[Thompson, B. (2002). Teaching and the Phonics Debate: What Can We Learn? *New Zealand Annual Review of Education, 11,* 161-178]

Teaching and the Phonics Debate: What Can We Learn?

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Abstract:

There is debate about whether New Zealand practices for teaching reading should include "more phonics". With the focus on the first two years of school instruction, the status quo of receptive phonics and the teaching culture in which it is embedded are described and compared with the productive phonics practices of other teaching cultures. The response of New Zealand children to this practice is relatively faster reading procedures. However, there is much that remains to be learnt to sharpen New Zealand receptive phonics teaching practices to meet the successive developmental purposes of phonics; and also to reduce repetitive teaching rituals, as in practices to prompt for meaning.

The main theme in the current New Zealand reading debate is about whether teaching the skill of reading should place more emphasis on the relationships between letters and their matching component sounds of words. This is called the "phonics debate". It has warmed up in New Zealand since 1995 (see Elley, 1996; Greaney, 1997; Harrison, 1998; Limbrick, 1998, 2000; Nalder, 1997; Nicholson, 1997), simmered since then (Literacy Experts Group, 1999; Nicholson, 2000a, 2000b), and come under high heat with the Parliamentary Select Committee inquiry into the teaching of reading and the resulting recommendation "that the Ministry of Education provide advice and support to schools to incorporate successful phonics programmes into the classroom" (New Zealand House of Representatives, 2001, p. 17). However, it has cooled somewhat with the Government's response.

The Ministry of Education's submission to the Parliamentary Committee was that New Zealand teachers already take "a balanced approach to reading instruction, which includes the teaching of phonics" (New Zealand House of Representatives, 2001, p. 14). Their

response to the Committee's recommendation on phonics teaching was that "professional development programmes and materials are providing clear guidance on how to effectively incorporate a full toolkit of approaches for an effective literacy programme" (New Zealand Government, 2001, p. 9). The current professional development referred to is the Literacy Leadership Programme (Baretta, 2001; Ministry of Education, 2001a) which facilitates school self-review to identify and promote good literacy teaching practice. The notion of a "full toolkit of approaches" is neither specified nor elaborated.

Is the present phonics debate a tired old one that gets nowhere? Is it best ignored by teachers or deftly sidelined? Is it an unresolvable clash of teaching cultures? [1] Can teachers and their advisers learn anything from this debate that will benefit children? The intent of this article is to show they can, if they examine what purposes are served by some of their teaching practices. As this is a New Zealand review, the focus will be on recent theory and evidence from New Zealand but, where available, will include direct comparisons with different teaching cultures overseas. The focus will be on the first two years of regular school instruction. The issues of instruction outside regular classrooms, such as Reading Recovery, warrant separate treatment, so will not be addressed here.

New Zealand Practices and Teaching Culture

What are the status quo practices in New Zealand schools for teaching the relationships between letters and their matching sounds? During the past three decades children have been taught names for letters (e.g., *a* is "ay", as in "day") but usually there has been no teaching of phonic sounds (e.g., *a* is "a" as in "apple"). An intensive study of both types of responses to letters by 5- and 6-year-olds in New Zealand shows this to be the case (Thompson, Fletcher-Flinn & Cottrell, 1999). It follows that children in New Zealand have not been taught to try to work out unfamiliar words in their reading by pronouncing, in turn from left to right, the phonic sound for each letter (or digraph, e.g., *th*, *ea*, etc.) These phonic "sounding-out" responses, such as "ki"-"o"-"ti" for the unfamiliar word *cot*, have been virtually unknown in school classrooms; nor have children spelt out sequences of the letter names of unfamiliar words in their reading (Thompson, Cottrell & Fletcher-Flinn, 1996, pp. 205, 211-212; Connelly, Johnston & Thompson, 2001, p. 435). More recently, in a different region of the country, as part of a current research project (by the author and C. M. Fletcher-Flinn) teaching

practices and pupil responses have been systematically observed in seven classrooms of state schools for approximately 10 hours each, again confirming the absence of phonic "sounding out" for either teachers or the 6-year old pupils.

