Literacy for all is a noble goal: The significant interaction of learner history and teacher style Dr Kerry Hempenstall RMIT

Sarah is looking forward to beginning school next year. Her preschool year was fun, but two hours or so was not enough time to do all the things she wanted to do and learn all the things that schools can teach over a whole day. Of course, she has already learned so much - she speaks clearly in well-constructed sentences, she relates well with her age-peers, having worked out or been taught the rules of games, sharing, listening, when to behave and when to "let go". Sarah is especially keen to learn to read and has been primed by her parents. Since before she could remember, her parents have read to her for about thirty minutes each evening - nursery rhymes and fascinating stories. She pores over alphabet books, never misses Sesame Street and regularly videotapes it on preschool days - spending nearly an hour a day watching, answering and singing along with them. Sarah loves creating ridiculous rhymes and word games (especially when on car trips) and speaks to her friends in a strange tongue called Pig Latin that only she and her friends seem to understand. It involves systematic intentional word mutilation that creates a form of secret code. The initial consonant(s) of a word is shifted to the end of the word and followed by /ay/. So "junk" becomes "unkjay", "person" becomes "ersonpay".

She makes up words with magnetic letters on the fridge, she copies letters on butchers' paper using crayons, and she teaches her dolly how to hold a book and run her finger under the words from left to right. Sarah's interest in letters has increased even further since she has began learning how to use the keyboard on the family's computer so she can enjoy the games it can provide. Sarah will have spent several thousand hours on experiences important for the development of reading skills before she even steps over the formal education threshold.

Johnny is the same age as Sarah. He is healthy, active ("Active? Are you kidding?" says his mother) and can only be found indoors when he's asleep, in trouble, or when Clint Eastwood/Arnie/Bruce Lee are on the box. He loves action, whether riding his BMX over home-made obstacles, shooting baskets, or playing football with friends. His parents did read stories to him, but he was always asleep within two minutes, or was too distractible, or complained about them reading him "baby stuff". So the reading routine gradually faded out, and "Besides", said Dad, "He's just a happy healthy little boy, he'll have plenty of time to learn stuff like reading at school". Johnny only watched Sesame Street on really wet days when he wasn't allowed to watch the NBA basketball he'd previously recorded. Johnny shows no interest in "girls games" such as those Sarah enjoys, and tends to become bored very easily when restricted to remaining inside the house. He does have a good memory for statistics - who shot the most baskets on the NBA final, his favourite hitters' average.

Over his pre school life, Johnny spent about 6 minutes per day, a couple of hundred hours, on experiences important to the development of his reading skills. He is looking forward to starting school - he will have lots more friends to play with - maybe even enough to form a baseball team. While Sarah is advanced, attuned to the school system and largely self-motivated, Johnny is naive about formal learning, attuned to active play and not at all self-directed.

David is a quiet, serious boy. He has never had many friends, and being a little uncoordinated, doesn't play a lot of outdoor games. He seems more comfortable with adults and can have a conversation of surprising sophistication. He enjoys Sesame Street though he particularly likes the news and current affairs programs. He also spends hours looking at the National Geographic programs on television. David's language development seems advanced and he speaks clearly except when he gets excited - then words just tumble out. He is a bit forgetful - when his mother asks him to get his brown sox and grey jumper, he often forgets one or the other or brings the wrong colours. Although he tries to play word games, his little sister is much better at finding words that rhyme, or in finding "something starting with /b/." She also beats him in those games like "How many things in your bedroom can you name in 30 seconds?" He arranges letters on the fridge in an odd jumble - and has done so for some time.

David's parents have always enjoyed reading to him, and they have taken pride in the ease with which his vocabulary has widened to include many of the words they have introduced. He converses about the stories with them, demonstrating a capacity for incisive analysis. They did encourage him to follow the words in the book whilst they read, but he soon lost interest in doing so, preferring simply to listen. Nor was he ever able to point out nominated words on a page in the word game his parents tried to play with him.

Like Sarah's, David's home has provided many hours of experience important for literacy development, and despite these characteristics, his parents are sure he will soon be ready to manage the reading task because he is, after all, clearly a bright boy. David too is eagerly looking forward to having the opportunity to learn so much more about the world from proper teachers in a real school.

