

5 | Pupils: Similarities versus Differences

Part 1 Research: Individual Differences

One very popular assumption made by teachers and other professionals is that a mixed-method approach is required in order to meet the needs of *individual* children. It has already been seen, however, that in reality the mixture of methods now in use represent largely just one way of teaching reading, the whole-word, 'meaning-emphasis' (memory-emphasis) approach. These methods of teaching are also viewed as child-centred. Children are permitted to learn at their own pace often working individually on their own projects and activities, they are encouraged to choose their own books and write about what interests them personally. Teacher-directed activities are regarded as less important than individual enquiry, which allegedly results in more meaningful learning experiences.

Propounding a mixed-method philosophy, however, achieves the goal of shifting emphasis away from children's similarities and common needs to their differences. Instead of concentrating on similar ways in which all children can be taught to read, it is, instead, deemed necessary to find different methods to suit individual children. This attitude also effectively shifts blame from the possibility of flaws in the instructional setting to flaws in the child. When explaining poor reading standards, apart from blaming the government for overloading the curriculum, various child factors are named as likely contributing influences. Since there is supposedly no one method of reading instruction being used to teach reading, there is no one method of instruction that can be blamed. The quality of teaching escapes critical examination, and the individual characteristics of children become the focus. Child factors blamed include: individual learning styles (visual or auditory), individual differences (psychological and ability), socioeconomic differences, particular reading disabilities and gender differences.

But to what extent are these factors to blame, when the shortcomings of the instructional setting are recognised and taken into account?

The Myth of Individual Learning Styles

It is often assumed that whole-word methods are good for the visual learner, while a code-emphasis approach is good for the auditorially attuned. Although there have been many empirical studies addressing this issue, there is absolutely no evidence of an interaction between method and preferred learning style (Arter & Jenkins, 1977; Groff, 1979; Liberman & Liberman, 1992; Stahl, 1988). If the notion that children have individual styles of learning is not an issue then, both whole-word (supposedly catering to visual learners) or code-emphasis (supposedly catering to auditory learners) approaches should be suitable for early reading instruction. This, however, is not the case.

As pointed out in earlier chapters, compared to whole-word methods, code-emphasis approaches result in faster and superior reading progress. Among the reasons why code-emphasis approaches are more effective is the fact that certain types of linguistic skills, *both* visual and auditory, are required in learning how to read. Whole-word methods assume that learning to read is a visual process. However, as is shown by the research on the importance of being phonologically aware or being able to *detect speech sounds*, and the importance of *relating speech sounds* to printed symbols (letters), the process of learning to read is much more reliant on the skills of *hearing* than seeing.

Code-emphasis or phonics instruction specifically addresses the fundamental nature of the reading process; such instruction focuses attention not only on the development of a child's speech sound awareness, but also on the development of a child's ability to relate the alphabetical symbols to speech sounds. Whole-word methods, on the other hand, do neither. Whole-word methods concentrate on the learning of words as whole visual shapes, as if they were pictures; but visual skills are not extended to examining the interior details of words such as the shapes of individual letters or familiar spelling patterns. While the emphasis is on remembering visual shapes, some auditory skills are developed; these involve listening comprehension of stories read by the teacher, and recall of whole words pronounced by an adult reader. But

whole-word methods both ignore the elemental importance of developing phoneme awareness as a requisite reading skill as well as fail to teach children the specifics of how letters and speech sounds are related.

Although studies show that a strong reliance on the visual mode is often detrimental to the process of learning to read (McGuinness, 1981), research has also demonstrated that what is required is not merely the ability to learn across both auditory and visual domains, but the ability to learn *a particular type* of auditory response (to do with speech sounds), as well as *a particular type* of visual response (involving letters *and* speech sounds) (Stevenson, Parker, & Wilkinson, 1976). These findings help to explain why investigations have found that, regardless of children's auditory or visual capacities, higher reading achievement is produced by phonics-emphasis programmes than through the use of whole-word, meaning-emphasis schemes (Harris, Serwer, Gold, & Morrison, 1967).

Individual Differences Augmented by Classroom Setting

It is commonly believed that child-centred approaches where children direct their own learning are merited on the basis that children will learn more and be happier in an environment where their individual differences in ability, in their own particular interests, or in their levels of emotional development are taken into account and catered to.

However, where efficiency of learning is the aim, direct instruction results in superior effects in comparison to discovery or learner-centred methods of teaching. Teacher-led activities are found to be strongly associated with higher levels of pupil concentration and engagement, which, in turn, are directly related to the learning that results (Rosenshine & Stevens, 1984; Yates & Yates, 1993). In fact, there is a great deal of evidence that teaching methods whereby the teacher sets the pace, sets the standards and teaches the class as a whole tend to achieve better results than teaching methods that emphasise pupil-directed learning and/or individual consultations with children (Gutierrez & Slavin, 1992).

Children's reading achievement is better, for example, when they receive direct group, or whole class code-emphasis teaching, regardless of their ability, simply because they are

receiving more systematic and comprehensive instruction from the teacher (of the kind that is needed) than is possible under individualised, whole-word teaching régimes. Many studies have shown this to be the case (for reviews, see Adams & Bruck, 1993; Jorm & Share, 1983; Schickedanz, 1990). Even if the instruction received is not tailored perfectly to suit the needs of each individual child, if a pupil is exposed to more direct teaching, it is likely that more learning will result.

Two further factors help to explain the superior achievement produced by code-emphasis instruction. First, children in code-oriented classrooms become independent readers sooner than those in whole-word classrooms and the sooner a child is able to read independently the sooner he or she will begin to benefit from the many positive spin-off effects that reading practice brings.

Second, differences in reading methods mean that those in code-oriented classrooms are given more opportunity for teacher-directed reading practice than those in whole-word classrooms. Every child in a 'real books' or whole-word classroom is likely to be 'reading' a different book, whereas those in a code-oriented classroom are likely to be reading either the same book as many others in a group or the same book as the rest of the class. These differences in teaching method mean that a teacher in a whole-word or 'real books' classroom is faced with the difficulty of having to 'hear' children read on a very time-consuming, individualised basis, and, at the same time, constantly trying to arrange the most appropriate practice for each child; in a code-oriented classroom, however, the teacher is able to hear a group of six to eight children read all at once. (Children in a group taking turns to read are in effect all reading at once because they are all reading silently as they follow what is read orally.) Thus, children in a whole-word setting, having to rely on one-to-one adult help for reading practice (which is necessarily limited in availability), not only suffer the effects of a slower start in reading but they also make very slow progress towards becoming better readers once they do begin to grasp the alphabetic principle.

A survey undertaken by Reading University explored the effects of traditional classroom organisation versus progressive methods where 'for the past twenty years most classes have had pupils sitting in groups for much of their

work' (Hastings & Schwieso, 1995). The results showed that traditional seating of pupils in rows led to increased time on task, ranging from as much as one-third to double the amount of time spent working productively. Seated in groups, children were found to talk to each other more, have difficulty seeing the blackboard, become easily distracted and more often behave disruptively. Seated in rows, pupils concentrated better, could see the blackboard more easily, were less distracted and were better behaved.

