First to Fourth to Thirteenth and (in all Probability), Still Dropping? New Zealand’s International Literacy Results: Some Personal Thoughts About the Reasons For The ‘Gap’

Dr Keith Greaney
Massey University
College of Education

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In 1970 I began my twenty-seven year primary school teaching career. The 1970’s was a ‘milk and honey’ time for teaching literacy. After all, the first international literacy survey (IEA) results had just been released which showed that New Zealand 14 year olds were the best readers in the world. There was little mention of an achievement ‘gap’ or ‘tail’ between the top and bottom achievers in this survey, although there was probably a small one. With such positive literacy results, we taught in a generally unquestioning environment with regard to the literacy methodologies and ideologies of the day. We were frequently being told the following:

- children learn to read as naturally as they learn to speak
- we shouldn’t break reading up into ‘pint sized little bits’
- just immerse children in a print rich environment and they will teach themselves
- we don’t need to explicitly teach skills (like phonics) and certainly not outside the context of real reading
- children learn to read best on ‘rich’ texts that have ‘natural’ language with stories that relate to their experiences
- we shouldn’t teach phonics because written English is too irregular
- English written language is very predictable and many words are actually redundant
- reading is a ‘psycholinguistic guessing game’ where the reader can miss words out and just guess from context

At this time, schools were also presented with (i.e., given free), a ‘natural language’ text series called Ready to Read which was published by the Department of Education. We were also led to believe that this underpinning list of literacy learning characteristics was relevant and sufficient for all children’s learning. And so our programmes reflected these characteristics and the literacy programmes were heavily based on the Ready to Read books as the predominant instructional series in junior classes.

The 1970’s and early 1980’s saw the development of two Department of Education funded literacy-related inservice training courses for primary teachers. The first one was known as the Early Reading Inservice Course (ERIC) which was
designed for junior class teachers. This was followed a few years later by a similar one known as the Later Reading Inservice Course (LARIC) and was designed specifically for teachers in the upper primary classes. The national Reading Recovery programme was also introduced in the early 1980’s. The underpinning philosophies for both these inservice training courses and the Reading Recovery programme were also based heavily on the literacy learning characteristics previously presented.

From the middle 1980’s cognitive psychologists were using scientific research paradigms to study the components of early literacy learning. New research methodologies incorporating experimental designs and statistical analysis procedures were allowing researchers to more accurately study the variables and conditions that affect literacy learning. More importantly, much of this research was also beginning to demonstrate why some children fail to develop efficient literacy skills. However, the results from many of these new studies did not sit well with the predominant literacy philosophies that we had been familiar with in New Zealand classrooms. Results from many of these new studies for example, revealed the following:

- reading skills do not develop naturally (like learning to speak)
- eye movement studies suggest that fluent readers actually process every letter of every word when they read (but the processing is very efficient)
- efficient decoding skills are necessary for fluent reading
- fluent readers are efficient decoders (and do not rely on context as a word identification strategy)
- the main problem affecting most young children with reading difficulties is an inability to decode words quickly and efficiently
- there is a high correlation between early phonological awareness and later reading success
- many children require explicit and systematic instruction in phonological skills before they are able to develop fluency
- most poor readers rely on inefficient context-based word identification processes to compensate for their poor phonological processing skills

So, in the light of many of these new research findings, the latter part of the 1980’s should have been a time for questioning our teaching methods, and particularly in
relation to the teaching of those children with reading difficulties. One would expect to have seen evidence of change in the way we taught reading. Perhaps we may have seen interventions being designed to take account of the importance of phonological learning in early literacy programmes. Perhaps we may have seen an acceptance that one size (i.e. method of teaching), does not fit all children, but that many children actually require explicit teaching to learn the alphabetic principle. Perhaps we may have seen the development and introduction of some phonological awareness assessments. We saw none of this. What we did see were the results from a second international (IEA) literacy survey.

The second IEA literacy survey results were published in 1991 and they showed that New Zealand children were now in sixth place overall behind Finland, United States of America, Sweden, France, and Italy. The results from this second international survey also began to highlight the differences between the scores of European and Maori/Pacific Island children, and between boys and girls. In other words, a literacy performance ‘gap’ was beginning to show between different gender and cultural groups within New Zealand.