Given that children enter school with marked differences in maturity, experience, attitude and inheritance, how well does our system cope in achieving the goal of literacy for all? National and state literacy assessments over recent years in the USA and Great Britain suggest that there is a serious problem. Literacy for all is a noble goal - one inscribed in most literacy policies, yet there has been increasingly outspoken concern among parents and employers that the system is failing to meet the objective by a long way (perhaps between 20% and 40%). Initially it was individual researchers and now numerous state and national literacy reports that inform us the methods most popular (those formerly known as whole language, and sometimes now as "constructivist" or "literature-based") have little theoretical or empirical support to justify their use. Further, rather than simply leading to ineffective teaching - it appears that we have been teaching moribund strategies, thereby creating rather than resolving literacy problems. How could this have happened?

Some educational theorists had argued that all children have a natural desire and ability for learning, and that the role of teachers is to step back, provide plenty of encouragement and stimulation - thereby offering the supportive learning environment in which children will naturally choose activities that will enhance their learning. In this view, teachers who direct the learning - set goals, systematically instruct, offer sustained regular correction of errors, and provide lots of practice - are considered to be out-of-date and likely to damage a learner's self-esteem and future preparedness to take risks in learning.

This "natural learning" approach seems to suit Sarah just fine. She is co-operative, attentive, socially skilled, has the curiosity to seek learning opportunities, and the confidence to risk making mistakes. Both her teacher and her parents are delighted with her progress.

Johnny enjoys the freedom to choose too, although his activity-choices are usually sports-related and he is easily bored, becoming boisterous in class, and is sometimes asked to leave the room for a visit with the administration. His teacher commented at a recent parent-teacher interview that Johnny will need to take responsibility for his own learning, but she is confident that he will do so given time for his slightly delayed maturation to occur.

David is so quiet, says little in his co-operative learning group, and his teacher has to regularly remind herself to see how he is getting along. He sometimes asks to remain in the classroom at recess and in her conversations with him, he impresses as a studious, intelligent boy who seems to relate more comfortably with adults than to his peers. His progress in the early stages of reading doesn't match his excellent vocabulary and oral expression. The class uses authentic literature, rather than graded readers or stories with controlled vocabulary, and children make their own choices based upon their own interests. While many of the children are remembering some words they've seen before, David is very inconsistent and his invented spelling remains very immature. Still, he is appreciative of the praise and encouragement given to him by his teacher who is confident that his studious attitude will ensure dramatic progress eventually.

The school had long demonstrated a strong commitment to the whole language approach to literacy. Most of the teachers had been trained in the philosophy at the teacher training stage, and/or through in-service programs provided and endorsed by their education department. This approach assumed that learning to read and write is just as natural as learning to speak. As speech develops readily in a supportive, language-rich environment (the home), so the school tries to recreate that environment to enable reading to similarly develop with ease. Since we are not formally instructed how to speak - we learn to speak by speaking and being spoken to (so the argument goes), we can learn to read without formal instruction by reading and being read to.

This is a very important assumption, because it guides what should and what should not take place in the classroom. If reading is much the same language process as is speaking then any and all activities involving oral language should simultaneously promote reading acquisition. Since the processes are similar, learning to read will occur just by language activities and some meaningful engagement with quality literature. In this approach, one doesn't and shouldn't focus upon phonics instruction, an approach that fractionates reading into skills and subskills. Reading is considered a wholistic activity, thus teaching should also be wholistic.

What if the equivalence assumption is wrong! Researchers are now agreed that the two processes are not the same. Speaking is indeed a natural system (all communities have speech), reflecting a biological specialization for language. All speech systems are similar in that they are developed by combining about 40 or so sounds. However, only a minority of communities have a written form. They are artificial devices varying dramatically in their structure across different societies. Written languages are an invention, and of those with an alphabetic basis, the alphabetic principle has to be discovered by or taught to every new reader. It involves being able to recognize and use the fact that sounds (phonemes) can be reliably represented by letters or groups of letters in words. This principle in turn requires (i) some degree of phonemic awareness knowing that words are composed of sounds, can be broken down (segmented) into those constituent sounds; and, that by blending sounds, words can be constructed; (ii) some knowledge of the letter shapes and how they represent sounds in our alphabet; (iii) an ability to combine these two features. This is trickier than it at first appears. Speech develops before reading, and we do not usually think about the sound construction of spoken words - it is an acquired skill. Speech is delivered in a more or less continuous stream yet words are separated in print through spacing. Some children have a great deal of difficulty in analysing spoken words to help map the phonemes onto print. They may not develop this phonological sensitivity without varying degrees of assistance, and for some students intensive carefully sequenced instruction is necessary.