Boys, compared to girls, are at a disadvantage in noisy, whole-word, meaning-emphasis classrooms. Boys are at greater risk of dyslexia and it has been shown that dyslexics' performance is particularly, and adversely, affected by noise (Nicholson & Fawcett, 1990). It has been documented that in whole-language, child-centred classrooms there is far more talking and generally higher noise levels than in code-emphasis, teacher-directed classrooms (Stahl & Miller, 1989). It is extraneous speech in particular that disrupts working memory in dyslexics (Ackerman & Dykman, 1993), so that children working in small groups, or the teacher's speaking with another group, television or radio in the background, are noted as situations that will have deleterious interference effects on dyslexics' reading ability.

On the other hand, it has been suggested that boys may perform badly in relation to girls in child-centred, whole language classrooms because girls are better at the language and communication skills being emphasised. However, among cognitive sex differences, the magnitude of the sex difference in verbal ability is very small; in fact, it is estimated that it is probably the smallest among the cognitive sex differences (Halpern, 1992). Additionally, the chances are that it is the boys who are practising their language and communication skills far more than girls since some studies find that boys dominate teachers' time in nearly all classroom situations (for reviews, Reid & Stratta, 1989). Thus when considering what factors may contribute to early sex differences in reading, the amount of time communication skills are being practised by each sex may be a factor to be discounted, whereas the differences between the sexes in their distractibility due to noise, and in particular extraneous speech, may be important.

As far as the individual emotional welfare of children is concerned, there is no evidence that children are happier or

have more positive attitudes towards reading in a whole-language, individualised setting (McKenna, Stratton, Grindler, & Jenkins, 1995; Stahl, McKenna, & Pagnucco, 1994). In fact, studies show that self-esteem is related more to levels of achievement. In a study involving 9,000 children aged 6 to 8 years, the relationship between academic performance and self-esteem was investigated; it was found that the teaching approaches that produce the highest achievement scores on basic skills, also produced the highest scores on self-esteem (Moeller, 1993, 1994). In classrooms where children receive little direct teaching, the reading performance of many will suffer; poor reading achievement is found to be associated with poor self-esteem, low motivation, apathy or anger (Brunner, 1993; Kline, 1994; Stuart, 1995).

Socio-economic Differences

The current debate about school league tables centres on the unfairness of comparing achievement of children from different social backgrounds, and of comparing children who start off with very different skills and levels of knowledge upon entering school. The assumption that expectations of achievement should be lower for socially disadvantaged children is challenged by several researchers. A NFER report (Cato & Whetton, 1991) which examined the test results of 7-year-olds in England and Wales found that there was no evidence that the decline, occurring in 73% of the twenty-six LEAs' reading scores, was an inner-city phenomenon. In another study, an analysis of the GCSE results of almost 12,000 state school students revealed that socioeconomic factors did not play a rôle, except in a very few schools where there were a high proportion of disadvantaged students (Sammons, Thomas, Mortimore, Owen, Pennell, 1994).

What researchers have found, however, is that differences in results are related to whether students are taught in the most effective or least effective schools. Another report found, for example, that while pupils entitled to free school meals are likely to do less well in their GCSEs, the particular school attended has an even greater impact on GCSE attainment (Thomas, Pau, & Goldstein, 1994). In one study examining school and pupil factors it was found that effective schools raise reading attainment between the ages of 7 and 10 for all pupils regardless of background factors or prior attainment, while less effective schools appear to depress later reading

attainment for all pupils (Sammons, Nuttall, & Cuttance, 1993). Others have found that while only 2% of the variance in third-year reading attainment is due to background factors once initial attainment is accounted for, just over 9% of the variance in reading attainment can be attributed to the influence of the particular school (Mortimore, Sammons, Stoll, Ecob, & Lewis, 1988).

Tizard and others (1988) found no relationship between reading progress and social background, and no relationship between frequency of reading at home with parents and reading achievement. Others have concluded after reviewing a substantial amount of research in this area that there is no convincing evidence that parental help with reading at home results in better reading progress at school (White, Taylor, & Moss, 1992).*

Schools that provide effective reading instruction can be powerful in mitigating the effects of social disadvantage. A report from Suffolk (HMI, 1991) showed falls in reading scores of both disadvantaged and other groups of primary children, and warned against schools using social factors as the only explanation of reading performance. It was concluded, for example, in a study conducted in Canada in thirty-six classrooms of 5- and 6-year-old children, that none of the factors such as poverty, unemployment, single-parent families, English as a second language, or lack of books at home had inevitably to result in low reading attainment (Willows, 1996). The schools involved in this study were selected because they were attended by children from homes characterised by many of the disadvantages listed. After one group of children was taught using a British-designed phonics programme, and a control group of children was taught using the unstructured, whole-word based methods already in place, there were dramatic differences in the way each group could

* One curious exception to such conclusions was found in an Israeli study. Look-and-say methods were adopted in the schools with the result that most of the children learnt to read well, but some did not. Upon investigation, it was discovered that parents of the good readers were literate in Hebrew, and worried about their children's poor reading progress at school, had helped them overcome their initial reading difficulties with substantial amounts of letter-phoneme teaching at home; parents of failing readers, however, were new immigrants, not literate in Hebrew, and were unable to intervene in the schooling process (Feitelson, 1973).

read and spell. The results of this study were so convincing that three large education authorities in Toronto decided to use the phonics programme in all their schools.

This research provides evidence that there is simply no justification for assuming an inevitable link must always arise between social factors and educational attainment. Researchers who have conducted studies addressing this issue have warned against attributing reading difficulties to family or social background (Blachman, 1987; Read & Ruyter, 1985), and failing to recognise the importance of the instructional setting; in relation to reading progress, the type, the sequence, and the quality of instruction are crucial.

What of the possibility that a child's phonological skills, the most significant predictor of reading success, might be influenced by social background? Even in considering this possibility, studies have failed to find a convincing relationship between social background variables and the development of phonological skills in preschool children (Maclean et al., 1987; Tunmer, 1991). Jorm and others (1984) found no significant differences in phonological abilities between children of differing socioeconomic status. Once formal schooling begins, those children who do have poor phonological awareness can be trained so that initial differences in this area can be largely overcome. Research demonstrates, for example, that reading programmes which develop phonological awareness and which are found to be superior with one group of children tend to be superior with all groups of children, regardless of their intelligence or prior reading-related experiences (Alegria et al., 1982; Blachman et al., 1994). As Ehri (1989) points out, individual differences in phonological awareness ability influence reading development only when 'the instructional method is inadequate' (p. 361).

What influence do economic factors have on reading standards? Lack of funding is widely held to influence academic standards. In the years during which the Conservative government has been in power in England, educational expenditure has increased 50% per pupil (DES, 1992a), class sizes have decreased overall, and the teacher/pupil ratio in primary schools is relatively stable, an average of 22.7 in 1980 compared to 22.4 in 1993 (Government Statistical Service, 1994a). Reading standards among 7-year-olds, however, have not improved during this period, as we noted in the introduction they have significantly declined.

