4 | The Whole-Word Method

Part 1 Research: Searching for the Foundations of the Whole-Word Method

Whole-word methods of learning to read are not new. The idea of teaching children to recognise words as whole visual units on the basis of their shape or a few selected features was invented by Thomas Gallaudet in 1830, as a method of teaching deaf children to read (Blumenfeld, 1990). In England such methods were popularised by the Americans, Frank Smith, who promoted his book *Understanding Reading* (1971) in 1978, a work entirely devoid of scientific evidence, and Kenneth Goodman, the past president of the International Reading Association. In America, whole-word methods are known as *whole language*, so that Kenneth Goodman observes, 'The basic concepts of whole language (largely without the term) have become institutionalized in British schools, and parents like what their kids are doing in school' (Goodman, 1992a).

Whole-Word Methods: A Case of *The Emperor's New Clothes*?

In spite of claims from Goodman that whole language is founded on a 'comprehensive knowledge base' (1994, p. 346), a number of critics have argued that whole-language advocates have failed to support their position with research (Adams & Bruck, 1993; Chall, 1989; Ellis, 1993; Felton, 1993; Liberman & Liberman, 1992; McKenna, Robinson & Miller, 1990; Stahl, 1990; Stanovich, 1991; Vellutino, 1991). One may look very hard for some supporting facts, but just like the Emperor's new clothes, they do not actually exist. Others have pointed out that the current research base clearly contradicts the whole language position (for example, Adams, 1990). This means that, although one would like to appear even-handed in presenting data for and against whole-word instruction as a beginning method to teach reading, there is a difficulty.

(There is, however, some evidence to support the use of such methods in preschool or nursery programmes, introducing children to the pleasures and rewards of reading, and to the idea that reading is a process of communication [Stahl & Miller, 1989]).

Thus despite the lack of evidence in support of whole-word methods to teach reading, at the beginning of formal instruction in the primary school, there are a number of such approaches advocated for just this purpose, although the terminology varies. The following are some of the whole-word, 'meaning-emphasis' (or non-code) approaches recommended to teach a child to read:

1. *Whole-word, look-and-say, sight word learning* (at the beginning of instruction) approaches (all of which involve the memorisation of *words* as whole visual units);

2. *Language experience, integrated reading/writing* approaches (which involve the memorisation of personal *sets of words* used in individualised writing activities);

3. *Shared book reading, paired reading, apprenticeship,* and *whole-language* methods, either with the use of 'real books' (ordinary story books) or reading scheme books (all of which involve the memorisation of whole *books*).

All of these approaches have in common an aversion to teaching a child how to read. Although what the child does is called 'reading', these approaches all teach a child to memorise. All of these approaches fail to draw attention to the fact that the English language is an alphabetic system, based on a code or a cipher representing speech sounds. All assume that children will discover the alphabetic principle for themselves.

Recently, Chall (1995) observes that large analyses and syntheses of research, by Share and Stanovich (1995a), for example, have led to the conclusion that learning to read is a two-stage process concerned with letters and sounds, as well as with meaning. All of the foregoing meaning-emphasis approaches view reading as one single process concerned with getting meaning from print. Reading is defined by these methods as solely making connections between print and ideas, and it is little concerned with making connections between print and sound. Code-emphasis approaches,

however, view reading as a two-stage process, concerned with decoding print *and* obtaining meaning from print.

All of these whole-word, 'meaning-emphasis' approaches hold common assumptions that have surprisingly little, if any, scientific evidence to support them. What are some of these assumptions and what is wrong with them?

'Reading Is a Natural Process Like Learning to Speak'

One of the most serious flaws of the whole language or whole-word approach is the assumption that learning to read is a natural process, much like learning to speak. It is assumed that as long as someone can speak, and written language is not broken down into abstract, meaningless bits, but kept whole and 'meaningful' in sentences, and in books, the child will spontaneously and naturally learn to read. This idea is simply not true. Learning to speak is a biological process and virtually universal. Learning to read is a cultural invention (about 4,000 years old) which not everyone learns; it is a cognitive intellectual achievement in a way that speech is not (see Liberman & Liberman, 1992 for a discussion).

Something more than learning how to speak is required in order to learn how to read in an alphabetic language. What is required is the awareness that speech is made up of separate sounds or phonemes, those abstract, little bite-size pieces that Goodman and other whole-word proponents object to. The difficulty is that speech articulation is so rapid that the internal structure of words is obscured, and neither knowing how to speak, nor even cognitive maturation, is enough to produce this phonemic insight. There is nothing in speech to produce this awareness: a word like 'sun', for example, is a single seamless piece of sound. A child does not understand why the word should be represented by three letters.

Contrary to Goodman's assertion that the child does not have to be a linguist, the child does need to be enough of a linguist to recognise that all words have an internal structure. Studies have shown that this awareness does not come naturally (Liberman, Shankweiler, Fischer, & Carter, 1974). Alegria and Morais (1991) found that children in a strictly whole-word setting have no segmental awareness of speech because they have not been confronted with a situation requiring such awareness. As mentioned earlier, research has also shown that adult illiterates do not have this awareness.

