficulty: implications for bilingual children*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.
- Fazal, S. (1997). Supporting bilingualism in schools - areas for consideration. *NALDIC News*, 13, 4 - 5.
- Feuerstein, R. (1979). *The Dynamic Assessment of Retarded Performers: The Learning Potential Assessment Device*. Baltimore: University Park Press.
- Figuroa, R. A. (1983). Test bias and Hispanic children. *Journal of Special Education*, 17, 431 - 440.



- Figueroa, R. A. (1989). Psychological testing of linguistic minority students: Knowledge gaps and regulations. *Exceptional Children*, 56, (2), 145-152.
- Figueroa, R. A., & Sassenrath, J. M. (1989). A longitudinal study of the predictive validity of the System of Multicultural Pluralistic Assessment (SOMPA). *Psychology in the Schools*, 26, 5 - 19.
- Fisher, D., Fox, D., & Wood, K. (1999). The identification of specific reading difficulties through assessment of listening comprehension skills. *Educational and Child Psychology*, 16, (1), 54-59.
- Fisher, J. (1998). Fit for the purpose? A critique of the National Framework for Baseline Assessment. *Education 3 to 13*, 26, (3), 9 - 14.
- Fitzpatrick, F. (1987). *The Open Door: The Bradford Bilingual Project*. Clevedon, Avon: Multilingual Matters.
- Fradd, S. H. (1987). Accommodating the needs of limited English proficient students. In S. H. Fradd & W. J. Tikunoff (Eds.), *Bilingual Education and Bilingual Special Education: A Guide for Administrators* (pp. 133 - 182). Boston: College Hill Press.
- Fraser, S. (1997). Working effectively with bilingual classroom assistants in school. *NALDIC News*, 13, 6- 8.
- Frederickson, N. (1992). Curriculum-based assessment: broadening the base. In T. Cline (Ed.), *The Assessment of Special Educational Needs: International Perspectives* (pp. 147 - 169). London: Routledge.
- Frederickson, N., & Cline, T. (Eds.). (1990). *Curriculum Related Assessment with Bilingual Children: A Set of Working Papers*. London: University College London Department of Psychology.
- Frederickson, N., & Cline, T. (Eds.). (1996). *Assessment of Learning Environments of Children with Special Educational Needs*. London: University College London.
- Frederickson, N., Frith, U., & Reason, R. (1997). *Phonological Assessment Battery*. Windsor: NFER-Nelson.
- Frederickson, N., & Reason, R. (1995). Discrepancy definitions of specific learning difficulties. *Educational Psychology in Practice*, 10, (4), 195 - 205.
- Frederickson, N. L., & Frith, U. (1998). Identifying dyslexia in bilingual children: A phonological approach with Inner London Sylheti speakers. *Dyslexia*, 4, 119 - 131.
- Frith, U. (1985). Beneath the surface of developmental dyslexia. In K. Patterson, M. Coltheart, & J. Marshall (Eds.), *Surface Dyslexia* (pp. 301 - 329). London: Routledge and Kegan Paul.
- Fulcher, G. (1989). *Disabling Policies: A Comparative Approach to Educational policy and Disability*. London: Falmer Press.
- Galloway, D., Armstrong, D., & Tomlinson, S. (1994). *The Assessment of Special Educational Needs: Whose Problem?* London: Longman.
- Garcia, G. E. (1991). Factors affecting the English reading test performance of Spanish-speaking Hispanic children. *Reading Research Quarterly*, 26, 371 - 392.
- Gardner, J., Sutherland, A., & Meenan-Strain, C. (1996). *Reading Recovery in Northern Ireland: The First Two Years*. Belfast: Queens University School of Education.
- Gardner, S., & Rea-Dickins, P. (1998). *Literacy and Oracy Assessment in an Early Years Intervention Project: The Roles of English Language Stages*. Paper presented at the BAAL 1998 Conference.

- Gathercole, S. E., & Baddeley, A. D. (1993). Phonological working memory: a critical building block for reading development and vocabulary acquisition? *European Journal of the Psychology of Education*, 3, 259 - 272.
- Gavillan-Torres, E. (1984). Issues of assessment of limited English-proficient students and of truly disabled in the United States. In N. Miller (Ed.), *Bilingualism and Language Disability* (pp. 131-153). London: Chapman and Hall.
- Gentile, L. M. (1997). Oral language: assessment and development in Reading Recovery in the United States. In S. L. Swartz & A. F. Klein (Eds.), *Research in Reading Recovery* (pp. 187 - 195). Portsmouth, New Hampshire: Heinemann.
- Gersten, R., & Woodward, J. (1994). The Language-Minority Student and Special Education: Issues, Trends, and Paradoxes. *Exceptional Children*, 60, (4), 310-322.
- Geva, E. (1999, 17 - 19 June 1999). *Issues in the Assessment of Reading Disabilities in Children who are Working in their Second Language - Beliefs and Research Evidence*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.
- Geva, E., & Clifton, S. (1994). The development of first and second language reading skills in early French immersion. *The Canadian Modern Language Review*, 50, (4), 646-667.
- Geva, E., & Ryan, E. B. (1993). Linguistic and memory correlates of academic skills in first and second languages. *Language Learning*, 43, 5 - 42.
- Geva, E., Wade-Woolley, L., & Shany, M. (1993). The Concurrent Development of Spelling and Decoding in two Different Orthographies. *Journal of Reading Behaviour*, 25, (4), 383-406.
- Gillborn, D., & Gipps, C. (1996). *Recent Research on the Achievements of Ethnic Minority Pupils: Ofsted Review of Research*. London: HMSO.
- Gipps, C., & Stobart, G. (1993). *Assessment: A Teacher's Guide to the Issues*. London: Hodder and Stoughton.
- Gipps, C. V. (1994). *Beyond Testing: Towards a theory of educational assessment*. London: Falmer Press.
- Goldstein, H. (1991). *Assessment in Schools: An Alternative Framework*. London: Institute for Public Policy Research.
- Gomez, M. L., Graue, M. E., & Bloch, M. N. (1991). Reassessing portfolio assessment: rhetoric and reality. *Language Arts*, 68, 620 - 628.
- Grabe, W. (1991). Current Developments in Second Language Reading Research. *TESOL Quarterly*, 25, (3), 375-406.
- Graf, V. L. (1992). Minimizing the inappropriate referral and placement of ethnic minority students in special education. In T. Cline (Ed.), *The Assessment of Special Educational Needs: International Perspectives* (pp. 186 - 198). London: Routledge.
- Gravelle, M. (1992). To prove or improve? Assessment issues with particular reference to bilingual learners. *The Curriculum Journal*, 3, (2), 185-194.
- Gravelle, M. (1996). *Supporting Bilingual Learners in Schools*. Stoke-on-Trent: Trentham Books Limited.
- Gravelle, M., & Sturman, E. (1994). Assessment of bilingual pupils: issues of fluency. In P. Keel (Ed.), *Assessment in the Multi-Ethnic Primary Classroom* (pp. 61-67). Stoke-on-Trent: Trentham Books.