Particular Reading Disabilities

(a) Reading Failure and Remediation

If some children fail to learn how to read while others succeed, does this not indicate that children are indeed very different and need to be taught in different ways? Research investigating reading methods clearly indicates that failure can be avoided; if, instead of focusing on individual differences, children's common needs are taken into account, virtually all children can be taught to read within the first few months of school.

In fact, one study shows that instructional methods which are concerned primarily with children's individual differences result, paradoxically, in a substantial *increase* in the range of differences; within a class the overall spread in reading abilities, for example, becomes noticeably larger. Burkard (1996) found that such methods result in a greater proportion of very poor readers, lengthening the tail of under-achievers who trail far behind the average. In Suffolk primary schools where such methods are in use standardised testing reveals that the average proportion of children whose reading attainment is more than a year and a half behind is 15%; this is large in contrast to one school in Suffolk (Woods Loke) where common needs are the focus and systematic phonics is taught to the whole class in the first few weeks of school. At this school the average proportion of children in this category is only 1%. Furthermore, within the tail of under-achievers, 35% of children in Suffolk schools are six months retarded in their reading compared to only 8% at Woods Loke school.

On the other hand, children who fail to make reading progress in their first year at school will begin a downward cycle, falling further and further behind. Indeed, these children may struggle all their school lives to make up for this very serious initial delay.

Even if specialist help is eventually secured, it is more difficult to teach a child to read as the time passes, as ineffective habits and negative attitudes become more and more ingrained. These are the children who may have had a long history of using inefficient, whole-word strategies to tackle print. Difficulty may arise weaning these children from their heavy reliance on context and sight word reading.

One study, where children were identified as 'Chinese' (whole-word readers) or 'Phoenicians' (alphabetic decoders),

monitored this problem (Byrne et al., 1992). Results showed that over a three-year period, Phoenicians improve while Chinese decline in their ability to read both regular (easily decodable) as well as irregular words (the kind of words best suited to whole-word readers). These findings illustrate how whole-word or visual cue reading might serve a child adequately until the age of 7, but still result in inferior reading progress over the long term.

Timing of instruction may be critical in helping children through the sequence of necessary reading stages. It has been suggested that phonological awareness may have 'a maturational component', or a critical period (Mann, 1991b; Silver & Hagin, 1990). Some children are aware of phonemes before they learn to read and before being exposed to alphabetic knowledge, whereas illiterate adults do not have this awareness (Mann, 1991b; Morais et al., 1987; Wagner & Torgesen, 1987). Exposure to an alphabetic system and to phonics methods, in particular, facilitates the development of phonological awareness (Alegria & Morais, 1991; Ellis, 1993; Jorm et al., 1984; Juel, 1988; Lundberg et al., 1988), but children, compared to adults, appear to have a 'window' of opportunity where it is easier for them to acquire and make use of the necessary phonological skills.

Indeed, waiting until children are in trouble is a serious mistake. Many remedial reading programmes produce only slow progress, and gains achieved in the short term may not be retained over the long term. In the case of the Reading Recovery programme, for example, measurements taken twelve months after intervention revealed no significant differences between groups (Glynn et al, 1989); any effects found initially were not maintained.

(b) Reading Recovery Programme

A vivid warning of the political dangers of assuming there will be individual differences in learning to read - and in particular, that some children will later need remedial help - comes from the example of Reading Recovery. Not only is Reading Recovery expensive, evidence suggests that it is limited in its effectiveness. Reading Recovery costs £800 to £1000 per child for the individual tutoring, and there are additional costs as well. Teachers are trained for a year before

they become tutors and others are trained and hired to integrate and administer the programme.

An early intervention programme for children who have failed to make reading progress after one year in school, Reading Recovery was designed originally for use in New Zealand schools where whole-language methods are widely adopted. Its use has since spread to a number of other countries. The programme involves the use of 'real books', writing activities, and some phonics of the incidental and opportunistic variety. It differs little from the 'mixture' of methods most children are currently experiencing except that since the instruction is given privately on a one-to-one basis it exerts less pressure on the teacher. That is, the teacher does not have to be in 25 different places at once trying to deliver it. However, its effectiveness has not been adequately evaluated under conditions of stringent empirical research.

Studies which have attempted to establish its effectiveness have been criticised by a number of researchers for their flawed methodology (Center et al., 1992; Chapman & Tunmer, 1991; Nicholson, 1989; Shanahan, 1987). Although all criticisms do not apply to all studies, some of these criticisms include:

1. In most cases, only the Clay battery of tests was used to measure results, and no standardised measures, which would allow generalisations about reading skills, were used.
2. In isolated cases where standardised measures were used (Burt Graded Word Reading Test used in England), the *non reading recovery* children scored significantly higher in spite of there being no differences between groups on this test at the start (Hall, 1994). In one case, where another test outside the Clay battery of tests was used (a measure of syntactic awareness), there was no difference between groups on the post-test.
3. The use of the Clay battery of tests to assess reading ability has been questioned since they simply measure the specific skills taught in the programme; none of these tests measure knowledge that is significantly correlated with the ability to read connected text; a non-word or pseudo-word reading test, regarded as the most accurate measure in the research literature (Iversen & Tunmer, 1993), is not used.

4. Positive gain in text level has often been reported for the Reading Recovery children. However, comparison of gain scores is inappropriate. The comparison groups began with books containing much more text than the simple picture books of the RR children, and as a result, the average gain for those on the higher level texts was much lower than the average gain for those beginning on the lower-level texts.
5. Reading Recovery results have been inflated since they have been based only on those children who were successful in the programme, and the 25-30% of children who failed to benefit and were withdrawn during the studies were excluded from the data analyses.
6. *Serious* failure to assign children randomly to experimental or control group has been criticised; groups being compared were not equivalent. Groups were not equal in terms of quality of instruction: the RR teachers were more experienced and better trained, and individual instruction was compared with group instruction.
7. Statistical measures used were not as stringent or appropriate as they should have been.
8. Claims that children had achieved the target reading level of 'average' among their peers at completion of the programme are questioned since the comparison children referred to were not the average readers but the poorer readers.

Children who are having problems learning how to read are particularly deficient in decoding skills, and programmes which emphasise these skills achieve better and/or quicker results (Adams & Bruck, 1993; Iversen & Tunmer, 1993). Contrary to expressed opinion (Wright, 1994a; Beard, 1994), that Reading Recovery is the only suitable programme available, there are a number of alternative programmes available with proven effectiveness. Some of these programmes are better alternatives, not only in terms of cost, but because, in line with experimental research, they focus primarily on developing phonological awareness and decoding skills, skills that Reading Recovery has been criticised for failing to address (Adams, 1990; Center et al., 1992; Glynn et al., 1989).