Rather than assuming that this awareness is not needed, or will arise spontaneously, as whole-word advocates appear to do, research suggests that developing this awareness directly should be of primary concern.

In fact, it has been proposed that learning to read, rather than being a natural process, is an 'unnatural act' (Gough & Hillinger, 1980). During an early stage the child is naturally inclined to recognise words as visual wholes, or in a logographic fashion (note that such an approach is visual memorisation, not reading). It is perhaps not surprising, therefore, that between this type of initial stage and the next alphabetic or cipher stage (where entirely different processes are involved), research evidence demonstrates that there is a basic discontinuity. In order for the child to progress to the second stage, intervention is nearly always required. Research shows that later stages of learning to read are not natural, continuous extensions of a first logographic stage (Byrne, 1991; Cary & Verhaeghe, 1994; Masonheimer et al., 1984; Morais & Kolinsky, 1994; Seymour & Evans, 1994; Vellutino & Scanlon, 1991). The assumption made by the whole word-approach that children will deduce what they need to know simply by being immersed in meaningful language activities is unsupported by research (Byrne, 1991). Instead, research findings underline the importance of providing children with training in phonological awareness and letter-phoneme relations, knowledge which must be acquired in order to read in an alphabetic language, knowledge that is needed to make the major necessary leap from a logographic (actually non-reading) way of looking at words to a real reading alphabetic stage.

'Individual Letters Are not Important'

Another tenet of the whole-word approach is the assumption that children and adults read by recognising whole words as visual shapes, and by sampling whole groups of words, recognising some of the words and skipping others. This idea is not supported by research either. While children in the very earliest stages of learning to read *may* 'read' logographically, recognising whole words simply by shape or other features, later all people must learn to attend to every letter in every word if they are to read fluently.

Because adult skilled readers' decoding skills are so automatic and effortless, it may appear as if readers are

instantly recognising words or groups of words in whole chunks. Eye-movement studies, however, have proven quite categorically that this is not true. Skilful adult readers attend to every letter in each word, instantly recognising familiar spelling patterns in the process; they read alphabetically, not logographically (Perfetti & Lesgold, 1979; Perfetti, 1995a; Rayner & Pollatsek, 1989; Rayner, 1995). Recall that the loss of a single letter in a small window of text reduces reading speed by 50% (Rayner & Bertera, 1979).

Evidence from many studies suggests that there are possibly three stages in the reading process. Frith (1985) describes these three stages more formally as: (a) a logographic stage, where visual cues only are used, and there are no alphabetic insights; (b) an alphabetic stage, where children discover letter/phoneme relations and use them to read; and (c) an orthographic stage, where children use letter groups, or spelling patterns to identify words.

Some researchers have pointed out, however, that children do not necessarily pass through an initial stage of logographic reading (Morais, 1991); in fact it is argued that recognising words purely as if they are pictures is not actually reading. Children who possess some phonological awareness and a minimal amount of letter-sound knowledge before formal instruction do not pass through a logographic stage. In the complete absence of any such skills, however, some children may be inclined to read logographically, and if they are denied access to phonological and alphabetic information through a lack of appropriate instruction, there is a danger they will remain stuck at this stage by default. Interestingly, one study has shown, for example, that children with a history of reading problems in English were rapidly able to learn to read some words in Chinese (Rozin, Poritsky, & Sotsky, 1971), suggesting a continued and engrained reliance on whole-word reading strategies.

'Direct Alphabetic Instruction Is Not Required'

A third whole-language assumption is that no particular instruction which explains the point of the alphabet needs to be given. This is partially true, since no matter how unhelpful the instruction, 75% of children, given enough time, will discover for themselves the principle of how speech is encoded alphabetically and will eventually learn to read. However they

gain this insight, all children must understand that units of print correspond to units of sound if they are going to learn how to read. That phonological recoding is the '*main* mechanism' of early reading development is supported not only by the vast amount of research on the importance of letter sounds, but also by the fact that pseudo-word reading (which tests the ability to decode alphabetically) accounts for *most* of the word recognition variance among beginning readers (Share & Stanovich, 1995b, p. 106).

Although the majority of children will eventually discover the alphabetic principle even in the absence of direct instruction, avoiding delay in learning how to read is a serious issue. The instructional setting plays a critical rôle. The longer a child's reliance on the use of partial visual cues (as encouraged under whole-word approaches) the greater the delay in learning to read, and for some, the continued reliance on such strategies will lead to severe difficulties in learning to read (Gough & Juel, 1991; Snowling, 1987). On the other hand, much evidence shows that the amount of time children are involved with alphabetic or phonic instruction in the early grades is found to be highly correlated with their reading achievement (Fisher & Berliner, 1985). Research has shown also that an overemphasis on context, at the expense of instruction in decoding strategies, will result in a slower rate of reading progress (Evans & Carr, 1985; Nicholson, 1991).