It is important to become aware of the influence of this local teaching culture. As most New Zealand teachers, pupils, and parents have never experienced this sounding-out practice, what are they to understand by the term "sounding out"? In my experience many teachers take it to mean the deliberate, slower than normal, pronunciation of a word when reading (without any pronunciation of the phonic sound of individual letters or digraphs). A few teachers consider it to mean the pronunciation of the phonic sound of the initial letter of a word, followed by the remainder of the word or syllable, e.g.,"ki"-"ot" for *cot*, which does, very occasionally, occur among New Zealand children (Thompson, Cottrell & Fletcher-Flinn, 1996, p. 211) Only a few teachers and their advisers consider it to be the phonics sounding-out procedure described above. The Education Review Office is not among that number. In their report on literacy (Education Review Office, 1997, p. 7) they claim that the intention in the official New Zealand Ministry of Education (1994) English curriculum statement is that "teachers should help students to learn how to sound out." In the usual international English usage of this term, which derives from a teaching culture different from the local New Zealand one, this statement is both wrong and misleading. The English curriculum statement never uses this term, but mentions (p. 76) that in reading, students should use "grapho-phonic cues" (to gain meaning). This means that students should attend to letters of words to give them partial information ("hints") about the sound of the word, along with other cues already available from their reading of the text, namely the meaning and syntax.

Would New Zealand children be better than the Education Review Office in describing the implementation of the New Zealand English curriculum? Tunmer and Chapman (in press, a) have made a study of New Zealand children's self-reports of their procedures for trying to read unfamiliar words. The children were at the end of their first year at school but still aged 5 years. Among those children's self-reports which referred to sounds or letters were: "listen to what the letters are", "hear all the letters", "think of the sounds", "sound it out". Apart from the last descriptor in this list, these 5-year-olds (about half the total sample) have better descriptions than the Education Review Office.

Sounding-out phonics of the "ki"-"o"-"ti" kind is a productive phonics teaching practice. There are other kinds. There is receptive phonics teaching. Instead of the child pronouncing separate sounds for letters of the word, the child learns about letter-sound relationships by *listening* for the sounds within heard words that match printed words. For example, the teacher says to the child, "Can you hear this letter (e.g., *c* of the print word *cot*)? Is it the same as the sound the letter makes in this other word (e.g., *c* in the print word *car* which is already known by the child)?" For teachers and parents who have known only the teaching culture of sounding-out phonics, this practice may not be recognised as phonics at all. Receptive phonics has been the practice which New Zealand teachers themselves have advocated since the 1960s, following the influence of Myrtle Simpson (Department of Education, 1962, pp. 50-51, 70, 92-94) and the many teachers she consulted for the introduction into our schools of the original New Zealand Department of Education *Ready to Read* series of reading books. This practice is a feature of more general characteristics of our present teaching culture, which has a major emphasis on responsive teaching in the junior school years. Teaching often arises as the teacher responds to the children's attempts at reading texts. Also, the classroom activities of the children are often open-ended, without predetermined correct outcomes. These characteristics have been systematically observed and described by Watson (1999). In contrast, in other teaching cultures phonics teaching may follow a preset schedule, for example, as described in Nicholson (2000a, p. 95). Of course a mix of both kinds of teaching can take place. Openshaw and Cullen (2001) recorded teacher reminiscences which indicate that the preset schedule was a stronger feature in the teaching of receptive phonics for some New Zealand teachers in the 1960s than it has been since.

As McNaughton (1999a, 1999b) points out, a teaching action which is a response to the child's text reading can be explicit teaching, as in the example above of receptive phonics teaching about the sound of the letter *c* in words. Hence the term "explicit phonics" (commonly used in the international literature as a label for what is here called "productive phonics") is potentially confusing when applied to New Zealand teaching practices.