Available programmes include: Williams' programme for learning-disabled children (1979, 1980); Wallach and

Wallach's tutoring programme (1976); the highly successful Distar programmes, *Reading Mastery* and *Corrective Reading*, which were originally aimed at disadvantaged children and which achieve extremely impressive long-term results (Engelmann & Bruner, 1983), and the *Units of Sound* (Dyslexia Institute, 1996), *Phonics 44* (Morris, 1983), *Alpha to Omega* (Hornsby & Shear, 1980), *Step by Step* (McNee, 1990), *Butterfly* (Tyk, 1993), *THRASS* (Davies & Ritchie, 1996), *Toe by Toe* (Cowling, 1994), and *SoundWorks* (Open School, 1995) programmes, each of which has a proven record for helping backward or dyslexic readers. Other useful resources include the *Morris-Montessori Word List* (Morris, 1990, 1994), and *The Phonics Handbook* (Lloyd, 1992).

The reading levels of 8-year-old Scottish children, taught by phonics, were compared with those of children in New Zealand, taught by whole-language methods (Johnston & Thompson, 1989). New Zealand is a country where Marie Clay expects that '30 to 50 percent' of children will need Reading Recovery (extra whole-language) treatment (Clay, 1985, p. 18). Among the Scottish children, there were fewer poor readers and the average reading level was six months higher than that attained by the New Zealand children. The results of this study suggest that there would be many fewer children in need of remedial teaching in England if at the beginning of primary school a *Phonic Prevention* programme were to be adopted by all schools.

Since all children must acquire the alphabetic principle when learning how to read, it is perhaps not surprising that programmes which address this issue are the most effective.

Indeed, one danger of remedial programmes is that they may masquerade as mixed or eclectic in approach, when in fact the instruction merely represents an increased diet of context and whole words. Clay (1985, 1991), for example, argues in defence of the Reading Recovery programme (in direct contrast to research findings) that it is unnecessary to teach alphabetic coding skills directly and that such knowledge can be developed effectively through writing activities as children try to spell words.

However, Iversen and Tunmer (1993) have shown that such an assumption is in error. They found that a modified Reading Recovery programme (which provided systematic letter-sound instruction) was almost 40% more effective than the standard

Reading Recovery programme (which provided only incidental phonics instruction in combination with writing activities). Those in the modified programme reached the same levels of achievement much earlier than those in the standard programme, within an average of forty-one lessons as opposed to fifty-seven lessons. Iversen and Tunmer suggest that even greater efficiency would result if alphabetic training were introduced at the start of the programme rather than delaying for ten or more lessons (a standard procedure adopted in Reading Recovery, where no instruction takes place for the initial two weeks while the teacher spends time 'roaming around the known').

(c) Dyslexia

Some children, approximately 4% of the population in the United Kingdom, are dyslexic (Brooks, 1994; Peer, 1994).^{*} This 4% translates to only one dyslexic child per classroom, and even dyslexics can learn to read with the appropriate instruction. Ehri (1989) goes so far as to state: 'Inadequate instruction spawning limited reading and spelling development and limited phonological awareness is the primary cause of the dyslexics' reading disability' (p. 356).

Badian (1994) defines two types of poor readers: dyslexics, or those who have a discrepancy between their IQ and reading level (IQ can range from high to low but does not match reading level), and poor, backward readers, or slow learners (those that have below average intelligence and poor reading skills to match). Researchers investigating reading disabilities have convincingly argued, with over twenty years of research to support their view, that phonological processing deficiencies are the hallmark of both of these types of disabled readers (for reviews, see Hurford et al., 1994; Pennington, 1991; Snowling, 1995; Wagner & Torgesen, 1987). Research using non-word or pseudo-word tests to measure reading ability shows that both these types of disabled readers share an insensitivity to speech sounds and to sound/symbol relationships (Badian, 1994; Liberman & Shankweiler, 1991; Stanovich, 1988; Vellutino, 1979).

* The term dyslexia, derived from Greek origins, strictly means difficulty with speech; it is often confused, however, with the Latin term to read, and has therefore come to mean difficulty with reading (Brown, *The New Shorter Oxford English Dictionary*, 1993).

Dyslexics, however, do differ from ordinary backward readers. As well as suffering from more severe phonological deficits, dyslexics are poorer in other tasks which involve primarily left-hemisphere language processing, or the integration of right- and left-brain processing: for example, tasks such as automatic word recognition or naming speed (which involve linking visual information with phonological information retrieved from short-term memory), or orthographic processing (which involves recognising and then naming which letters in a sequence are reversed) (Badian, 1994; Bowers & Swanson, 1991; Felton & Brown, 1990; Holmes, 1994; Snowling, 1995). Dyslexics are also found to be impaired on tasks requiring long-term memory, such as remembering the months of the year or multiplication tables. Thus, although dyslexics' three areas of weakness are phonological awareness, naming, and verbal memory, the last two are not unrelated to the first since they both involve retrieving phonological information (usually stored in language areas within the left hemisphere) from memory.

Dyslexics' difficulties in these areas are related to the findings of other studies which involve the use of sophisticated equipment to investigate how the brain behaves during various processing tasks. Although research in this area is constantly changing and at this point inconclusive, to date a number of studies have produced evidence which suggests that dyslexics have difficulty shifting from right- to left-hemisphere processing, once the right side of the brain has been activated. If a letter or a numeral is shown to the subject, areas in both the right and the left posterior parietal-occipital regions of the brain are activated along with other areas in the right hemisphere (Hynd, 1992; Harter, 1991; Kershner & Micallef, 1991; Pumfrey & Reason, 1991), but naming requires processing which occurs in central language areas of the left hemisphere. Speed of shift appears to be affected in dyslexics. It is suggested that dyslexics may be susceptible to 'an exuberance of right hemisphere activation which, in turn, interferes specifically with the development of phonological skills by the left hemisphere' (Kershner & Micallef, 1991, p. 408).

Results of further investigations in this area (reviewed by Obrzut, 1991) support the view that dyslexic children appear to experience an 'attentional dysfunction' which interferes with left-hemisphere language processing. In one

investigation, Rumsey and others (1992) found that, in contrast to non-dyslexic control subjects, severely disabled males with dyslexia failed to activate a region in the left hemisphere while performing a rhyme detection task. Another investigation found that unlike normal readers, dyslexics responded to linguistic stimuli as if they were non-linguistic stimuli (with right-hemisphere activity) (Landwehrmeyer, Gerling, and Wallesch, 1990). These findings coincide with the evidence that dyslexics have difficulties with short-term memory tasks, finding is easier, for example, to remember a short word than a longer word, or finding that their performance on one task is adversely affected if asked to perform another task at the same time (Nicholson & Fawcett, 1990).

In further support of this research, investigations comparing the neuroanatomy of dyslexics' brains with the brains of normal subjects (both at autopsy and in live subjects) have found evidence that dyslexics' brains may differ in a number of respects (for review, see Gallaburda, 1994; Flowers, 1993; Obrzut, 1991; Pennington, 1991), and in various aspects that would help to explain the speed-of-shift difficulties, and weak or unstable left-hemisphere processing that dyslexics appear to suffer from.