With many national and international research studies continuing to implicate poor and/or inefficient phonological processing skills as being a major factor in literacy under-achievement, one would have expected to see a more phonological-based emphasis in early literacy interventions in the classroom. After all, if the research findings in the literature were demonstrating that fluent readers were also efficient decoders of print and that poor readers were inefficient decoders of print, then it would have made sense to design and introduce literacy interventions that focussed on the development of phonological skills in the early years of reading instruction. The results from the second IEA survey should also have signaled a need for a review of the predominant teaching strategies used to assist children with reading difficulties. Again, this did not happen. Soon after I had left teaching in 1998, the results from a third international literacy survey (PIRLS) were published. These latest results show that New Zealand is now currently ranked in 13th place.

Although the PIRLS’ results show that New Zealand’s top scores are as high as the best in the world, the results also show that the ‘gap’ or ‘tail’ is now also one of the longest. When discussing these variable scores, the Ministry of Education report Reading Literacy in New Zealand (2003) notes for example that
for New Zealand, the difference between the lowest achieving students (the bottom 5%, at the 5th percentile) and the highest achieving students (the top 5%, at the 95th percentile) was 308 scale score points. This is large in comparison with most other high-performing countries (p. 5).

Of particular significance are the poor performances of Maori/Pacific Island students and students who do not speak English as their first language. Boys in general, also tend to continue to score lower than girls. While it is true that these groups are over-represented in the ‘tail’ figures, it is also often stated that the socio-economic status of families, and/or different language backgrounds of the students are to blame. Poor phonological skills development and/or ineffective instructional procedures are still not considered by many commentators, to be a major cause of the achievement ‘gap’ results in these surveys.

An example of this lack of acknowledgement of the importance of phonological processing skills in literacy development is apparent in the contents of many submissions made to the Parliamentary Inquiry into the Teaching of Reading in New Zealand (2001). An analysis of the contents of some the submissions from some major (and influential institutions and organizations) indicates that they are not particularly sympathetic to the call for more phonological-based teaching as the answer to the low literacy performances of some groups.

A submission from the Auckland College of Education for example, lists a number of possible reasons why some children find literacy learning difficult. These include:

- discontinuity in school attendance
- high numbers of foreign trained teachers
- inadequate effective classroom support for teachers
- high numbers of curriculum changes
- demanding classroom environments
- variable teacher training quality increasing numbers of children with English as a second language
- competition from non-print based media.

As well as listing an increase in the numbers of foreign trained teachers teaching in our schools and an increase in the numbers of English second language students as
being major causes for low achievement levels of some students, the New Zealand Reading Association’s submission also blamed issues such as ‘more complex’ classrooms and ‘more demanding children’ as possible reasons for low literacy levels.

In a personal submission, Warrick Elley listed the following reasons for low literacy skills among some groups:

- lack of adult role models for reading in the home
- lack of books in home
- poor oral language developments
- children coming to school hungry
- ‘family’ problems
- poor school attendance
- English as a second language issues

While it may be true that any learning (including literacy learning), may be affected to some extent, by these issues, it is nevertheless interesting to note that none of these submissions address the importance of (or call for) more explicit and systematic classroom teaching of the relevant phonological skills. Rather, these submissions suggest that many of the main causes of low literacy for New Zealand children seem to lie ‘outside the context of the school.’

**Has New Zealand learnt anything new about literacy teaching in thirty years?**

Probably the most widely accessible (literacy) publications that teachers read (and therefore gain professional development knowledge from), are those that are published by the Ministry of Education and distributed free to all state and integrated schools. Many of these publications relate specifically to the teaching of literacy in the primary school, (e.g., *The Learner as a Reader*, 1997, *Reading and Beyond*, 1997, *Ready to Read Teacher Support Material*, 2003, *Effective Literacy Practices in Years 1 to 4*, 2003). An analysis of many of the teaching directives and suggestions presented in these Ministry of Education publications highlights an underpinning
philosophy of literacy development and teaching that is based on the following characteristics:

- children learn to read best on ‘rich’ texts that have ‘natural language’
- we don’t need to explicitly teach phonics skills outside the context of regular reading
- fluent readers use all cues simultaneously and equally
- children learn to read best on texts that have predictable language structures
- children use prediction skills to identify many unfamiliar words
- teachers ‘set up the environment’ so that children will want to learn to read
- children should be encouraged to use context cues ahead of phonological-based cues when identifying unfamiliar words

When comparing these characteristics with those that influenced the 1970’s literacy teaching in New Zealand primary schools (that I alluded to earlier), it is apparent that there are still many similarities. There is still an apparent acceptance that these characteristics apply equally and sufficiently, to all children’s literacy learning, irrespective of individual abilities. Rather than accepting the evidence-based findings from the international research literature that demonstrates the importance of including explicit phonological skills training in early reading programmes, the Ministry of Education has continued to ignore this evidence in favour of retaining the status quo ideologies. The problem with retaining these ideologies as the all-inclusive basis for teaching reading is that it is presumed that such ideologies are equally suitable for all children regardless of their reading abilities. A large number of children will develop phonological-based literacy skills, irrespective of the method of instruction. However, this is certainly not the case for many others. Tunmer, Chapman, Greaney and Prochnow (2002) argue for example that

As Liberman and Liberman (1992) have pointed out, most children, probably 75%, will independently discover the phonologically-based skills necessary for learning to read in an alphabetic orthography no matter how unhelpful the method of reading instruction. However, this leaves an unacceptably large number of children
who struggle to learn to read as a consequence of instructional approaches based on incorrect assumptions about the nature of the reading acquisition process (p. 12-13).

It is conceivable that most of those students who keep falling into the ever-growing ‘tail’ in the international literacy surveys include the 25% referred to by Liberman and Liberman. It is this particular group of children who require a lot more explicit phonological-based instruction before they are able to develop fluency. However, even the Ministry of Education’s (2003) latest text (Effective Literacy Practices in Years 1 to 4), gives very scant attention to the explicit teaching of literacy skills for those children who are experiencing difficulties. In this text, there are a number of case studies that are included as examples of ‘effective’ classroom practices, yet there is no mention of any explicit phonological-based teaching strategies. Rather, these case studies suggest that the programmes are suitable for all children at all levels of ability. It is also significant to note that twenty five years ago the Department of Education (1978) recognized that some children with reading difficulties required more focused and explicit teaching needs than others. This was acknowledged through the publication of the text, Reading: Suggestions for Teaching Children with Reading Difficulties in Primary and Secondary Schools.

The recent emergence of a socio-cultural paradigm (Phillips, McNaughton & MacDonald, 2000) as a possible solution to addressing literacy learning problems is also beginning to ‘muddy the waters’ with regards to finding solutions to closing the literacy performance gaps between the top and bottom readers. I mention that this paradigm ‘muddies the waters’ because, while such a paradigm correctly acknowledges the importance of developing home-school relationships, it also disassociates the need to include explicit phonological-based skills learning in any instructional intervention that is outside the context of regular reading. The socio-cultural paradigm argues that, because literacy is embedded in social contexts and practices, it is not advisable to separate and teach sub-components outside the context from which it occurred. Phillips et al (2000) argue for example that

*Literacy must be situated in the social, physical and socio-cultural world of participants within community-wide social practices. On the other hand it also suggests the detachment and examination of elements of semantic structure (the words, morphemes and phonemes, letters and sounds) is possible and indeed,
necessary. However this examination only has substance with reference to the practice in which it is embedded (p. 85).

Many failing readers require very explicit (and in many cases, isolated) skills-based teaching of the literacy-related sub-components for them to fully understand such information. Furthermore, such instruction will almost invariably include tasks that are presented outside the context of regular reading. However, the socio-cultural paradigm does not encourage this approach. According to the socio-cultural paradigm of literacy learning, the emphasis for teachers seems to be on adapting and modifying the school programme to match the literacy-related learning environment of the home. McNaughton (2002) argues for example that

_The core assumption of the continuity approach is that teaching and learning at school can be made more effective by enhancing the continuity between how things are done at school and how things are done in the child’s family and social setting_ (p. 20).