The phonics debate frequently proceeds from the polar positions of the status quo versus "more phonics", a position often implying productive phonics explicitly taught to a preset schedule. And both sides so often seem unwilling to go beyond these entrenched positions,

to enter into distinctions that describe children's learning in different teaching cultures.

Comparisons of outcomes

For reading level outcomes, are there comparisons between the New Zealand teaching practice and those of other countries? There are international comparisons of reading attainments, the most recent of which shows that 15-year-olds (the 5-year-olds of 1990) were on average at par with Australia and the United Kingdom, and significantly above the United States (Ministry of Education, 2001b). Such simple comparisons are often not robust (Reid, 1994) and the next set to appear may give a different picture. However, some commentators may want to say the present set indicates that receptive phonics teaching practices of the early '90s did not disadvantage our children relative to the comparison countries. We cannot, however, make any inferences about whether New Zealand children (or some below-average subgroup of them) would have done better, or worse, if they had received "more phonics" of some kind.

An entirely different research approach to comparisons of teaching programmes derives from the proposition that children can follow different learning pathways to the same general level of word reading attainment. This proposition has also been accepted in several New Zealand theoretical discussions (e.g., Clay, 2001, p. 77; McNaughton, 1999a). A further step is the recognition that different types of teaching practice may result in children following different learning pathways. This was taken in the research of Connelly, Johnston, and Thompson (1999, 2001). A comparison was made of New Zealand beginning readers with children of the same general level of word reading attainment in an intensive productive phonics programme in Scotland. The level of oral reading comprehension of text was found to be slightly lower in the New Zealand children but they were faster at reading text (to the same level of text word accuracy). They were also faster at giving correct responses to *familiar* words isolated from text. On the other hand, they had lower accuracy (but were not ineffectual) in responding to totally unfamiliar items ("nonwords", e.g., *blum*) isolated from text. The children in the productive phonics programme were apparently reaching the same level of word reading accuracy but by means of slower procedures that often involved sounding out, while the New Zealand children receiving (light) receptive phonics were making more use of quick recall of words from their memory of the word. Their faster

rate of reading text would enable them to come across more instances of a word in a given period of time, thus providing more opportunity for consolidating memory of the word. At the same time, the New Zealand children were making use of letter-sound relationships, although in faster, and more implicit, procedures (Connelly, Johnston & Thompson, 1999).

Some compatible results have been obtained in a study in progress (by the author & colleagues, M. F. McKay, C. M. Fletcher-Flinn, & R. Te K. Kaa) that has compared New Zealand slow progress 6-year-olds with those of the same word accuracy level in some Australian schools that have a light productive phonics programme (in conjunction with much story reading). Although the New Zealand children were slower and less accurate at reading nonwords, and less proficient in *learning* a set of unfamiliar real words in isolation (for a fixed number of presentations), they were significantly faster in reading text (to the same level of text word accuracy). In this study there was no difference at all in reading comprehension.

Phonics Learning for What?

What is the teaching of phonics meant to achieve? For some people on the "more phonics" side of the debate this is obvious. For them, learning to read words is just the linear translation of each letter (or digraph) to a corresponding pronounced sound. One problem with this view is that the sequence of sounds, "ki"-"o"-"ti", derived in this way from *c o t*, is not "cot", nor a satisfactory means of making an approximation to the word sound "cot". There is another more telling problem. Pronunciation of *any* kind is not necessary in learning to read. I have observed young people who are good readers but since birth have not been able to utter any language sounds at all. However, they did have good general language comprehension; they could listen and follow spoken language well. So this view has too many problems to be correct.

For some opponents of "more phonics", word sounds are irrelevant. They take the view that learning to read is the association of visual words directly with meanings, language sounds having no part in successful reading skill (except when reading aloud is required). This view does not match the research evidence, a part of which has been conducted on New Zealand children (Johnston, Thompson, Fletcher-Flinn & Holligan, 1995). The accepted view, consistent with research evidence, is that learning to read requires the child's use of brain codes of the sound units of the language known as phonemes

(Clay, 2001, p. 98; Jackson & Coltheart, 2001). Phonemes serve to distinguish words, and hence meanings, of a language. For example, there are two phonemes (in initial position of the words) which enable us to distinguish what we hear as "dog" from what we hear as "bog". Note that the child's use of phonemes does not require pronunciation, only the activation of brain codes that represent the phonemes.