- Green, L. F. (1985). *The Effects of Poor Learning Skills on the Attainments of Children in the Primary School*. Unpublished PhD, University of London.
- Green, L. F., & Francis, J. (1988). Children's learning skills at the infant and junior stages: a follow-on study. *British Journal of Educational Psychology*, 58, 120 - 126.
- Gregory, E. (1990). Negotiation as a Critical Factor in Learning to Read in a Second Language. *Language and Education*, 4, (2), 103-115.
- Gregory, E. (1993). Sweet and Sour: Learning to Read in a British and Chinese School. *English in Education*, 27, (3), 54-59.
- Gregory, E. (1994). Cultural Assumptions and Early Years' Pedagogy: The Effect of the Home Culture on Minority Children's Interpretation of Reading in School. *Language, Culture and Curriculum*, 7, (2), 111-124.
- Gregory, E. (1998). Siblings as Mediators of Literacy in Linguistic Minority Communities. *Language and Education*, 12, (1), 33-54.
- Gregory, E., & Kelly, C. (1992). Bilingualism and assessment. In G. M. Blenkin & A. V. Kelly (Eds.), *Assessment in Early Childhood Education* (pp. 144-161). London: Paul Chapman.
- Gregory, H. M., & Gregory, A. H. (1994). A comparison of the Neale and the BAS reading tests. *Educational Psychology in Practice*, 10, 15 - 18.
- Griffiths, R., & Sheen, R. (1992). Disembedded figures in the landscape: a reappraisal of L2 research on field dependence/independence. *Applied Linguistics*, 13, 131 - 148.
- Grossen, B., Coulter, G., & Ruggles, B. (1999). *Reading Recovery: An Evaluation of Costs and Benefits*, [www]. Available: <http://darkwing.uoregon.edu/~bgrossen/rr.htm>19/11/99].
- Gupta, A., & Garg, A. (1996). Visuo-perceptual and phonological processing in dyslexic children. *Journal of Personality and Clinical Studies*, 12, (1 - 2), 67 - 73.
- Gyarmarthy, E., Smythe, I., & Everatt, J. (1999). *Learning style assessment in dyslexic individuals - a cross-country comparison*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.
- Hagley, F. (1987). *Suffolk Reading Scale*. Windsor: NFER-Nelson.
- Hagues, N. (1993). *London Reading Test*. Windsor: NFER-Nelson.
- Hall, D. (1993). *Living in Two Languages: The Language Assessment of Bilingual Pupils with Severe Learning Difficulties*. London Borough of Tower Hamlets: Education Department.
- Hall, D. (1995). *Assessing the Needs of Bilingual Pupils: Living in Two Languages*. London: David Fulton.
- Halliwell, M., & Feltham, R. (1995). Comparing the Neale and BAS reading tests: a reply to Gregory and Gregory. *Educational Psychology in Practice*, 10, (4), 228 - 230.
- Hamers, J. H. M., Hessels, M. G. P., & Pennings, A. H. (1996). Learning potential in ethnic minority children. *European Journal of Psychological Assessment*, 12, (3), 183 - 192.
- Hamers, J. H. M., Hessels, M. G. P., & Van Luit, J. E. H. (1991). *Leertest voor etnische minderheden: Test en handleiding [Learning Potential Test for Ethnic Minorities: Test and Manual]*. Lisse: Swets and Zeitlinger.
- Hamers, J. H. M., Sijtsma, K., & Ruilessenaars, A. J. J. M. (1993). *Learning Potential Assessment: Theoretical, Methodological and Practical Issues*. Amsterdam: Swets and Zeitlinger.