Finally, it would appear that boys have more difficulty with this problem. Estimates of the ratio of boys to girls who are dyslexic range from 5 or 6:1 in remedial settings (Finucci & Childs, 1981; Halpern, 1992) to 2 or 3:1 in school populations (for review, see Stevenson, 1992). In some research populations, the ratio of males to females with dyslexia may approach equality, but Feldman and others (1995) explain why this finding is unusual. They conclude from the evidence that female compared to male dyslexics are better able to overcome their reading impairment, they exhibit different patterns of reading skills, and their impairments are usually less severe. Thus, to some degree at least, the method of instruction used to teach beginners to read may be especially critical for boys, since it is suggested that being female acts as a 'protective factor' while being male is a 'potential liability' (Feldman et al., 1995, p. 160).

(d) Instructional Implications for At-Risk Readers

These findings have significant implications for instruction. First, if all types of poorer readers suffer from phonological

deficiencies, and as pointed out earlier are unable to gain alphabetic insights for themselves, instruction which develops these skills should be stressed. This means that the sort of instruction which draws attention to speech sounds and the explicit connections between these sounds and letters in a structured, systematic, and intensive manner would be of benefit. Indeed a great deal of research has shown precisely this to be the case; all of the at-risk children in these studies were successfully taught to read using code-emphasis instruction (Ball & Blachman, 1988; Johnston & Holligan, 1991; Stoner, 1991).

It has been suggested that whole-word instruction is not particularly appropriate for disabled readers (Henry, 1991; Liberman & Liberman, 1990; Lyon, 1992; Mather, 1992); in fact, poorer readers appear to be relatively competent with top-down, meaning-emphasis processes (Stanovich, 1991). Some studies have demonstrated, for instance, that poor readers lacking in phonological skills achieve surprisingly high levels of performance on tests of right hemisphere visuospatial skills (Harter, 1991; Mann, 1991a). Kershner & Micallef (1991) found that dyslexic children who were better at recalling information presented to their left ear (and therefore, to their right hemisphere) were more disabled in pseudoword reading (a task performed by the left hemisphere). Structured, systematic, phonics instruction, which provides disabled readers with training in the area of their weakness (phonological skills), has been shown to produce superior reading performance with at-risk children compared to context-emphasis instruction (Brown & Felton, 1990).

Secondly, if dyslexics suffer from particular difficulties shifting their attention from visual to phonological stimuli, then instruction which plays down the visuospatial and concentrates on the phonological aspects should help to avoid these problems. Whole-word instruction (emphasising visual shapes), along with the guess-the-word-by-looking-at-the-picture strategy (activating visuospatial processing) is precisely the sort of instruction that one would expect to worsen this particular problem in dyslexics; as the research evidence suggests, overactivation of visuospatial processing in dyslexics can interfere with their ability to perform phonological tasks. And indeed, other research evidence

confirms that educational practices such as these may contribute to the development of reading problems (Brown & Felton, 1990; Calfee, 1983).

To help these children avoid the danger of becoming mired in the use of logographic strategies, recognising words purely by selective association, or by their visual peculiarities (Gough, 1993), it is important, in particular for these at risk children, that systematic and intensive code-emphasis instruction is provided. Researchers caution that some children, especially those poor in rapid naming ability as well as phonological skills, will need long-term intensive treatment (Blachman, 1994). The danger is that these children may not get the help they need when they do not respond as quickly as others to instruction.

Gender Differences

Are there differences between the sexes which imply that instruction should be designed differently to meet their individual needs? There are a number of differences between girls and boys that relate to reading instruction.

First, as outlined above, boys are more at risk of developing dyslexia than girls; it is frequently noted in the literature reviewing sex differences in reading that boys are more likely than girls to have problems learning to read (Halpern, 1992; Kail, 1992). Thus, boys more than girls, may be susceptible to some of the further ramifications associated with dyslexia: they may be more distracted by extraneous noise, particularly speech, during learning tasks, they may be more susceptible to picture effects, the wide range of bright and colourful illustrations in their readers distracting their attention from the decoding task. They may be more vulnerable to an over-exuberance of right-hemisphere processing in response to instruction which emphasises the shape or length of words and thus, the development of left-hemispheric phonological skills may be more at risk of interference.

Second, developmental differences between girls and boys may put boys more at risk of reading problems. Cerebral lateralisation for language-related, left-hemispheric tasks is present in girls at 5 years, but begins to develop later in boys, around age 6 (Buffery, 1976; Knights & Bakker, 1979; Halpern, 1992). A study in Australia, for example, found that up until the age of 7.5 years males are about eight months

behind females in their visual attention span (VAS) level; VAS is defined as the number of visual elements a child can process at a glance (Harrison et al., 1996).

These findings are in line with research evidence that boys develop greater specialisation of spatial skills in the right hemisphere and language skills in the left-hemisphere than girls do, but they also demonstrate slower maturation in this development than girls. Girls not only pass through the successive laterality stages faster than boys, but they also show greater bihemispheric participation in both verbal and spatial processing (Harris & Sipay, 1990).

What implications do these sex differences have for instruction? Boys and girls have the same teaching requirements when it comes to learning how to read. The reading achievement of all children can be enhanced with the appropriate instruction; without it, the reading progress of all children will be curbed. However, since the factors described above may make boys more susceptible to developing reading problems than girls, it seems likely that the lack of appropriate instruction will take more of a toll on the reading attainment of boys.

Furthermore, since differences in phonological awareness ability contribute more than any other factor to reading development among all children, instruction which fails to address this aspect of reading is likely to aggravate initial sex differences in reading. In addition, in the absence of early, systematic code-emphasis instruction, the sort of instruction which has been found to encourage the development of left-hemisphere sequential processing abilities (Bakker, 1992), there is the risk that boys may become stuck in the early reading strategies (memorising visual shapes) primarily undertaken in bilateral posterior, and right hemisphere regions of the brain. Thus, in the absence of appropriate teaching, it is possible that early sex differences in reading ability are exacerbated, with the danger that these disparities, instead of narrowing over time, may instead grow worse.

Summary

When the instructional setting is considered, and designed to cater to the common needs of all beginning readers, individual difference factors such as learning style, academic ability, emotional maturity, socioeconomic background, and reading-related disabilities can be largely overcome.

Shifting the focus away from individual differences to the common requirements that research indicates all children have when learning how to read can also avoid the need for remediation later.

Part 2 Practice: Catering to Individual Differences

In practice, there is widespread agreement on the need to cater to individual differences. Examples of the popular adoption of this myth abound:

1. 'Individual children succeed best by different routes' (House of Commons, 1990-91a, p. 56).
2. 'Teachers should ... meet the needs of individual children.' (government curriculum proposals, SCAA, 1994c, p. 10).
3. 'Children also bring to school different styles of learning' (teacher trainer, Dombey, 1992, p. 20).
4. 'No one method works with every child' (teacher trainee, Brooks et al., 1992, p. 57).