One of the problems with whole-word learning is that there is a lack of real engagement with the print, depth of processing, or what Ehri (1991) calls 'press'; there is little desire to look beyond the cues that are the easiest, and most obvious to discern. Why should the child attend to letters, when all the information needed can be derived from non-alphabetic sources? In fact, several investigators have suggested that the reason phonics instruction is so effective is because it forces attention to the interior details of words, it involves more work, more fine-grained processing than whole-word strategies; thus, more thinking and learning take place. Phonics instruction facilitates the development of the very processes that characterise real reading. It facilitates, unlike whole-word learning, the rapid development of alphabetic decoding skills typical of the skilled reader (Perfetti, 1995a; Rayner, 1995), including the development of orthographic knowledge (Adams, 1990; Stanovich, 1992; Vellutino &

Scanlon, 1984), and an efficient verbal memory (Tunmer & Rohl, 1991).

Further research has pointed out another related problem with whole-word learning: this is the difficulty a whole-word reader encounters in trying to decode a novel word. Such children simply lack any effective mechanism for deciphering unfamiliar words. Seymour and Elder (1986) conducted a study in a Scottish primary school where Year 1 children were taught for two terms using sight vocabulary and whole-word methods. After this period of time, none of the children were able to recognise new words, unfamiliar to them. Others, too, have found this lack of transfer phenomenon, or the inability to read novel words in children trained in whole-word methods (Vellutino & Scanlon, 1991), or even in children trained in a combination of whole-word and phonics methods (Juel & Roper-Schneider, 1985). Although experimental studies have shown that the repeated presentation of whole words (often a major feature of whole-word reading methods) may result in faster recognition of the trained words (Reitsma, 1988), studies have failed to demonstrate a transfer effect from trained to untrained words, or even from trained words in one context to the *same* words in another context (Adams, 1990; Ehri & Wilce, 1983: Fleisher, Jenkins, & Pany, 1979). Such findings reduce the value of teaching children to recognise whole words.

Repeated presentation of words as whole shapes to be learned either in the context of reading material or in isolation as sight words on flashcards is of limited value, especially for poor readers, for three reasons: (a) poor readers evade phonological decoding if context is available to help them guess at words (Stanovich, 1980); (b) children taught by whole-word methods will still try to bypass the phonological decoding route even with words presented in isolation (Stanovich, 1980); and (c) poor readers' slow decoding skills are not speeded by methods that allow unlimited exposure time (van den Bosch, van Bon, & Schreuder, 1995) (as is the case in whole-word methods where the same words and stories are repeatedly presented).

It should be explained that not all forms of 'sight word learning' have nothing to do with letter-sound correspondences. The type of sight word learning which has been referred to here, usually involving irregular spelled

words, is characterised by the memorisation of words based on their shape or selected features; it occurs in young children who lack alphabetic decoding ability. However, research shows that 'mature forms of sight word learning are alphabetic and phonological at root' (Ehri, 1995, p. 117), where words (irregularly and regularly spelled words) that readers have encountered many times, phonologically recoding them over and over, are eventually stored in memory. The sight of the word (*not its shape*, but the sequence of *letters* and the familiar *spelling patterns* within it) immediately activates that word in memory along with all the connections previously made about its spelling, pronunciation and meaning.

What, then, are the instructional implications of the research pertaining to this early non-alphabetic (memorising shapes and features) form of sight word learning? Teaching to improve decoding skills, particularly for poorer readers, will be much more effective if: (a) words are first presented in isolation, not in context; (b) pseudo- or nonsense words, instead of real words, are used in order to compel readers to decode phonologically and to abandon their fixation with lexical features such as shape or length as a means to recognise words, and (c) words are presented very quickly with unlimited response time allowed (a procedure found to be the optimum method for improving the slow decoding skills of poor readers) (van den Bosch, van Bon, & Shreuder, 1995).

'The English Language Is Too Irregular'

One of the arguments of whole-word advocates against the use of phonics is the irregularity of the English language. While it is true that English is one of the most irregular of alphabetic orthographies, it is not as irregular as one might think. Because common words, spelled irregularly, occur frequently there is a tendency to overestimate the percentage of total words they occupy in everyday English usage. While Morris (1990) found that less than 10% of English words are spelled irregularly, a major computer study of 17,000 words (from Charlton, 1989) found no less than 84% of the words were spelled according to a regular pattern, and only 3% were so unpredictable that they would have to be learned by memorisation.

With this 3% in mind, it is clear that the English language is certainly not irregular enough to prevent one reading by using knowledge of spelling-to-sound connections. The emphasis on irregularities is misleading in a number of other ways: (a) first of all, spelling-to-sound relationships (the letter f = the sound /f/), which are needed for reading, are much more regular than sound-to-spelling relationships (the sound /f/ = f, ff, ph, gh); (b) nearly all consonants have regular letter-to-sound correspondences; (c) it is the vowels which are the most irregular, but one is able t- r--d w-th--t th-m; (d) English is more regular than one might think, if the position of letters in words is also taken into account; and (e) the systematic regularity of groups of letters makes English even more regular. Furthermore, once a child has mastered a limited number of spelling-to-sound correspondences, this knowledge appears to spread rather efficiently (see Stanovich, [1991] for a discussion of this topic).

The alphabetic route certainly represents a very easy task in comparison with the whole-word approach where it is expected that thousands of words will be memorised based on their shape. It is far easier to learn the seventy ways to spell the forty-four sounds made by the twenty-six letters of the alphabet than to memorise thousands and thousands of words in an arbitrary fashion.