- Hamers, J. H. M., Van Luit, J. E. H., & Tissink, J. (1995). *Leertoetsen voor Oudste Kleuters (LOK) [Phonemic Awareness Test (PAT)]*. Hilversum: OBD.
- Hannon, P., & McNally, J. (1986). Children's understanding and cultural factors in reading test performance. *Educational Review*, 38, (3), 237 - 246.
- Haworth, M., & Joyce, J. (1996). A resource for assessing the language skills of bilingual pupils. In T. Cline & N. Frederickson (Eds.), *Curriculum Related Assessment, Cummins and Bilingual Children* (pp. 116 - 145). Clevedon, Avon: Multilingual Matters.
- Heath, S. B. (1983). *Ways with Words: Language and Life in Communities and Classrooms*. Cambridge, Massachusetts: Cambridge University Press.
- Hernandez, R. D. (1994). Reducing bias in the assessment of culturally and linguistically diverse populations. *Journal of Educational Issues of Language Minority Students*, 14, 269 - 300.
- Hertfordshire Education Department. (1997). *Assessment of Minority Ethnic Pupils with reference to the SEN Code of Practice*. Hertford: Hertfordshire County Council Education Department.
- Hester, H., Ellis, S., & Barrs, M. (1988). *Guide to the Primary Learning Record*. London: Centre for Language in Primary Education.
- Hillingdon Education Department. (1998). *Bilingual Children & SEN: Guidance for Teachers*. London Borough of Hillingdon: Department of Education, Youth and Leisure.
- HMI. (1983). *Report by HM Inspectors on Greenfield School, Idle, Bradford*. London: Department of Education and Science.
- Hobsbaum, A. (1997). Reading Recovery in England. In S. L. Swartz & A. F. Klein (Eds.), *Research in Reading Recovery* (pp. 132 - 147). Portsmouth, New Hampshire: Heinemann.
- Hudelson, S. (1994). Literacy development of second language children. In F. Genesee (Ed.), *Educating Second Language Children: The Whole Child, The Whole Curriculum, The Whole Community* (pp. 129 - 158). Cambridge: Cambridge University Press.
- Hunt, M. (1998). Discussant's Paper. In B. Norwich & G. Lindsay (Eds.), *Baseline Assessment: Benefits and Pitfalls* (pp. 41 - 44). Tamworth, Staffordshire: NASEN.
- Hurry, J., & Sylva, K. (1998). *The long-term effects of two interventions for children with reading difficulties* (QCA/98/165). London: QCA.
- ILEA. (1985). *Educational Opportunities for All? Research Studies: Fish Report* (Vol. 2). London: Inner London Education Authority.
- James, M., & Connor, C. (1993). Are reliability and validity achievable in national curriculum assessment? Some observations on moderation at Key Stage 1 in 1992. *The Curriculum Journal*, 4, 5 - 19.
- Jones, R. L. (1988). *Psychoeducational Assessment of Minority Group Children: A Casebook*. Berkeley, California: Cobb and Henry.
- Joyce, J. (1988). The development of an anti-racist policy in Leeds. *Educational and Child Psychology*, 5, (2), 44 - 50.
- Keel, P. (Ed.). (1994). *Assessment in the Multi-Ethnic Primary Classroom*. Stoke-on-Trent: Trentham Books.
- Kenner, C. (1998). Keeping the Door open for Bilinguality: How can Schools Support Parents and Children? *Language Issues*, 10, (1), 4-7.

- Kenner, C. (1999). What meanings does Gujarati literacy hold for Meera, age seven? In H. South (Ed.), *Literacies in Community and School* (pp. 51 - 61). Watford, Hertfordshire: NALDIC.
- Kletzien, S. B., & Bednar, M. R. (1990). Dynamic assessment for at-risk readers. *Journal of Reading*, 33, (7), 528 - 533.
- Kysel, F. (1986). *Inner London Education Authority Statistics 1985 Language Census*. London: ILEA.
- Lacelle-Peterson, M. W., & Rivera, C. (1994). Is it real for all kids? A framework for equitable assessment policies for English language learners. *Harvard Educational Review*, 64, (1), 55 - 75.
- Lam, T. C. M. (1993). Testability: A Critical Issue in Testing Language Minority Students with Standardized Achievement Tests. *Measurement and Evaluation in Counselling and Development*, 26, 179-191.
- Lanauze, M., & Snow, C. (1989). The relation between first- and second-language writing skills: evidence from Puerto-Rican elementary school children in bilingual programs. *Linguistics and Education*, 1, 323 - 339.
- Landon, J. (1997, 20 October 1997). *Reading Between the Languages: Bilingual Learners and Specific Learning Difficulties*. Paper presented at the BDA Forum on Dyslexia and Bi/Multilingualism, London.
- Landon, J. (1999). Early intervention with bilingual learners: towards a research agenda. In H. South (Ed.), *Literacies in Community and School* (pp. 84 - 96). Watford, Hertfordshire: NALDIC.
- Lawrence, B., & Carter, J. (1999). The identification and assessment of dyslexia: class teachers' perception of the usefulness of the Dyslexia Screening Test for seven to eight year old pupils. *British Journal of Special Education*, 26, (2), 107 - 111.
- LCAS. (1999). *Enabling Progress in Multilingual Classrooms... towards inclusive education*. Enfield: Language and Curriculum Access Service.
- Leeds City Council Department of Education. (1992). *Leeds Pupil Achievement Survey (1992)*. Leeds: City Council.
- Leung, C. (1995, 27 - 28 April 1995). *An investigation of current practice in assessing stages of language acquisition*. Paper presented at the Invitational Conference on Teaching and Learning English as an Additional Language, London.
- Leung, C., Harris, R., & Rampton, B. (1997). The idealised native speaker, reified ethnicities and classroom realities. *TESOL Quarterly*, 31, (3), 543 - 560.
- Levine, J. (1990). *Bilingual Learners and the Mainstream Curriculum*. London: Falmer Press.
- Levy, P., & Goldstein, H. (1984). *Tests in Education*. London: Academic Press.
- Lewis-White, L. (1998). Assessing oracy and literacy in bilingual students: getting the whole picture. In B. Sturtevant, J. Dugan, P. Linder, & W. M. Linek (Eds.), *Literacy and Community* (pp. 147 - 175). Carrolton, Georgia: College Reading Association.
- Lindsay, G. (1998). Baseline Assessment: A positive or malign influence? In B. Norwich & G. Lindsay (Eds.), *Baseline Assessment: Benefits and Pitfalls* (pp. 8 - 40). Tamworth, Staffordshire: NASEN.
- Lindsay, G., & Wedell, K. (1982). The early identification of educationally "at risk" children. *Journal of Learning Difficulties*, 15, 212 - 217.
- Linguistic Minorities Project. (1985). *The Other Languages of England*. London: Routledge and Kegan Paul.