It is on the basis of the individual-differences concept that teachers justify the use of a mixture of different methods to teach reading. However, as has been seen, this mixture of methods is invariably a mixture of meaning-emphasis approaches, all essentially the same. Common to all these methods as well, children are frequently involved in individual activities and receive very little direct whole-class teaching.

The Misguided Focus on the Individual Learner

Despite the lack of evidence that individual learning styles exist, or that children's learning or emotional welfare will be negatively affected if taught directly as a whole class, the use of a combination of approaches tailored to suit the individual needs of children is a stance that is widely accepted as appropriate. The almost universal adoption of this view is useful for a number of reasons.

Firstly, the assumption that the mixed approach adopted does in fact cater to the needs of all children helps to divert attention away from instructional factors, and avoids a careful monitoring of the constituents of the 'mix'. Since there is supposedly widespread use of different reading methods, one

does not have to entertain the possibility that declining reading standards might have something to do with any particular teaching method. Although a decline in reading standards has been confirmed by Cato and Whetton (1991), they note that since all 'schools had similar mixed approaches to the teaching of reading, using a balance of reading schemes, 'real' books, 'phonic', and 'look-and-say' instruction, it was not possible for comparison of different approaches to the teaching of reading to be made' (p. 66).

Similarly, the debate over whole-class teaching versus individualised instruction has been labelled a non-existent problem, an instance of 'standard election-year scapegoating' (Kane, 1996, p. 7). Just as teacher trainers and teachers are quick to point out that they 'already do' teach phonics, they also point out that they 'already do' include whole-class teaching, and it is therefore considered impossible to make comparisons between the two forms of instruction, or to establish whether one might be preferable to another.

Thus, in spite of the fact that primary school inspectors note that the teaching of phonics is 'rare' (Ofsted, 1996, p.14), and the fact that according to inspectors' reports, whole-class teaching only occurs about 20-25% of the time in early primary classrooms (Woodhead, 1996a), these imbalances in the mixture of reading approaches and teaching styles tend to be obscured, and furthermore, they are safe from scrutiny or change as it is judged impossible to compare elements within the mixtures on their relative effectiveness.

Secondly, the combination of approaches, or 'no one method' stance, is convenient for publishers and some teacher trainers. Publishers of reading schemes who demonstrate that their schemes include something of every approach (even if only a token gesture in some cases) are able to appeal to a wide range of teacher preferences, and in this way, increase their chance of profit. (Teachers who have decided to use different methods of instruction to meet the needs of individual children, will also want to ensure that they have a wide variety of reading materials for the same sort of reasons.) The current cost of placing a reading scheme in a school can range from £2,000 to £7,000 per year. The popularity of the 'real books' approach represents another substantial opportunity for publishers. An abundance of ordinary story books are necessary, and these are now much in demand not only by

schools but also by parents. As for teacher trainers, some have formed alliances with publishers, relationships that are undoubtedly mutually beneficial.

Thirdly, the 'balanced' multiple-methods view allows some educators, educational bureaucrats, or people in the public eye to agree with all views and thereby appear eminently reasonable. As the following cases illustrate, under this all-embracing philosophy, educationists may lend their support to such a wide selection of views that they may be led inadvertently to contradict themselves:

(a) *Waterland*:

'Reading cannot be taught' (1985, p. 10).

'I didn't make clear enough ... the need to continue technique teaching' (quoted by Gold, 1994, p. 2).

(b) *Dombey*:

'Phonics teaching can ... disable children' (1992, p.19).

'Children need to develop an awareness of phonemes and their relations with letters' (1992, p. 18).

(c) *Smith*:

'Such ability' (i.e. reading) 'is not taught'; 'decoding is not only futile but unnecessary' (1978, p. 2).

'The final strategy may be trying to work out what the word is from its spelling' (1988, p. 143).

Sending out mixed messages such as these reduces others to a state of confusion. It is an effective mechanism for establishing the perpetrators in their position as 'experts' (since others have difficulty in divining their message), and effective too, in bolstering the multiple-methods view as the widely accepted, correct view (since this is one message that can be grasped with some certainty). Many parents, however, may find the reality of dealing with the consequence of these views a frustrating experience. Instead of having their child practise reading, they are expected to teach reading. As one parent admits, 'it's hard work ... all this stuff about when you're both feeling in the mood ... I don't do it because what actually happens is you're saying 'What's that word, you know that word, you've seen it three times,' and it all goes wrong on you' (*Times Educational Supplement*, 1996, p.16).

Nevertheless, as long as the mixed-methods view remains firmly established, change is unlikely. The details and

implications of important research are overlooked. As a result, important questions are not asked. For example, does the research indicate that there are specific types of instruction that will suit the needs of *all* children at different stages in the process of learning to read?

How Classroom Management Exacerbates Individual Differences

As research shows, direct teaching at an early stage is important, with the amount of direct teaching clearly linked with levels of achievement; in simple terms, more teaching equals more learning. In practice, however, it is the absence of direct teaching to the whole class, and the favouring of progressive practices such as topic work, group projects and individualised, child-centred activities (characteristic of whole-word methods) that is noticeable. Ofsted report that in approximately a third of unsatisfactory lessons (resulting in low student achievement), teachers engage in little or no direct teaching but act 'largely as servicers or supervisors of the pupil's tasks' (Ofsted, 1994, p. 3). This observation was confirmed in a survey of 175 high school and university teachers who displayed a similar attitude towards didactic methods: the statement 'teachers are facilitators of learning' elicited 100% agreement (Walker & Newman, 1995).

Some research suggests that teachers divide their type of instruction into thirds: a third of the time is spent in whole-class teaching, a third of the time is allotted to group work, and a third of the time is allowed for individual work (Alexander et al., 1994). However, in another survey, when asked what approach would ensure the highest standards of achievement, even though 90% of teachers indicated that a mixture of whole-class and group teaching would be best, at the same time, only 20% of teachers favoured whole-class teaching (Taylor & Miller, 1994). Another survey found that fewer than 2% of teachers use whole-class teaching as their main strategy (Cato et al., 1992).

One recent report (based on observations in forty-five inner London schools) reveals the emphasis placed on individualised classroom management which invariably accompanies whole language, or 'real books' methods. Inspectors noted that 'listening to individual pupils read was the principal strategy used by most teachers ... [which often became] ... an unproductive routine exercise of such short duration that very

little actual teaching took place. The effective teaching of pupils in groups, and especially as a whole class, about specific aspects of reading was uncommon' (Ofsted, 1996, p. 5).

Reflecting teacher concern with the learning context, or processes of learning, rather than the teaching of subject content or knowledge, 83% of teachers indicate that effective teaching consists first in relating to children, whereas parents feel it is more important for teachers to explain work, and know their subject well (Taylor & Miller, 1994).