The recent public debate about the teaching of reading occurring in Great Britain (National Literacy Strategy) and the USA (Reading Excellence Act, National Reading Panel) has led the school to add to its language arts policy. A short section suggests that students may be encouraged to attend to phonic cues if they have difficulty with a word in a story and they have been unable to use the context to determine the word's pronunciation. They describe this addition as indicative of the school's "balanced" approach to reading. The policy stresses that it is not only concerned with reading but with many facets of literacy; it reaffirms the desirability of integrating all language and literacy activities; and it insists that reading, writing and spelling be addressed only within the context of authentic literature.

Sarah has little difficulty in discovering and comprehending the alphabetic notion. That her teacher has not made this principle clear to Sarah is of no great consequence, as she came to school with extensive literacy experience and a good ear for sounds. Johnny has had far less experience and is still to discover the principle. He does not attend to letters and their positions in words - he perceives a word as an indivisible whole, entirely unlike any other words. For him, reading is a matter of guessing from the convenient accompanying pictures, or a memory test in which every word has a different shape to be memorised. Of course this leads him to confuse words that are even vaguely alike visually, and to read the same word differently even when it appears in the same sentence. He has no idea about decoding words that he has not seen before, or even those he sees

irregularly. His teacher suggests to him that he must pay more attention to the story meaning if he is to improve - he needs to develop the courage to guess.

According to those recent research reports, it would be helpful if someone taught Johnny the alphabetic principle, as initial problems in reading acquisition are highly predictive of long term problems. For Johnny's teacher, however, that would involve teaching the subskills of reading out of the context of stories, a practice completely at odds with the school's balanced reading approach (nee whole language philosophy). Johnny may develop adequate reading ability eventually, but he may never become truly facile nor find pleasure in reading - because the task was made too difficult initially. On the other hand, he may continue to rely on memory and guesswork - strategies that collapse around grade four when the number of words he must recognise becomes overwhelming.

David too is disadvantaged in this classroom. He has significant difficulty in recognizing the sounds in words, and probably would continue to do so even they were sounded out to him from time to time. The construction of words appears completely arbitrary, and the task of remembering even simple words appears beyond him. He sometimes even reads a word correctly in one sentence but then is mystified by the same word in the next sentence. His reading is painfully slow and effortful. He is clever though, and sometimes uses a synonym for the word because he has guessed the author's intent. His teacher praises him for such meaningful substitutions, and even informs his parents that such meaningful miscues are a cause for celebration, as it indicates he is negotiating meaning - the true purpose of reading in this philosophy.

Unfortunately, he will not thrive in such an unstructured, discovery-oriented environment. If David is to progress, he will need more intensive teaching over a longer period of time, with far more practice than Sarah or even Johnny requires. He is the least able to overcome the inadequacies in his instruction. In this classroom, he will probably be left to develop at his own rate with the reassurance that he will catch up when he is ready. By the time his parents become more assertive, David will be in upper-primary school and extra assistance even if available will be too little too late. He will be trapped in a downward spiral, reading very little, errorprone and halting, with little comprehension because of his slow rate and the demands made on his attention merely to decode the words.

While Sarah reads about 2000 words a week in class and 20,000 words out of class, David reads 20 words a week in class and less than 2000 words out of class. Unfortunately, after the early grades, this low engagement in reading affects not only vocabulary development - thereby further limiting comprehension - but it even appears to impede the continued development of his intellectual ability. David not only does not catch up - the gap between him and his peers widens further over time.

Why can't David's teacher perceive the merit in following the National Reading Panel's advice? The teacher has been trained to view reading as a process of constructing meaning during which skilled readers skim over the print using as little visual information as possible. The idea is to predict upcoming words before they arise based upon the understanding of the context, and then use a few letters to confirm the identity of the word. Thus identification follows meaning, and thus should not form the basis of reading instruction. Meaning is paramount.