- Lipka, J. (1991). Toward a culturally based pedagogy: a case study of one Yupik Eskimo teacher. *Anthropology and Education Quarterly*, 22, 203 - 223.
- Luke, A., & Kale, J. (1997). Learning through difference: cultural practices in early childhood language socialisation. In E. Gregory (Ed.), *One Child, Many Worlds: Early Learning in Multicultural Communities* (pp. 11 - 30). London: David Fulton.
- Lyon, G. R. (1995). Toward a definition of dyslexia. *Annals of Dyslexia*, 45, 3 - 27.
- Lyons, C. A., Pinnell, G. S., & Deford, D. E. (1993). *Partners in Learning: Teachers and Children in Reading Recovery*. New York: Teachers College Press.
- Mackintosh, N. J., Mascie-Taylor, C. G. N., & West, A. M. (1988). West Indian and Asian children's educational attainment. In G. Verma & P. Pumfrey (Eds.), *Educational Attainments: Issues and Outcomes in Multicultural Education* (pp. 87 - 99). London: Falmer Press.
- Macmillan Test Unit (1985). *Macmillan Graded Word Recognition Test*. London: Macmillan.
- Macpherson Committee of Enquiry (1999). *Report of the Stephen Lawrence Enquiry*. London: Stationery Office.
- Marchant, H. G., Royer, J. M., & Greene, B. A. (1988). Superior reliability and validity for a new form of the sentence verification technique for measuring comprehension. *Educational and Psychological Measurement*, 48, 827 - 834.
- Martin-Jones, M., & Bhatt, A. (1999). Literacies in the lives of bilingual learners in local communities in Britain. In H. South (Ed.), *Literacies in community and school* (pp. 1 - 20). Watford, Hertfordshire: NALDIC.
- Mattes, L. J., & Omark, D. R. (1984). *Speech and Language Assessment for the Bilingual Handicapped*. San Diego, California: College Hill Press.
- McKay, P. (1996). *Assessment: issues and implications for the classroom*. Paper presented at the NALDIC Annual Conference 1996, University of Staffordshire, Stoke-on-Trent.
- McKenna, M. C., Kear, D. J., & Ellsworth, R. A. (1995). Children's attitudes towards reading: a national survey. *Reading Research Quarterly*, 30, (4), 934 - 956.
- McKenna, P. (1990). Learning implications of field dependence-independence: cognitive style versus cognitive ability. *Applied Cognitive Psychology*, 4, 425 - 437.
- McLaughlin, B. (1994). First and second language literacy in the late elementary grades. In B. McLeod (Ed.), *Language and Learning: Educating Linguistically Diverse Students* (pp. 179 - 198). Albany, New York: State University of New York Press.
- Mercer, J. R. (1973). *Labelling the Mentally Retarded*. Berkeley, C.A.: University of California Press.
- Mercer, J. R. (1979). *The System of Multicultural Pluralistic Assessment: Technical Manual*. New York: Psychological Corporation.
- Miles, T. R. (1983). *Bangor Dyslexia Test*. Wisbeach, Cambridgeshire: Learning Development Aids.
- Miles, T. R. (1997). *Bangor Dyslexia Test*. (Second ed.). Wisbeach, Cambridgeshire: Learning Development Aids.
- Miles, T. R. (1999, 17 - 19 June 1999). *Translation of the Bangor Dyslexia Test into different languages*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.
- Miles, T. R., & Miles, E. (1999). *Dyslexia a Hundred Years On*. (Second Edition ed.). Milton Keynes: Open University Press.