Indeed, one of the shortcomings of a whole-word approach is that the child is not provided with a structure or filing system that promotes memory storage. Instead, remembering the spellings of words is completely randomised. Whole-word readers find the task of remembering more and more words on the basis of their shape or peculiar features an increasingly more difficult and frustrating task, and it is a system that inevitably breaks down (Gough & Juel, 1991). On the other hand, the utilisation of letter-sound correspondences provides the child with a systematic way of storing spellings in memory. Memory research shows that it is far easier to remember a structured set of information than one that is a random collection (Gough et al., 1992; Sawyer & Fox, 1991). Ehri (1991), for example, points out that children in Japan, given a similar task to whole-word taught children, are asked to learn fewer than 200 kanji characters per year.

'Words Are Identified Using Context, Guesses, Predictions'

Whole-word proponents actually promote procedures designed, not to reveal the alphabetic principle and assist meaning, but to obscure it. In the twenty years since Frank Smith promoted his book *Understanding Reading* (1971), science has consistently, firmly, and indisputably refuted his claims that skilful readers use context to guess at the words on the page. This is one of most problematic of whole-word notions. In fact, research shows that exactly the opposite is the case. It is only poor readers who rely on context to assist with their poor decoding ability (Bruck, 1990; Nicholson, 1991; Perfetti, Goldman, Hogaboam, 1979; Schwantes, 1991; Stanovich, 1992). Good readers' word-recognition skills are so accurate and fluent that they don't need to use context to guess at words. Goodman's assertion that reading is a 'psycholinguistic guessing game' is not true. Eye-movement research proves, beyond all shadow of doubt, that skilled readers do not use context as a decoding strategy to guess at words (Perfetti, 1995a; Rayner, 1995).

Yet teachers using whole-word or whole-language approaches base much of their teaching on this false premise. Teachers using these approaches actually teach children, as a decoding strategy, to guess. Thus, when children encounter a difficult word, they are encouraged to guess what the word might be, to look at the accompanying pictures and guess, to read through to the end of the sentence and guess, or to look at the first letter and guess.

There is absolutely no data either from empirical research or from whole language studies to support guessing. Research does show that guessing from context leads to the most astonishing and frequent errors. Even skilled adult readers are only able to guess correctly one content word out of ten (Gough, 1983). Content words are more important than function words because they convey virtually all the meaning of a text but such words are also the least predictable. Context will help the child to recognise short, familiar function words, but as these words are more likely to be recognised by the child, context will let the child down precisely where he needs help the most with longer, less frequently occurring content words (Gough & Juel, 1991).

Whole-word supporters profess to be interested in ensuring that reading is a meaningful exercise; but it is precisely such practices as the use of context and guessing which prevent the child from acquiring the sort of strategies which will assist the access to meaning. Research has shown that for effective comprehension a whole clause or sentence must be read quickly enough to be in the reader's memory, ready for interpretation. If word recognition is too slow, meaning will be lost. In support of these findings, many studies have illustrated that poor decoding results in poor comprehension (Perfetti, 1985; Rack, Snowling, & Olson, 1992; Stanovich, 1991; Stuart, 1995; Vellutino, 1991). Fluent, fast word recognition, unassisted by context, facilitates reading comprehension.

Although whole-word advocates often criticise code-emphasis methods of reading instruction for failing to develop reading comprehension, many studies have demonstrated that phonological and alphabetic instruction given to young children not only produces significantly superior word-recognition skills, but also results in better achievement on measures of reading comprehension as well (Brown & Felton, 1990; Hatcher et al., 1994; Iversen & Tunmer, 1993; Juel, 1994; Lie, 1991).

Whole-language instruction, however, offers the following advice for the reader who encounters difficulty with a word: don't sound it out, don't look for familiar word parts within the word because these activities will divert attention from meaning, do skip it, use prior information, read ahead, reread, or put in another word that makes sense (Goodman, 1988). These are practices used by all those who adhere to whole-word emphasis methods of reading instruction and who profess to be interested in helping children understand what they read. (These methods include: shared reading of real books, apprenticeship reading, look-and-say, language experience, story-book methods of reading schemes.) According to research findings which are now beyond debate, however, *all* of these instructions are diametrically *opposed* to practices that will facilitate comprehension of text.

'Good Readers Rely on a Variety of Cues to Extract Meaning'

Part of the whole-word approach is to praise children for 'making sense of print', using a variety of cues, such as

context, syntax, semantics, or illustrations. Research shows, however, that good readers use these strategies to *confirm* meaning, not to extract it in the first place. Research also demonstrates that the encouragement of such strategies may result in harmful effects.

First, information gained from more than thirty years of eye-movement studies indicates that accomplished readers make use of contextual, syntactic, or grammatical cues only where there is some doubt about the meaning of the text (Garrod, 1995; Perfetti, 1995a; Rayner, 1995). During reading there is an initial activation of the connections between letters and sounds, and as each new word is decoded, comprehension is automatic and incremental, the word being incorporated into the interpretation of the sentence or passage thus far. Comprehension is automatic because, in most cases, words that are read will be in the reader's speaking vocabulary. Ambiguous words or phrases, however, produce longer-duration-eye fixations, and greater frequency of regressions (where the eyes move back over the text). In this case a reader may momentarily entertain a number of meanings for a word, but use of context resolves the issue. As Garrod (1995) explains: 'the input proposes interpretations and the context disposes them'. Thus, while in most cases decoding unlocks meaning automatically, other features of the text are used as confirmation or checks on meaning when the initial decoding processes put the meaning in doubt.