The results of a more recent teacher survey support Taylor and Miller's finding that teachers are most concerned with creating a caring and happy environment. The results of this survey also confirm Ofsted's observation that there is a lack of direct teaching in primary school classrooms; investigators discovered that there is 'an avoidance of direct teaching', teachers seeing their rôle as a 'facilitator', someone to provide encouragement, a warm atmosphere and an attractive supply of materials (Blatchford et al., 1994; Ireson et al., 1995).

Between 1985 and 1989, the Leeds Local Education Authority was concerned with low standards, and spent £14 million implementing widespread changes in their primary schools. These changes fit the progressive, 'good practice' mould, with the emphasis on reorganisation of classroom seating (groups instead of rows); learning of topics (rather than knowledge in sequence); and discovery learning (instead of direct teaching). The main concern was to attend to the *context* in which learning should take place, rather than the *content* to be learned.

A report on this research revealed that the project in Leeds had resulted in no improvement in pupils' progress in any subject, and in reading, by 1987, scores for 7- and 9-year-olds began to decline (Alexander, 1992). By 1989, at the end of the six-year project, reading scores for 7- and 9-year-olds were lower than at the start of the project, with a 'disturbing' increase in the proportion of 7-year-old children at least one and a half years behind in their reading (Alexander, 1992, p. 52). The report criticised the commitment to discovery learning, where teachers were supposed to let children discover things for themselves, and the low targets and expectations set for pupils' learning. Professor Alexander's research examining the results of this project so alarmed Kenneth Clarke, who was then Secretary of State for

Education, that he commissioned a report on the project for wide circulation (Alexander, Rose, & Woodhead, 1994).

An embarrassing illustration of these practices was brought to the attention of John Patten (Patten, 1994a) when he was the Secretary of State for Education. A mother had written to a local newspaper. She was in despair because her son, after being in school for six months, had not learned how to write his name. Instead, he had spent his time 'stapling pieces of brown paper together' (Patten, 1994a, p. 2).

Nevertheless, in spite of such reports the current orthodoxy in England, promoted in most teacher training centres, and bolstered by powerful teacher unions, still continues in favour of child-centred learning; and, in spite of the government's attempts to reorganise education over the last six years, much of classroom practice has not been radically altered (Webster et al., 1996; Walker & Newman, 1995). Ofsted reports note that, particularly at Key Stage 1 (age 5-7), group work on topics and themes is widely practised and there is a resulting 'lack of subject progression...both within any one topic and between successive topics'; furthermore, the poor management and use of time result in 'a slow pace of learning and a drift of attention from the task in hand' (Ofsted, 1994. p. 3).

In order to facilitate individualised learning and discovery methods, teacher unions demand smaller class sizes, more teachers and increased parental involvement. Parents' help is increasingly enlisted to provide an additional support structure for such methods: it has been stated, for example, 'Parents too need educating...they are pulling pupils in a direction that we do not endorse and which may subvert our aims' (LINC, 1990). Programmes are set up to train parents in the specifics of how to encourage their children to view words as symbols of meaning rather than symbols for sounds; the goal appears to be the eradication of parents' intuitive, and usually correct, beliefs about how reading should be taught, in favour of training parents, instead, how to make the learning of the alphabetic principle as obscure as possible for their children.

Finally, are children happier in child-centred classrooms? As far as children's emotional welfare is concerned, to foster an enjoyment of reading is the most frequently expressed, top-priority aim of many teachers (Blatchford et al, 1994; Cato et al., 1992, Taylor & Miller, 1994), teacher trainers (Brooks et

al., 1992), and inspectors. For example, in one of these studies, although a few teachers thought it important that they develop the constituent skills of reading, five times as many teachers thought it was important that they encourage positive affective responses in children (Blatchford et al, 1994).

The apprenticeship, or sharing of 'real books' method of teaching reading has gained enormous popularity because of the appeal of the simple belief that the 'sharing' of a wide range of interesting, colourfully illustrated, non-graded story books with natural-sounding language or 'real' (but difficult-to-read) words will result in spontaneous, effortless, 'emergent literacy', or learning to read. The theory is that – as long as the materials are attractive enough, personally interesting, and easy to guess at, as long as children are permitted to choose them themselves, are not pressured to read them, and are allowed instead to focus on the pictures while ignoring the print – then children will enjoy reading. Unfortunately, no matter how attractive the reading materials, or pleasurable or undemanding the teacher tries to make the reading environment, children will not enjoy 'reading' if they cannot read.

Reflecting research in this area, school inspectors have observed that 'lower attaining pupils [are] the least keen readers', and that 'girls' attitudes to reading are usually more positive than boys" (HMI, 1989, p. 3). Teachers almost invariably claim that their children love reading, but this claim is not borne out by researchers' observations (Cato et al., 1992). Perhaps whole-word advocates sense the frustration and lack of enjoyment some children feel when they experience reading problems; perhaps this is why these methods emphasise that accuracy in reading should not be demanded, that children's 'miscues' (not errors) should be accepted without correction.

Socio-economic Factors

Frequently socioeconomic factors are cited as contributing factors in the increasingly noted decline in reading standards. A connection between instructional methods and poor reading standards is regularly dismissed on the basis that most teachers employ a mixture of methods. Currently coming to light, however, are a number of examples where educational

intervention has made a difference in socioeconomically depressed areas. Clayton Middle School in Bradford, with a working- to lower-class intake, has pupils who arrive with a reading age often one year below average. A change to phonics methods has resulted in children leaving the school after four years with reading ages usually a year above average (Hetherington, 1994). Information about declining reading scores in Essex has not been made public because, according to one spokesman, instead of being able to point to socioeconomic causes, there would have been 'a call for a change in teaching methods'.

Particular Reading Disabilities

(a) Remediation and Low Teacher Expectations

It is likely that many teachers accept the notion that a certain proportion of children will inevitably have difficulty with, need specialist help with, or will fail in learning how to read, in spite of the research indicating quite convincingly that this need not be the case. A recent study illustrates teachers' attitudes. A sample of 121 teachers from twenty primary schools were asked what factors were most important in contributing to children learning to read. Approximately 85% of these teachers thought that factors other than teaching (to do with the home or the child) were the most important (Blatchford, Ireson, Joscelyne, 1994). Contrary to the research-verified view that any child 'with an IQ of 70 can be taught to read at age 5' (Engelmann, 1993), others believe that it takes up to four years for a child to become a fluent reader (Clay, 1993). Clay believes that up to half of all children will fail to learn how to read after spending a year in school so that the need for intervention is 'probably unavoidable' (Clay, 1992, p. 70). One prominent, whole-word advocate maintains that some children will 'progress slowly' while others will 'remain illiterate all their lives' (Meek, 1982, p. 7). Meek, like Clay, promotes the view here that failure, for a certain proportion of children, is inevitable. What they, as well as the many others influenced by them, fail to realise is that this scenario is only true in the absence of appropriate teaching. Virtually all children, even if they are dyslexic, can learn to read if they are taught properly.