- Miller, N. (1984). Some observations concerning formal tests in cross-cultural settings. In N. Miller (Ed.), *Bilingualism and Language Disability* (pp. 107 - 114). London: Chapman and Hall.
- Miller-Guron, L. (1999a). *Wordchains (Research Edition)*. Windsor: NFER-Nelson.
- Miller-Guron, L. (1999b, 17 - 19 June 1999). *A cross-cultural study of word reading difficulties amongst primary school children - preliminary findings*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.
- Mills, J. (1994). Finding a Voice: Bilingual Classroom Assistants and their Role in Primary Schools. In A. Blackledge (Ed.), *Teaching Bilingual Children* (pp. 131-142). Stoke-on-Trent: Trentham Books.
- Mills, J. (1995). Bilingual children and their assessment through mother tongue. In M. K. Verma, K. P. Corrigan, & S. Firth (Eds.), *Working with Bilingual Children: Good Practice in the Primary Classroom* (pp. 143 - 153). Clevedon, Avon: Multilingual Matters.
- Mills, R. W., & Mills, J. (1993). *Bilingualism in the Primary School*. London: Routledge.
- Mobbs, M. C. (1997). *Children's Other Languages: Expertise, Affiliation and Language Use amongst Second-Generation British South Asian Pupils* (Occasional Paper 9). Watford, Hertfordshire: NALDIC.
- Moseley, D. (1997). Assessment of spelling and related aspects of written expression. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 204 - 223). London: Routledge.
- Moss, G. (1996). *Negotiated Literacies: How children enact what counts as reading in different social settings*. Unpublished Doctoral thesis, Open University, Milton Keynes.
- Muter, V., Hulme, C., & Snowling, M. (1997). *Phonological Abilities Test*. London: The Psychological Corporation.
- Nagy, W. E., Garcia, G. E., Durgunoglu, A. Y., & Hancin-Bhatt, B. (1993). Spanish-English bilingual students' use of cognates in English reading. *Journal of Reading Behaviour*, 25, 241 - 259.
- NALDIC. (1998). *NALDIC response to the draft proposals for Baseline Assessment*. Watford: National Association for Language Development in the Curriculum.
- NALDIC Working Group. (1998). *Provision in Literacy Hours for Pupils Learning English as an Additional Language*. Watford, Hertfordshire: NALDIC.
- Nation, K., & Snowling, M. (1997). Assessing reading difficulties: the validity and utility of current measures of reading skill. *British Journal of Educational Psychology*, 67, 359 - 370.
- Neale, M., Christophers, U., & Whetton, C. (1997). *Neale Analysis of Reading Ability*. (Second Revised British Edition ed.). Windsor: NFER-Nelson.
- Newton, M. J., & Thompson, M. E. (1982). *Aston Index*. (Revised ed.). Wisbeach, Cambridgeshire: Learning Development Aids.
- Nicolson, R., & Fawcett, A. (1990). Automaticity: a new framework for dyslexia research? *Cognition*, 30, 159 - 182.
- Oakhill, J. (1997a). Review of Neale Analysis of Reading Ability. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 312 - 313). London: Routledge.
- Oakhill, J. (1997b). Review of the Suffolk Reading Scale. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 324). London: Routledge.
- Oakhill, J. (1997c). Review of Wechsler Objective Dimensions Tests (Reading). In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 325 - 326). London: Routledge.

- Ochoa, S. H., Rivera, B., & Ford, L. (1997). An investigation of school psychology training pertaining to bilingual psycho-educational assessment of primarily Hispanic students: twenty five years after *Diana v. California*. *Journal of School Psychology, 35*, (4), 329 - 349.
- Ofsted. (1993). *Reading Recovery in New Zealand: A Report from Her Majesty's Chief Inspector of Schools*. London: HMSO.
- Ofsted. (1994). *Educational Support for Minority Ethnic Communities: A survey of educational provision funded under Section 11 of the 1996 Local Government Act (130/94/NS)*. London: Office for Standards in Education.
- Ofsted. (1997). *The Assessment of the Language Development of Bilingual Pupils (97/97/NS)*. London: Office for Standards in Education.
- Ofsted. (1998). *The National Literacy Project: An HMI Evaluation*. London: Office for Standards in Education.
- Ofsted. (1999). *Raising the Attainment of Minority Ethnic Pupils: School and LEA Responses*. London: HMSO.
- Ogwen, E. (1980). Learning to Read in a Bilingual Situation in Wales. *Journal of Multilingual and Multicultural Development, 1*, (4), 313-320.
- Ortiz, A. A., & Garcia, S. B. (1988). A prereferral process for preventing inappropriate referrals of Hispanic students to special education. In A. A. Ortiz & B. A. Ramirez (Eds.), *Schools and the Culturally Diverse Exceptional Student: Promising practices and future directions* (pp. 6 - 18). Reston, Virginia: Council for Exceptional Children.
- Ortiz, A. A., & Garcia, S. B. (1990). Using language assessment data for language and instructional planning for exceptional bilingual students. In A. L. Carrasquillo & R. E. Beecher (Eds.), *Teaching the Bilingual Special Education Student* (pp. 25 - 47). Norwood, New Jersey: Ablex Publishing Corp.
- Parke, T. (1991). Young Bilinguals Reading Aloud. *Reading, 25*(November), 18-21.
- Peer, L. (1996). *Dyslexic and Bi/Multilingual: In a class of their own - An international issue of educational significance*. Unpublished MA, Manchester Metropolitan University, Manchester.
- Pema, S., & Pattinson, N. (1991). Developing bilingual assessment tasks. In G. Lindsay & A. Miller (Eds.), *Psychological Services for Primary Schools* (pp. 27-43).
- Pena, E., R., Q., & Iglesias, A. (1992). The application of dynamic methods to language assessment: a nonbiased procedure. *Journal of Special Education, 26*, (3), 269 - 280.
- Phillips, C. J. (1989). Children's learning skills: a cautionary note on ethnic differences. *British Journal of Educational Psychology, 59*, 108 - 112.
- Phillips, C. J., & Marvelly, A. (1984). Basic educational attainments of Asian children at the end of infant schooling. *Educational Research, 26*, 36-45.
- Pritchard, R. (1990). The effects of cultural schemata on reading processing strategies. *Reading Research Quarterly, 25*, 273 - 295.
- Pumfrey, P. (1986). Measuring attitudes towards reading. In D. Vincent, A. K. Pugh, & G. Brooks (Eds.), *Assessing Reading: Proceedings of the UKRA Colloquium on the Testing and Assessment of Reading* (pp. 115 - 135). London: Macmillan Education.
- Pumfrey, P. D. (1976). *Reading: Tests and Assessment Techniques*. London: Hodder & Stoughton.
- Pumfrey, P. D. (1985). *Reading: Tests and Assessment Techniques*. (Second ed.). London: Hodder & Stoughton.