Secondly, as mentioned previously, experiments have demonstrated that young children learn to read in the very beginning stages much more easily in the absence of accompanying illustrations (Levy, 1981; Rusted & Coltheart, 1979; Solman et al., 1992; Wu & Solman, 1993). Evidence suggests that illustrations hinder the young beginning reader's attempts to deal with print. Picture processing involves right-brain processes, which may interfere with the left-brain processing required for decoding sequential print. Heavy use of pictures as context cues and the constant demands on attention made by large and colourful illustrations act to force right-brain engagement when it is the left side of the brain which is especially suited to deciphering print. Boys are particularly susceptible to this danger since they do not specialise in using the left side of their brains for language tasks as early as girls do (Bakker & Moerland, 1981; Buffery & Gray, 1972; Halpern, 1992).

Thirdly, while it might be accepted whole-word practice to encourage approximate meanings (for example, if a child guesses 'horse' instead of 'donkey'), there is evidence to suggest that encouraging such practices will lead a child to develop the wrong idea about what reading actually is. Byrne (1992) notes that the origins of reading disability seem to be in the early conception that reading is largely remembering; he points out that one adult dyslexic's memory of standing up in class and being praised for 'reading' via memorisation is likely to be a common experience among dyslexics. Research has shown that whole-word learning may impede reading performance by preventing children from seeing any other alternative to the use of global strategies, and rote memorisation (Vellutino & Scanlon, 1991).

Summary

To summarise, research indicates that look-and-say or whole-word methods, which assume that the child will assimilate the alphabetic code intuitively, are potentially damaging, and especially so for the at-risk child (Ackerman, Anhalt, & Dykman, 1986; Brown & Felton, 1990). While Goodman asserts that whole-language methods are founded on a 'comprehensive knowledge base', findings from empirical research suggest that this particular 'knowledge base' is unreliable. Scientific research demonstrates that learning to read is not a naturally occurring process but a skill that must be taught, skilled readers attend to all the letters in every word, and direct instruction in the alphabetic code is required to assist children out of a logographic stage of 'reading' to a stage where more productive, more memory-efficient reading strategies are used. Scientific evidence also shows that context is not used by skilled readers as a decoding strategy; nor can context be used by beginning readers as an effective decoding strategy. Finally, teaching children to use a variety of cues may result in their having a distorted view of what reading actually is.

Part 2 Practice: Context-Emphasis Approaches In Use

Contrary to Goodman's assertion, many parents may *not* like what their children are doing in school. When their child fails

to learn to read at school, parents write to newspapers or government officials in despair of methods which assume that children will learn to read by 'osmosis' (Speed, 1994), or by 'some mystical process' (Graham, 1993). Far from being happy with what is happening in primary schools, when polled by MORI and Gallop, almost 90% of parents (parents unconnected with the educational establishment) were anxious that more emphasis be given to the teaching of reading (Moller, 1994). Alarmed at the state of current practice, parents' most common request was for a change to more structured, traditional teaching methods (SCAA, 1994b).

Although research has demonstrated that many of the tenets of whole-word teaching are in error, practice generally does not reflect an awareness of this knowledge. In practice, both the use of whole-word materials and whole-word methods are much in evidence. Most teachers use a combination of reading schemes and 'real books' (HMI, 1991; Cato et al., 1992; Gorman & Fernandes, 1992). Both materials are alike in that the vocabulary is ungraded (making it extremely difficult for children to discover the alphabetic principle), and illustrations dominate the pages (distracting children from the already too-difficult-to-read print). Reading scheme books and 'real books' may differ to the extent that, in schemes, certain key words (Oxford) or common words (Ginn) are repeated, whereas in 'real books', there may or may not be words and phrases that are repeated.

With both the current reading schemes and the ordinary story books certain methods are adopted. These methods require that children memorise words, phrases, sentences, and/or whole books, remembering them through the use of sight word recognition or picture, context, syntactic or phonic (initial letter) cues.

There is a curious belief that reading schemes and ordinary story-books, or real books, are vastly different. Some believe that reading schemes provide more structure than real books (House of Commons, 1990-91b, p. xii); others are of the opinion that only real books are interesting to children and have natural-sounding language (Dombey, 1994b). How different are these materials? As reading schemes do suggest procedures for teachers to follow, it is possible they might provide more structure; and, as storybooks are not normally designed to teach a sight vocabulary of common words, their

language may sound more natural. On the other hand, storybooks with patterned language, or with vocabulary matched to the child's reading level, may provide more structure than a scheme book, and reading-scheme stories may often be more interesting and natural-sounding to a child than a number of repetitious storybooks. Finally, in the case of both materials, any stories that must be read over and over, no matter how interesting, must lose some of their charm. In effect, differences between the two materials become negligible, particularly when one considers the common teaching practices or philosophies that are applied to both.