As noted earlier, only 4% of the population is dyslexic or truly predisposed to experiencing reading problems. If there is

a greater proportion of children than this who are currently being labelled as dyslexic, the chances are they are not, in actual fact, dyslexic at all. More accurately speaking (and to coin a new word), what they are suffering from is not 'dyslexia' (a problem with reading), but *dysdidaxia* (a problem with the *teaching*). Based on the average 24% rate of reading failure among 7-year-olds, a very conservative estimate, this means that while only 4% of children might be suffering from dyslexia, at least 20% of children are suffering from *dysdidaxia*.

Some classroom teachers may rely on specialist staff to help those children who are dysdidactic. In one survey of forty schools, for example, it was discovered that most children are fortunate if they read with the teacher for five minutes a week, unlike special needs pupils who may read with a teacher four or five times a week (Tregenza, 1994). Perhaps reflecting parents' awareness of this problem the results of the survey, cited earlier, found that 90% of parents were anxious that more emphasis be given to the teaching of reading in primary schools (Moller, 1994). The vociferous teacher opposition against government cutbacks in the funding of remedial programmes which has been reported in the press recently is illustrative of attitudes. Expectations are that ordinary classroom teaching must inevitably result in a large proportion of children failing to learn how to read, and additional specialist help is therefore regarded as a necessary adjunct to classroom teaching, a service that will always be needed (Parkinson, 1994).

While teachers assume that a certain proportion of children must fail at reading, teacher expectations for *all* pupils are inclined to be low. In the same survey of forty schools, it was found that teachers expect the majority of pupils to reach, on average, a standard of reading that is below national norms (Tregenza, 1994). Teachers may not be aware that their expectations are so low. When asked whether the government's Statements of Attainment were necessary because teachers' expectations of pupils were too low, 94% of teachers denied this to be the case (NUT, 1992). Yet inspectors' reports frequently note the problems of low expectations, superficial teaching and learning, and inadequate monitoring of standards. Evidence of teachers' low expectations is seen, too, when comparing the reading levels

awarded by teachers with the results obtained on National Curriculum tests; teacher-awarded levels are consistently higher than those achieved on national tests. In fact, since the abolition of the 11-plus examinations twenty years ago, in most parts of Britain there have been no external measures or adequately defined standards for this age group, a state of affairs which has made it difficult for teachers to know exactly what their objectives should be.

(b) Particular Problems Learning How to Read

In the absence of appropriate instruction, at least 25% of children (those with poor phonological skills) will have difficulty learning how to read. Results available from National Curriculum tests (DFE, 1992, 1994b) indicate that almost exactly this proportion of children are currently experiencing difficulty learning how to read. Understandably, many parents are upset. Parents who have a child, or children who, for whatever reason, lack sensitivity to the individual speech-sound structure of words, often find themselves in a desperate situation in their attempt to get help.

The school system in England is such that children who experience particular learning problems are entitled to free specialist help, provided that they are issued with a 'statement' from their local school authority that the child qualifies for this help. On a television programme, distressed parents reported their dismay at the difficulty of obtaining 'statements' for their children (Kilroy, BBC1, 1994). Parents are told that their child has to be at least three years behind in his or her reading achievement in order to qualify for assessment procedures, the results of which, may or may not lead to the granting of a 'statement'. One can sympathise with teachers who would like to remediate reading problems but who 'don't know what to do to help', or even with local authorities, who would like to help but have limited funds, but most especially with parents, who must witness their children in a state of increasing distress as year after year goes by, still having not learned how to read, having not received the appropriate instruction in school, and having not received a 'statement' from their local school authority entitling them to specialist help. Some parents report that, under these conditions, children become 'suicidal' (Kilroy, as above).

(c) Incidence of Reading Disabilities

In spite of the research demonstrating that virtually all children, including those at risk, can successfully learn to read if they are given the appropriate code-emphasis instruction, many children are now experiencing serious reading problems. Currently there are about 350,000 children in UK schools who need specialist help (Brooks, 1994).

However, while it is estimated that 20% of pupils in English primary schools are in need of specialist help (Doe, 1994; Pyke, 1994a; Warnock, 1994), many are not receiving it. As most authorities only issue statements to between 2 and 4% of pupils (Doe, 1994), there has been a resulting 'exponential rise' in Special Educational Needs court cases (Pyke, 1994b), the major proportion of these involving reading problems or dyslexia. The number of children in Gloucestershire classed as having special educational needs has more than doubled in the two years 1991-93 (*The Citizen*, 1993).

Gender Differences

The declining reading standards and the high incidence of reading failure among boys are increasingly causing concern. In 1992, nearly a third of boys at age 7 were struggling to read, compared to a fifth of girls (DFE, 1992), and in 1994, almost a quarter of boys aged 7 had failed to learn to read compared to about one-seventh of girls (DFE, 1994a). In schools for children with learning difficulties, boys now outnumber girls two to one. A survey in Humberside (Ofsted, 1993b) found that boys begin to suffer from a lack of interest and/or confidence in English before Key Stage 2. It was noted that at age 7, both girls and boys are enthusiastic about all learning, but by age 11 there is a marked change, with boys rapidly losing interest.

Results from the standardised Edinburgh Reading test (standardised in 1971-72) given to Scottish 8-year-olds in 1978, 1981, and 1984 found no significant sex differences in performance (Scottish Education Department, 1988); when English children were included in the restandardisation sample of this test in 1975, however, a significant sex difference of about 5 months of reading age between the sexes was discovered (University of Edinburgh, 1994). In addition, both in the years 1988 and 1992, sex differences in England among 7- to 9-year-old children were apparent: in 1988, in a

survey using the London Reading Test, 32% of boys compared to 19% of girls obtained scores indicating severe reading difficulty (Mortimore, Sammons, Stoll, Lewis, & Ecob, 1988a); in 1992, in restandardising the Edinburgh Reading Test, sample populations were drawn from England only, and a significant sex difference was revealed, with girls substantially outperforming boys. (In 1975, when Scottish children were included in the sample the sex difference was 5 months, but in 1992 with English children only in the sample, the sex difference was 12 months (University of Edinburgh, 1994).

Although it has been shown that a particular type of instruction is needed in order for all children to experience early success with reading, there is widespread resistance to this concept. More fashionable whole-word, child-centred methods reign, so that in practice there are still many today who would agree with Margaret Meek, who stated in 1982 that 'we have still not discovered the best means of helping all children to learn' (p. 7), and if a child 'thinks he is a failure...what he needs, above all, is more reading experience, a purpose of his own for reading' (p. 114), (i.e. more individualised, context-oriented instruction).

Summary

Instead of selecting reading instruction that suits the needs of all children during different stages of learning to read, teachers adhere to a individualised, mixture-of-methods philosophy, a stance that effectively deflects attention from teaching methods as a possible cause of poor reading standards. Other factors are blamed, including differences in children's individual styles of learning, in their abilities and interests, and in their socioeconomic backgrounds. The failure of local school authorities to supply adequate specialist help, regarded by many in the profession as a service that will always be needed for a large proportion of children, is also identified as a contributing factor.