- Pumfrey, P. D. (1988). Monitoring the Reading Attainments of Children from Minority Ethnic Groups: LEA Practices. In G. Verma & P. Pumfrey (Eds.), *Educational Attainments: Issues and Outcomes in Multicultural Education* (pp. 16-35). Lewes: Falmer Press.
- Pumfrey, P. D. (1997a). Assessment of affective and motivational aspects of reading. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 160 - 175). London: Routledge.
- Pumfrey, P. D. (1997b). Review of the Bangor Dyslexia Test. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 290 - 291). London: Routledge.
- Pumfrey, P. D. (1997c). Review of the Dyslexia Screening Instrument. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 305 - 307). London: Routledge.
- Pumfrey, P. D., & Reason, R. (1991). *Specific Learning Difficulties (Dyslexia): Challenges and Responses*. London: Routledge.
- QCA. (1999). *Target setting and assessment in the National Literacy Strategy*. London: Qualifications and Curriculum Authority.
- Rampton, B. (1990). Displacing the "native speaker": expertise, affiliation and inheritance. *ELT Journal*, 44, 97 - 101.
- Rampton, B. (1996). Language crossing, new ethnicities and school. *English in Education*, 30, (2), 14 - 26.
- Rasekoala, E. (1997). Ethnic minorities and achievement: the fog clears. Part 1 (Pre-16 Compulsory Education). *Multicultural Teaching*, 15, (2), 23 - 29.
- Rea-Dickens, P., Gardner, S., & Clayton, E. (1998). Investigating EAL Language Assessment in an Early Years Bilingual Intervention Project (pp. 4). Unpublished ms.: University of Warwick.
- Reid, G. (1997). *Dyslexia: A Practitioner's Handbook*. (Second ed.). Chichester: John Wiley.
- Reynolds, C. R., & Kaiser, S. M. (1990). Test bias in psychological assessment. In T. B. Gutkin & C. R. Reynolds (Eds.), *The Handbook of School Psychology* (Second ed., pp. 487 - 525). New York: Wiley.
- Riding, R. J., & Cheema, I. (1991). Cognitive styles - an overview an integration. *Educational Psychology*, 11, 193 - 215.
- Riding, R. J., & Pearson, F. (1994). Cognitive style and pupil learning preferences. *Educational Psychology*, 14, 235 - 260.
- Riding, R. J., & Read, G. (1996). Cognitive style and pupil learning preferences. *Educational Psychology*, 16, 81 - 106.
- Robeiro, J. L. (1980). Testing Portuguese immigrant children - cultural patterns and group differences in response to the WISC-R. In D. P. Macedo (Ed.), *Issues in Portuguese Bilingual Education*. Cambridge, Massachusetts: Evaluation, Dissemination and Assessment Center, Lesley College.
- Robson, A. (1987). Bilingual Learners: School Based Assessment. *Gnosis*, 10, 33 - 36.
- Robson, A. (1995). The assessment of bilingual children. In M. K. Verma, K. P. Corrigan, & S. Firth (Eds.), *Working with Bilingual Children: Good Practice in the Primary Classroom* (pp. 28 - 47). Clevedon, Avon: Multilingual Matters.
- Rodriguez-Brown, F. V., & Yirchott, L. S. (1983). *A Comparative Analysis of Oral Reading Miscues made by Monolingual versus Bilingual Students*. Los Angeles: Evaluation, Dissemination and Assessment Center, California State University.

- Rose, J. (1999). *Weighing the Baby: Report of the Independent Scrutiny Panel on the 1999 Key Stage 2 National Curriculum tests in English and mathematics*. London: DfEE.
- Royer, J. M., Kulhavy, R. W., Lee, J. B., & Peterson, S. E. (1986). The sentence verification technique as a measure of listening and reading comprehension. *Educational and Psychological Measurement*, 6, 299- 314.
- Ruddell, R. B., & Unrau, N. J. (1994). Reading as a meaning-construction process: The reader, the text and the teacher. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical Models and Processes of Reading* (Fourth ed., pp. 996 - 1056). Newark, DE: International Reading Association.
- Ruiz, N. T. (1989). An optimal learning environment for Rosemary. *Exceptional Children*, 56, (2), 130-144.
- Rust, J., Golombok, S., & Trickey, G. (1993). *Wechsler Objective Reading Dimensions*. London: The Psychological Corporation.
- Sainsbury, M., Schagen, I., & Whetton, C. (1998). *Evaluation of the National Literacy Project: Cohort 1, 1996 - 1998*. Slough, Berkshire: National Foundation for Educational Research.
- Sawyer, C., & Potter, V. (1994). Estimating standardised scores for MIRA. *Educational Psychology in Practice*, 10, (4), 46 - 47.
- SCAA. (1997). *The National Framework for Baseline Assessment: Criteria and Procedures for the Accreditation of Baseline Assessment Schemes*. London: Schools Curriculum and Assessment Authority.
- Scarr, S., Caparulo, B. K., Ferdman, M., Tower, R. B., & Caplan, J. (1983). Developmental status and school achievements of minority and non-minority children from birth to 18 years in a British Midlands town. *British Journal of Developmental Psychology*, 1, 31-48.
- Seeff, B. (1999). *A Psycholinguistic Assessment of ESL Learner's English Vowel Processing in Relation to their English Spelling Difficulties*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.
- Sewell, T. E. (1987). Dynamic assessment as a nondiscriminatory procedure. In C. Schneider-Lidz (Ed.), *Dynamic Assessment: An interactional approach to evaluating learning potential* (pp. 426 - 443). New York: Guilford Press.
- Sheil, G., & Forde, P. (1995). Profiling Pupil Achievement in Language and Literacy: Current Issues and Trends. In B. Raban-Bisby, G. Brooks, & S. Wolfendale (Eds.), *Developing Language and Literacy* (pp. 147 - 160). Stoke-on-Trent: Trentham Books.
- Sheppard, J. R. (1987). Reading Tests in a Multicultural Context. *Newsletter of the BPS Division of Educational and Child Psychology*, 27, 20-21.
- Shorrocks, D., Daniels, S., Frobisher, L., Nelson, N., Waterson, A., & Bell, J. (1992). *ENCA 1 Project Report: The Evaluation of National Curriculum Assessment at Key Stage 1*. London: Schools Examinations and Assessment Council.
- Siegel, L. S. (1992). An evaluation of the discrepancy definition of dyslexia. *Journal of Learning Disabilities*, 25, 616 - 629.
- Singleton, C. (1993). A Stitch in time... *Special Children*, 62(Jan 93), 30-33.
- Singleton, C. (1997). Screening early literacy. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 67 - 101). London: Routledge.
- Singleton, C., & Fumoto, H. (1999, 17 - 19 June 1999). *Cognitive assessment of multilingual children with learning difficulties, using CoPS*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester.