Reading Is Erroneously Viewed as a Natural Process

In direct contradiction to the most solid research findings that learning to read is not a natural process, there is much evidence in practice that teachers, teacher trainers and government inspectors support the notion that 'children learn to read by reading', in a natural, effortless way, much in the manner claimed by Smith, where 'the better reader barely looks at the words on the page' (1973, p. 190). Teacher organisations, teacher training centres, and government inspectors advocate the use of 'phonics in context', where the systematic direct teaching of phonics, decoding, spelling, and vocabulary skills are abolished in favour of teaching these elements incidentally and individually to each child, if and when they crop up. In doing so, they reveal their bias in favour of meaning-emphasis methods, where reading is viewed as a process as natural as learning how to speak, as a process that will simply and spontaneously emerge at each child's own individual rate.

At a recent United Kingdom Reading Association (UKRA) conference, held at the Institute of Education, Cambridge, the theme was shared reading, and the natural 'emergence' of literacy. Involving parents with reading to their children, the speakers suggested, would result in spontaneous, effortless, learning to read (UKRA, March, 1994). At the same time, however, because direct, structured teaching is not advocated, this approach does require the unnatural practice of constantly reading and rereading stories over and over, in order for children to begin to 'read' (guess at and memorise) the stories for themselves.

In Liz Waterland's *Read With Me* (1985), a variant of this approach, the apprenticeship approach, is described. This text has become the most recommended text on the teaching of reading in initial teacher training courses in England, Wales, and Northern Ireland, appearing on almost 70% of all reading lists at teacher training centres. This approach is described as the new orthodoxy in education (Brooks et al., 1992). Waterland sees reading as a process that can simply be picked up, and caught 'like a cough', through the use of guessing strategies: 'The reader reads a text by making informed guesses as to the likelihood of what that text will mean' (Waterland, p. 9). Many staff in training colleges also hold the view that reading is a naturally occurring process, and see phonics methods as unnatural, and too mechanistic (Brooks et al., 1992).

Other popular texts in use at many teacher training colleges include those by Meek and Smith which encourage the appealing, but erroneous, idea that all children will naturally and spontaneously learn how to read if they read with, or are read to by adults. Meek, for example, is a strong proponent of the view, 'to learn to read, children need the attention of one patient adult...for long enough to read something that pleases them both' (p. 9). According to Meek, children 'teach themselves to read... by turning the pages of books and looking at the pictures' (from *Learning to Read*, 1982, p. 11, a text compulsory or recommended in more than half of teacher training centres, the third most popular text). Her views have a powerful influence since there are three texts by Meek which appear on teacher college reading lists, two of which appear approximately half the time, and one a fifth of the time.

An examination of the top thirty most recommended teacher training texts (Brooks et al., 1992) reveals that there is not a single text among these that presents an objective up-to-date review of the experimental research on beginning-reading instruction. All of the texts and government documents listed espouse a 'meaning-emphasis', whole-word method of teaching reading in one form or another. A careful examination of these materials exposes the staggering bias in current teacher training, a bias that amounts to nothing short of indoctrination on a very wide scale. All of these texts, without exception, promote whole-word, 'natural' or discovery

methods of reading instruction to some degree, either just one or a mixture of these, along with the child-centred, progressive philosophies that accompany them, none of which are supported by empirical research as effective ways to teach beginning reading.

Government inspectors, informed as they are by the professionals, are inclined to lend their support to the idea that reading is a natural process. The use of non-graded, non-sequenced, ordinary 'real books', which children select for themselves and 'read' with an adult or partner are seen by inspectors as an appropriate way to promote beginning reading: '"Real books" ...(motivate) children to understand and take a strong interest in reading by teaching them from an early stage from attractively presented children's literature' (HMI, 1990, p. 6).

Although current reading scheme books are really no different from 'real books' in the lack of code-emphasis support provided, they are held in disfavour, and reference to them as suitable materials for beginning-reading instruction has been removed from the National Curriculum proposals (SCAA, 1994c, p. 25) so that they are not referred to in the final draft orders (National Curriculum Orders, SCAA 1994a). Although the natural-sounding language and attractive illustrations that ordinary story books are supposed to be unique in having are just as much in evidence in reading-scheme books, almost the entire first page of the Orders for English Key Stage 1, Reading, is devoted to the wholesale endorsement of 'real books', books with 'illustrations that are visually stimulating', have 'interesting subject matter and settings', and that have 'language that benefits from being read aloud and reread' (SCAA, 1994a, p. 6).

The books described may be excellent for adult readers to read to children (just as are the current reading-scheme books); indeed, reading *to* children in order to pique their curiosity and interest in books and develop their listening skills should unarguably form a part of the English curriculum. These books and these procedures, however, will not teach *children themselves how to read*. It is unfortunate that the sort of reading materials that are suitable for supporting children in their first independent efforts to read are not described. There is no mention that for the purposes of reading instruction, as opposed to literature appreciation or

listening comprehension, there should be books provided that are especially designed for children to practise their early reading skills; missing is a description of the sort of difficult-to-find books that have graded, sequenced vocabularies, books that arrange for practice of specific skills and knowledge taught beforehand by the teacher, and books that allow children to experience high rates of success in their first efforts to decode and understand print.