Socio-cultural advocates would not be encouraged to include any explicit phonological skills training _outside the context of regular reading_, and yet, this is precisely what the research suggests should be done in order to develop such skills in poor readers. Although Tunmer, Prochnow & Chapman (submitted, p. 88)) correctly argue that there is little disagreement with the idea that teachers should adjust their teaching to accommodate student differences in cultural/family background, the socio-cultural paradigm does not recognise the need to include any separate and/or explicit phonological-based instruction as part of this accommodation of differences. Yet, regardless of cultural/language background, the ultimate aim of any effective literacy programme in New Zealand, must be to teach every child to be literate in English, and to do this effectively often requires the inclusion of explicit phonological-based interventions to develop a knowledge of the alphabetic principle. Without such knowledge, many children will continue to remain poor readers and writers.
Conclusions

I began this paper with reference to my own teaching experiences, and so I will end with reference to it. In a strong attack on literacy research findings that use experimental designs, Smith (2000) has argued that

*a narrow experimental research paradigm may not assist classroom practices. What is published in refereed international journals, while satisfying stringent criteria from university-based researchers, may be of little help in the complex world of the classroom* (p. 141-142).

My response to this view is that after twenty seven years of involvement in this ‘complex world of the classroom’, these experimental studies have certainly had a strong influence on both my teaching, my way of looking at literacy-related issues and my research interests and directions. After teaching in regular classes at all levels of the primary system, including special education classes, and having worked with (and researched), children with reading difficulties for 27 years, I have developed a deep appreciation of the literacy problems affecting many poor readers. I am now also more aware that mere immersion in a print rich environment is far from adequate or sufficient for teaching all children to become fluent readers. I would like to think that such an appealing and romantic natural-learning philosophy would be sufficient for teaching literacy skills to all children. For many children it may be sufficient, but unfortunately this is not the case for others as our continuing international literacy survey results indicate. The fact that close to 20% of all 6 year old children require additional interventions such as Reading Recovery, also indicates that something is amiss with the way we teach reading in the early years.

The research studies that Smith (2000) claims are ‘of little help in the classroom’ have certainly informed both my thinking and practice to such an extent that I now wonder in amazement that I adhered so strongly to those deficient 1970’s beliefs for so long! Yet these are the very same beliefs and philosophies that the Ministry of Education continues to subscribe to and promote, in its publications to schools.

There are still many admirable qualities that characterize New Zealand’s literacy programmes. These include:
• the shared book reading lessons
• well-constructed guided reading lessons
• tape-assisted reading programmes
• reciprocal teaching lessons
• the thematic reading lessons
• the frequency with which teachers read aloud to their classes
• the opportunities for children to read silently (USSR)
• the presence of libraries in schools
• the freely available literacy resources (e.g., Ready to Read series, school journals)

However, even with all these programmes and materials, we need to be aware that there still remains a significant group of children who continue to have problems learning to read. This suggests that we need to look more closely at the recent research relating to how children learn to read and how we should teach children to read. We also need to design relevant assessment tools and instructional programmes that more effectively address the literacy learning needs of children with literacy-related learning difficulties.

**The second ‘gap’**

However, with such an ‘anti research’ climate pervading among some leading commentators in the literacy field, I am now also beginning to understand why New Zealand is continuing its downward trend in the international literacy surveys. Although there seems to be a widening achievement ‘gap’ between the top and the bottom scores of New Zealand students in the international literacy surveys, there also appears to be a second (and equally serious) ‘gap’ developing at the same time. The second ‘gap’ I allude to relates to a gap between the literacy theory knowledge base that is driving the international research literature, and the literacy theory knowledge base that is currently driving New Zealand Ministry of Education publications and policies. An interesting example of how the influence of the Ministry of Education publications are directing literacy teaching practices is evidenced in the case studies presented in the Ministry of Education’s latest text *Effective Literacy Practice in Years 1 to 4* (2003). In this text, three case studies are presented (pp. 177-188) that
purport to demonstrate ‘effective’ literacy practices. Teachers describe various literacy related activities at each of their class levels. However, the only literacy assessments discussed in these case studies include the following:

- alphabet knowledge assessments
- concepts about print assessments
- running records of oral reading behaviour
- tell me (an oral recall assessment from the School Entry Assessment kit)
- assessments of handwriting

While each case study discusses writing activities in some detail, there is also mention of the use of shared, guided and independent reading as key elements within the general class literacy programmes. However, there is an absence of any detailed descriptions relating to the assessment and teaching of phonological-based skills. It is also significant to note how the children who have literacy needs (particularly those with literacy learning difficulties), are catered for. In the first case study (Year 1 urban school), it states for example that:

If a child is still struggling with their literacy after these strategies have been used, a number of intervention programmes are available. Interventions include reading recovery, one-on-one support by teacher-aides in the classroom, oral language groups, peer support systems and parent tutor reading (p. 180).

In the second case study (Year 0 to 4 class in a rural school), the teacher notes that:

Children experiencing difficulties also work on the same activities as the other children, and my expectations for them too are based on what I know they are capable of and on challenging them. In one of my current groups, each child has 15 minutes a day working one on one with a teacher aide, reading easy texts to build up their fluency and confidence (p. 184).
In the third case study of ‘effective’ practice (year 4 in an urban school), children who are having (severe) literacy difficulties (who are reading at only the emergent level), receive the following:

*On 3 days of the week, they spend 30 minutes in a programme working with a teacher aide on shared reading and writing activities. They then receive individual, focused instruction from a specialist teacher* (p. 187).

The concern I have with these three case study examples relates to how these children with literacy learning difficulties are catered for. It seems clear that in each case, there is no indication that the class teacher is either willing or has the necessary skills, to cater for the specific needs of these particular children. It is also a concern that the children with literacy learning difficulties tend to be more often given extra tuition by untrained teachers (e.g., teacher aides, parents). It is impossible to expect every regular class teacher to meet every educational need of every child in their class all the time. However, there must come a point when the regular class teacher becomes more able to ‘own the problem’ of low literacy levels within their own class. But for this to happen, the teacher will first require professional development that includes opportunities to learn the necessary knowledge and skills. The teachers’ examples of ‘effective’ practices presented in the case studies in the *Effective Literacy Practice* text suggest that this is not happening.

While many of the activities discussed in the case studies do represent and reflect ‘effective’ literacy practices, there seems to be a lack of detailed information about what constitutes effective practices for children with literacy learning difficulties. The lack of attention given to phonological processing assessments and specific phonological processing teaching strategies in both the case study examples and in the text in general, suggests that the Ministry of Education’s literacy knowledge base does not accurately reflect the knowledge base that is now driving much of the international literacy research.

It may be that this pedagogical knowledge base ‘gap’ (that is reflected in Ministry of Education publications) is not about to close in the near future. The resulting evidence of this situation will continue to manifest itself in our widening literacy achievement gaps that are published in the international surveys. Until this
pedagogical knowledge base gap is closed, I see the literacy-related achievement ‘gap’ between New Zealand’s top and bottom students continuing to widen in future international surveys.

The PIRLS Results: Where to From Here?

In relation to the PIRLS document I have only alluded to the literacy achievement gap issue which shows that New Zealand students’ performances showed one of the greatest variations between the top and the bottom achievers. The current paper contends that if this ‘gap’ is going to close, a number of issues need to be addressed. Some of these include:

• an acceptance that large numbers of children with literacy learning difficulties need more explicit, more repetitive and more focused strategy instruction than that given to the majority of children
• an acceptance that such explicit instruction will often include isolated strategy training in phonological-based skills and knowledge, and at a very early stage
• an acceptance that fluent readers are fluent because they have developed phonological processing skills
• an introduction of more focused phonological-based literacy assessment measures to be available for all teachers
• more professional development for regular class teachers that focuses on research-based instructional and assessment strategies for teaching literacy skills to all children and in particular, to children with literacy difficulties
References


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