- Singleton, C., Horne, J., & Thomas, K. (1999). Computerised baseline assessment of literacy. *Journal of Research in Reading*, 22, (1), 67-80.
- Singleton, C. H. (1988). The Early Diagnosis of Developmental Dyslexia. *Support for Learning*, 3, (2), 108-121.
- Siraj-Blatchford, I. (1994). *The Early Years: Laying the Foundations for Racial Equality*. Stoke-on-Trent: Trentham Books.
- Smith, D. (1998). Ideas for coping with the National Literacy Strategy if there are pupils with special educational needs in your class. In M. Hinson (Ed.), *Surviving the Literacy Hour* (pp. 19 - 24). Tamworth, Staffordshire: NASEN.
- Smith, P. (1995). A Framework for Literacy Assessment. In P. Owen & P. Pumfrey (Eds.), *Curriculum and Assessment Issues: Messages for Teachers. Children Learning to Read: International Concerns, Volume 2*. Bristol: Falmer Press, Taylor and Francis.
- Smythe, I., Everatt, J., & Gyarmarthy, E. (1999). *Dyslexia testing in an international context*. Paper presented at the Multilingualism and Dyslexia: BDA International Conference, Manchester (See also website: <http://web.online.co.uk/wdnf/edt.html>).
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing Reading Difficulties in Young Children*. Washington, D.C.: National Academy Press. (Available on-line at <http://www.nap.edu>).
- Snowling, M. (1995). Phonological processing and developmental dyslexia. *Journal of Research in Reading*, 18, 132 - 138.
- Snowling, M. (1998). Reading development and its difficulties. *Educational and Child Psychology*, 15, (2), 44 - 58.
- Solity, J., & Bull, S. (1987). *Special Needs: Bridging the Curriculum Gap*. Milton Keynes: Open University Press.
- South, H. (1997). *Ofsted Report: The Assessment of the Language Development of Bilingual Pupils - A Discussion Paper for NALDIC*. Watford, Hertfordshire: NALDIC.
- South, H. (1998). Provision for bilingual children at an early stage in their learning of English in nurseries. *NALDIC News*, 15, (May 1998), 15 - 18.
- Stanovich, K. E. (1991). The theoretical and practical consequences of discrepancy definitions of dyslexia. In M. Snowling & M. Thompson (Eds.), *Dyslexia: Integrating Theory and Practice*. London: Whurr.
- Stanovich, K. E. (1994). Does dyslexia exist? *Journal of Child Psychology and Psychiatry*, 35, 579-595.
- Stanovich, K. E. (1998). Refining the phonological core deficit model. *Child Psychology and Psychiatry Review*, 3, (1), 17 - 21.
- Stanovich, K. E., & Stanovich, P. J. (1997). Further thoughts on aptitude/achievement discrepancy. *Educational Psychology in Practice*, 13, (1), 3 - 8.
- Stothard, S. E., & Hulme, C. (1991). A note of caution concerning the Neale Analysis of Reading Ability (Revised). *British Journal of Educational Psychology*, 61, 226 - 229.
- Stott, D. H. (1978). *Helping Children with Learning Difficulties: A Diagnostic Teaching Approach*. London: Ward Lock.
- Stuart-Smith, J., & Martin, D. (1997). Investigating literacy and pre-literacy skills in Panjabi/English schoolchildren. *Educational Review*, 49, (2), 181-197.