It Is Falsely Assumed That Adults Are Whole-Word Readers

As the research on eye movements show, skilled readers focus on each letter of every word although it may not appear that this is the case because processes are so automatic. Unfortunately, in practice it is commonly believed that readers see words as visual shapes, sample words here and there, and guess at others from context. Teacher trainers admit that this is one of the first concepts they teach their students (Dombey, 1990-91). Teachers in turn encourage children to use whole-word, guessing and sampling strategies when trying to decode print based on the false premise that this is what adult readers do.

Indeed, a survey of teaching practice in 234 primary schools found, as previously stated, that nearly all teachers employ a whole-word, look-and-say, sight word approach in the initial stage of teaching a child how to read (Cato et al., 1992). As the research clearly indicates, however, encouraging beginning readers to read in a whole-word or logographic fashion is precisely the kind of training that they do not need, as there is a natural inclination, early on, to read in this manner anyway. What they do need is a strategy that will help them decipher novel words, so that HMI inspectors will not find themselves making the following sort of observations: 'Year 1 children were unable to work out words that were new to them' (HMI, 1991), or 'the majority of pupils can read when they leave primary schools, although comparatively few have yet become independent readers' (HMI 1989, p. 2).

Yet not only do the National Curriculum Orders support the learning of a 'sight vocabulary' (words recognised automatically by shape, context, or visual cues) (SCAA, 1994a, p. 7), the National Curriculum assessment instructions also state that when reading a story passage children should not

be penalised for making sensible guesses at words if they use 'word-shape' (SCAA, 1994d, p. 8).

There is much evidence in practice that children are viewed as apprentices, encouraged to mimic the way adults read, erroneously assuming that adults read in a whole-word fashion. As observed in 1990-91 (HMI), 'Since the introduction of the national curriculum, there has been a steady growth of interest in paired reading, linking of younger and older pupils' (p. 13). Teacher trainers, seemingly ignorant of the research, misguidedly promote this approach: 'Children can and do learn much about reading from listening to and watching skilled adults who show them how it is done' (Dombey, 1992, p.18). The government-funded Adult Literacy and Basic Skills Unit also advocates 'natural', whole-word methods. Such statements as, 'The shape of the word is an aid to the reading of words' (ALBSU, 1994, p.3) reveal their bias.

Belief That No Direct Alphabetic Instruction Is Required

Because of the commonly held belief that children will learn to read by reading, it is widely assumed, in sharp contrast to the research, that no direct instruction is required. The UK Reading Association gives advice accordingly: the parent or teacher must read with the child and follow the 'PPP' procedure – pause, prompt, praise (UKRA, 1994). Practices such as 'shared reading', 'paired reading', or 'apprenticeship reading' mean that a child is perpetually dependent on another person who is a competent reader. It was found in one study that only 51% of children surveyed liked reading on their own because, as various children described it, 'Every time I don't know a word and I feel sad', or 'I don't like reading 'cos sometimes you need a teacher to tell what you don't know, and she is talking to someone else, and she says "wait a minute"' (Tizard et al., 1988, p. 144).

Evidence from inspectors' reports suggests that such frustrating experiences may not be uncommon for young children, exposed as they are to apprenticeship or shared-reading methods, methods where parental help is especially important. As a telling indicator of current practices, encouraging parental involvement is becoming a significant feature. Government officials report: 'it would be hard to overstate the value of the active involvement of parents in

"paired reading"' (House of Commons, 1990-91a, p. xi), and a third of children at the end of Year 3 still need 'adult support when they read' (HMI, 1990, p. 5). These observations attest to the widespread use of shared-reading methods.

Of course, in the absence of direct teaching, such practice entails introducing parents to the current doctrine (i.e. reading is nothing more than memorising the story), so that they may share in the large and relatively fruitless task. Parents who intuitively sense that productive strategies are needed, and try to teach letter-sound knowledge directly, are actively discouraged from such efforts, encouraged instead to teach their children to memorise print. As one illustration of current attitudes, at the UKRA conference in Cambridge LEA, (March 1994), one speaker urged: 'We must get parents to understand what we are trying to do. When you show them, they *all do it*. "See if you can remember this word, now this one, now this one!"' (Pearce, 1994).

The fourth most popular teacher training text in use, *Reading*, is written by Frank Smith (1978). It appears on 52% of teacher training reading lists of the most recommended texts. Like Waterland, and Meek, Smith proposes that 'children learn to read by reading' (Smith, p. 7) and they do not need to be taught 'since a large part of what we expect them to learn – including reading – cannot in fact be the subject of formal instruction' (Smith, p. 8). These views contrast sharply with experimental research studies that show, if all children are to succeed, or make an acceptable rate of progress in learning to read, they *must be taught*; the necessary phonological awareness and letter-sound knowledge do not spontaneously arise.