There are at least two major concerns with this as a guide to promoting reading progress. If it were true that skilled readers did read this way, would it necessarily be the best way for beginning readers to attempt? Observation of skilled performance does not always provide a guide for the novice. Students may need to progress through stages of competence using simpler strategies initially. Do we expect budding pianists to perform Rachmaninoff before Chopsticks?

In any event, the assertion about what skilled readers do is completely and demonstrably false. At the time it was proposed, about 30 years ago, this assertion could not be tested, but eye movement studies have clearly

shown that good readers do not simply sample the text. They look at every letter of every word, and their decoding skills usually provide the meaning of what they see before prediction strategies can come into play. They are sensitive to the letters in words and their positions. Good readers are characterised by rapid, context-free, automatic decoding skills that enable their higher order attention to be devoted to the task of comprehension.

Whole language advocates long argued that good readers mostly employ context strategies, and that struggling readers do not, but would become adept readers if they could be enticed to do so. The context strategy involves producing any word that preserves the sentence's meaning and grammatical structure. Unfortunately, the assertion is also false - poor readers use context strategies at least as much as do good readers when the passages read are equally difficult for each group. Over-reliance on context strategies for word identification is thus an indicator of inadequate decoding skills and not a cause for celebration.

Sarah doesn't take much notice of the teacher's advice because she has discovered that her guesses are frequently incorrect - even skilled readers guess accurately about one in four times. To make matters worse the very words she tries to guess are those that contribute the most information to the sentence, and thus are the hardest to guess. Fortunately, Sarah makes fewer and fewer decoding errors so she rarely needs to guess - she knows how to determine the pronunciation of unknown words. Since she makes so few errors she escapes her teacher's poor advice. Though not important for decoding, sentence context can still be useful for determining the meaning of an unknown word. However, if she can't derive an unknown word's meaning from the sentence context, she will ask, or use her dictionary - thereby further increasing her vocabulary.

Not so lucky is Johnny. He too is encouraged to guess, but he doesn't take seriously the advice - often suggesting outlandish or risque words to get a laugh from his peers. He is simply drifting along and his parents are concerned that he is beginning to refer to himself as dumb.

Predicting from context hasn't helped David either, though his language ability occasionally produces an inspired guess. He tries desperately to avoid reading aloud in class, and even in the daily lengthy periods of silent reading he derives neither understanding nor pleasure. He stares at the page and thinks of more pleasant things. His parents had been dissuaded from seeking outside assistance by David's teacher. Since she considers reading progress is natural given adequate desire, readiness and access to authentic literature, she considers formal assessment a pointless and dehumanising experience. Despite this strongly expressed warning, they recently sought assessment from a specialist reading clinic. They hope that it is not too late to renew David's enthusiasm and that his progress will accelerate through intensive, systematic instruction, possibly over a longish period. Initially focussing upon daily phonemic awareness training that incorporates direct linkages with phonic strategies, he will also receive continuous attention to fluency, vocabulary development and reading comprehension strategies.

The most alarming aspect of the philosophically driven, discovery-focussed classroom style is that it continues to be endorsed by numerous state education authorities, teacher training facilities, and by some literacy organisations. There is a bizarre quality to decision-making processes that ignore overwhelming educational evidence because the previous and preferred approach sounds more attractive and dovetails with humanist ideals. The Sarahs and some of the Johnnies may escape unscathed, but our failure to make a difference to perhaps 20-40% of our students is an indictment of the system. The head of the NICHD in the USA predicted recently (Lyon, 2001) that the introduction of teaching consonant with the principles outlined would reduce the proportion of fourth graders reading below the basic level from present figure of 38% to 6% or less.

It is becoming clear from the politics surrounding literacy instruction that parents are no longer as sanguine about failure as have been policy makers until recently. When politicians take up a cause, as has occurred in the USA and Great Britain, it is frequently a sign of strong parent interest and concern. Even though there have been valuable policies instituted at a state and federal level, there remains the unedifying intransigence of

many teacher training institutions and the resultant inability of teachers to implement the desired research-based strategies. Perhaps the next target for parent activism should be the very source - the training grounds for teachers.

Reference Lyon, G.R. (2001). Measuring success Using assessments and accountability to raise student achievement. Subcommittee on Education Reform Committee on Education and the Workforce U.S. House of Representatives Washington, D.C. [On Line]. Available http://www.nrrf.org/lyon_statement3-01.htm