- Tharp, R. G. (1989). Psychocultural variables and constants: effects on teaching and learning in schools. *American Psychologist*, 44, 349 - 359.
- Thomas, W. P., & Collier, V. (1997). *School Effectiveness for Bilingual Students*. Washington, DC: National Clearinghouse for Bilingual Education.
- Thomson, M. (1997). Review of British Ability Scales Word Reading Test. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 297 - 298). London: Routledge.
- Thordike, R. L., Hagen, E. P., & Sattler, J. M. (1986). *Cognitive Abilities Test (CAT)*. (Second ed.). Windsor, Berks.: NFER-Nelson.
- Tindall, G. A., & Marston, D. B. (1990). *Classroom-Based Assessment: Evaluating Instructional Outcomes*. Columbus, Ohio: Merrill Publishing Company.
- Tomlinson, S. (1981). *Educational Subnormality: A Study in Decision Making*. London: Routledge and Kegan Paul.
- Tomlinson, S. (1989). Asian pupils and special issues. *British Journal of Special Education*, 16, (3), 119 -122.
- Troyna, B., & Siraj-Blatchford, I. (1993). Providing support or denying access? The experiences of students designated as 'ESL' and 'SN' in a multiethnic secondary school. *Educational Review*, 45, (1), 3 - 11.
- Tucker, J. A. (1985). Curriculum based assessment: an introduction. *Exceptional Children*, 52, (3), 199 - 204.
- Turner, M. (1993a). Testing Times. *Special Children*, 65 (Apr 93), 12-16.
- Turner, M. (1993b). More Testing Times. *Special Children*, 66 (May 93), 12-13.
- Turner, M. (1994). Streamlining Raven. *Dyslexia Review*, 6, (3), 13 - 16.
- Turner, M. (1997). *Psychological Assessment of Dyslexia*. London: Whurr.
- Valdes, G., & Figueroa, R. A. (1994). *Bilingualism and Testing: A Special Case of Bias*. Norwood, New Jersey: Ablex Publishing Company.
- Valencia, R. R., & Rankin, R. J. (1988). Evidence of bias in predictive validity on the Kaufman Assessment Battery for Children in samples of Anglo and Mexican American children. *Psychology in the Schools*, 25, 257 - 263.
- Veasey, S. A. (1999). *The Identification and Assessment of Dyslexia/SpLD in pupils who have English as an Additional Language*. Unpublished MA, University of London, London.
- Verhoeven, L. T. (1987). Literacy in a second language context: teaching immigrant children to read. *Educational Review*, 39, 245 - 261.
- Verhoeven, L. T. (1990). Acquisition of reading in a second language. *Reading Research Quarterly*, 25, 90 - 114.
- Verma, G. K., & Pumfrey, P. D. (Eds.). (1988). *Educational Attainments: Issues and Outcomes in Multicultural Education*. Lewes: The Falmer Press.
- Verma, M. K., & Firth, S. (1995). The bilingual child - Learning and Teaching in Multicultural Contexts: Summary of the Open Forum for Participants' Contributions. In M. K. Verma, K. P. Corrigan, & S. Firth (Eds.), *Working with Bilingual Children: Good Practice in the Primary Classroom* (pp. 164 - 183). Clevedon, Avon: Multilingual Matters.

- Vincent, D. (1997). Assessment by classroom teachers. In J. R. Beech & C. Singleton (Eds.), *The Psychological Assessment of Reading* (pp. 27 - 48). London: Routledge.
- Vincent, D., & de la Mare, M. (1989). *Effective Reading Tests*. Slough: NFER-Nelson.
- Vincent, D., & de la Mare, M. (1990). *Macmillan Individual Reading Analysis*. London: Macmillan Education Ltd.
- Vincent, D., Green, L., Francis, J., & Powney, J. (1983). *A Review of Reading Tests*. Windsor: NFER-Nelson.
- Volk, D. (1994). A case study of parental involvement in the homes of three Puerto Rican kindergartners. *Journal of Educational Issues of Language Minority Students*, 1 - 25.
- Vygotsky, L. S. (1978). *Mind in Society: The development of higher psychological processes*: Harvard University Press.
- Wagner, R. K., & Torgesen, J. K. (1987). The nature of phonological processing and its causal role in the acquisition of reading skills. *Psychological Bulletin*, 101, 192 - 212.
- Wallace, C. (1988). *Learning to Read in a Multicultural Society: The Social Context of Second Language Literacy*. Hemel Hempstead, Hertfordshire: Prentice Hall.
- Wedell, K. (1998). Summary of discussions. In B. Norwich & G. Lindsay (Eds.), *Baseline Assessment: Benefits and Pitfalls* (pp. 61 - 64). Tamworth, Staffordshire: NASEN.
- Whetton, C. (1999). Personal Communication .
- White, J. (1998). The National Literacy Strategy and provision for children who are learning English as an additional language. *NALDIC News*, 15, 11 - 12.
- Wiliam, D. (1994). Creating matched National Curriculum Assessments in English and Welsh: test translation and parallel development. *The Curriculum Journal*, 5,(1), 17-29.
- Wimmer, H., & Goswami, U. (1994). The influence of orthographic consistency on reading development: word recognition in English and German children. *Cognition*, 51, 91 - 103.
- Wimmer, H., & Hummer, P. (1990). How German speaking first graders read and spell: doubts on the importance of the logographic stage. *Applied Psycholinguistics*, 11, 349 - 368.
- Winther, A. (1998). What may happen when individual needs of children from minority groups turn out to be "special needs"? In P. Gibbon & S. Scott (Eds.), *Meeting the Individual Needs of Children from Ethnic Minority Groups* (pp. 4 - 5). London: Intercultural Education Partnership.
- Witkin, H. A. (1978). *Cognitive Styles in Personal and Cultural Adaptation*. Worcester, Massachusetts: Clark University.
- Witkin, H. A., Moore, C., Goodenough, D. R., & Cox, P. W. (1977). Field-dependent and field-independent cognitive styles and their educational implications. *Review of Educational Research*, 47, 1 - 64.
- Wolfendale, S. (1998). Baseline assessment in respect of special educational needs, parental involvement and equal opportunities. In B. Norwich & G. Lindsay (Eds.), *Baseline Assessment: Benefits and Pitfalls* (pp. 45 - 53). Tamworth, Staffordshire: NASEN.
- Wood, R. (1991). *Assessment and Testing: A survey of research commissioned by the University of Cambridge Local Examinations Syndicate*. Cambridge: University of Cambridge Press.
- Wright, A. (1991). The assessment of bilingual pupils with reported learning difficulties: a hypothesis-testing approach. In T. Cline & N. Frederickson (Eds.), *Bilingual Pupils and the National*

*Curriculum: Overcoming Difficulties in Teaching and Learning* (pp. 185 - 192). London: University College London Department of Psychology.

Young, R., Shermis, M. D., Brutton, S. R., & Perkins, K. (1996). From Conventional to Computer-Adaptive Testing of ESL Reading Comprehension. *System*, 24(1), 23-40.

Ysseldyke, J., & Christenson, S. (1993). *TIES-II: The Instructional Environment System-II*. Longmont, CO: Sopris West Inc.