Phonics, a Structured System Enhancing Memory Storage, Is Rejected

In practice it is evident that systematic phonics instruction is rejected as being too difficult. As already stated, many teachers have not been trained to teach phonics and do not feel confident to try. Instead, random attention to initial letters while reading may be all that is offered. A careful examination of spelling-to-sound relationships in the English language reveals that it is certainly regular enough to support reading by making these connections. Yet a common excuse given by teacher trainers, and commonly believed by teachers

is that the English language is too irregular and there are too many exceptions to the rules.

Teacher training professionals help to consolidate this view with such statements as 'a phonic method ... is very abstract for little children. It means nothing to them and they usually find it boring' (Root, 1989, p. 42), and 'the well-known irregularity of English spelling means that 'phonic rules' are only an approximate guide to a limited number of words' (Fox, 1991). Phonics is accused of being dull and tedious, too abstract or mechanistic, and divorced from meaningful activities. However, phonics instruction does not demand that any of these unappealing conditions be met; it is quite possible for phonics instruction to be fascinating to children, easy to grasp, very much enjoyed and deeply rewarding. Nor does the use of a code-emphasis or phonics approach preclude the parallel use of amusing, interesting or otherwise appealing reading material once children have learned enough letter/phoneme and blending skills to experience a high rate of success in their first efforts to read them. Other teaching approaches have equal downside potential. For a parent to read the same text over and over to a child until the child begins to memorise it (as advocated in whole-word methods), must be an exercise not only prone to tedium, but rather lacking in the 'rewarding meaningful activity' department as well.

In contrast to research demonstrating the need to give children useful, generative, memory-enhancing strategies for decoding novel words, children are encouraged to read, instead, by stumbling along with their small store of sight words, hoping to recognise words they know, guessing at most of the rest, and as a last resort, using the initial letter or two. The most popular teacher training text in teacher colleges today asserts (in contrast to eye-movement research) that 'efficient readers ... use little more than the initial letter to check out their expectations of the word' (Waterland, 1985). Similarly, Smith (1986) asserts that the only point of the alphabet is that it provides 'a means of memorising written words' (p. 8).

Parents, too, are instructed; a BBC publication directs them to help their children to make sensible guesses at words by, among other ploys, looking at initial letters of a word only (Body, 1990). More recent, lavishly illustrated materials from the government-funded Adult Literacy and Basic Skills Unit

(1995), published in collaboration with the BBC, continue to instruct parents that a code approach is far too difficult for children as the orthography of the English language is too irregular: 'The English language doesn't have simple phonic rules. Try reading 'cough' by sounding it out' (ALBSU, 1995).

Use of Context and Guessing Is Encouraged

As has been pointed out, the use of guessing from context or picture 'cues' is simply not supported by research as an effective approach to beginning reading instruction. Evidence of its use, however, suggests that it is almost universal. For example, there is the look-and-guess technique, 'Encourage the child to guess any words he or she can't read' (Doncaster LEA, 1983, p. 18), or the read-the-pictures technique, 'The reader can use illustrations as a clue to the text' (ALBSU, 1994, p. 3), or the picture-plus-context strategy, a statement of attainment in the National Curriculum assessments: 'use picture and context cues...' (SCAA, 1994d, p. 7). An ALBSU publication (1991, p. 8) entitled *Extending Reading Skills* advises how to help pupils with unfamiliar words: 'skip the word', 'read on', 'read back over', 'ask what he thinks the word might be' (i.e. ask him to guess), 'draw attention to helpful characteristics', such as 'initial sound/letter', or word 'length'. The reader may find these instructions familiar; they reproduce Kenneth Goodman's advice, detailed in the first part of this chapter, almost word for word. ALBSU is a charity-funded organisation supported by the government.

Because of the widespread encouragement of such strategies, there is evidence that many children do not understand what reading is. Some children are suffering from the misconception that reading is nothing more than memorisation. One child, discussing a book that was difficult to read at first, reported that 'I cracked it in the end by reading and reading and reading' (DFE, 1989, p. 4). A BBC publication for parents instructs parents to 'help' by operating in a manner directly opposed to research findings. When encountering unknown words, parents are instructed: (a) to say 'Let's miss it out and read on to the end of the sentence...now can you guess what the word is?'; and (b) 'Don't ask or expect your child to build up or sound out words... this is hard, it often doesn't work', and as further justification for such advice 'this way is no longer used in most schools' (Body,

1990, section 3). For some other children, reading means telling a story using the large and colourful, often dominant, accompanying illustrations. Tizard and others (1988) found that at the end of nursery school, *more than half* the children surveyed thought that when one reads a book, it is not the print that is read, *but the pictures.*

Summary

In conclusion, then, the following practices, none of which is supported by experimental research, are in widespread use among primary school teachers: (a) encouraging children to read by gradually memorising, and guessing at text; (b) neglecting explicit, systematic, intensive code instruction that forces attention to every letter of every word (in favour of incidental attention, and/or the use of initial letter cues only); (c) providing little, if any, direct instruction (assuming that children will eventually catch on if they read with an adult often enough); and (d) encouraging children to recognise words by their shape, or through the use of context, syntactic, or picture cues. These practices produce a substantial number of children who fail to learn how to read at the crucial, beginning stage, and who, later on, may or may not receive help through appropriate code-emphasis instruction.