In the current theory of learning to read which is most widely accepted by researchers (Share, 1995), the children need to learn the relationships between letters and phonemes to enable them to acquire new reading vocabulary on their own initiative, to thus become familiar with the correct reading response to those words without direct teacher assistance, and subsequently become able to recall the word sound and meanings rapidly and without effort. The general principle of this self-sustaining learning of reading vocabulary is similar to that in Clay's (1991, pp. 325-345) "self-extending systems".

Developmental purposes for phonics teaching

In teaching the child letter-phoneme relationships, there are successive developmental teaching purposes.

First purpose: The alphabetic principle. When children in school are about to start learning to read they may have no prior knowledge that there are any regular relationships between letters and units for heard sounds within words. These children have to learn that there are sound units within words that have (quasi-) regular relationships with the letters of words. This is called learning the "alphabetic principle" (Liberman & Liberman, 1992, p. 349). Note that it is the general principle of these relationships within words that is learnt, not a specified set of relationships that are instances of the principle. Note also that it is the learning of relationships within words, not between individual letters and sounds isolated from words. The principle is not one that is verbalised by the child but is learnt as implicit knowledge, or as Clay (2001, p. 99) calls it, an "invisible relationship".

Teaching for this purpose belongs to the first few weeks of school reading instruction, when this commences. According to the level of the child's reading attainments in listening to, and understanding, the spoken language, reading instruction may begin in the initial weeks at school or as late as the second or subsequent year. With a child having average language attainments, learning the alphabetic principle would be expected to take no longer than a few weeks.

Second purpose: Self-initiated acquisition of new instances of the alphabetic principle. Children learn how to make their own applications of the alphabetic principle, to acquire new letter-phoneme relationships that are induced from their accumulating reading vocabulary. This learning will be largely implicit and non-conscious. As such, it is very powerful as it enables the child to process a large multiplicity of letter-phoneme relationships at speed, which would not be possible in conscious explicit processing which is very limited in the quantity of information that can be handled per unit of time. In Share's (1995) theory this purpose is recognised as being needed only as children are moving toward some maturity of reading skill, probably not before the third year of average progress instruction. However, a theory has been developed in New Zealand (Fletcher-Flinn & Thompson, 2000; Thompson, 1999; Thompson, Cottrell & Fletcher-Flinn, 1996; Thompson, Fletcher-Flinn & Cottrell, 1999) which goes beyond Share's, and seemingly accounts for more of the research data (Jackson & Coltheart, 2001). In this theory the child's self-initiated learning of new letter-phoneme relationships can commence as soon as the child has learnt the alphabetic principle (and has a very small reading vocabulary), which would normally be early in their first year of school reading instruction. Hence teaching for this second purpose is relevant from that time.

Transition purpose. This is the child's learning of teacher-selected instances of the alphabetic principle, as a transition from Purpose 1 to Purpose 2. It is arguable whether this transition purpose is needed at all, as it is claimed that the child's learning for Purpose 2 can commence immediately after success with Purpose 1. Certainly, if teaching for the transition purpose continues without moving toward Purpose 2, it becomes a mere repetition of a teaching ritual.[2]

In the phonics debate, Purpose 1 and the transition purpose are usually confounded and Purpose 2 not recognised at all. Hence the questions of how receptive, or productive, phonics teaching should be tailored to meet each of these purposes have not been addressed in the phonics debate.

Phonemic Awareness

Some proponents of "more phonics" advocate more teaching of phonemic awareness. For many decades teachers of beginner readers have used activities in which the children are asked to think of (spoken) words which start with the same sound as a word spoken by the teacher (Department of Education, 1960, pp. 22-23). This is one example of the

teaching of phonemic awareness, but there are many others (Castle, 1999). There have been some studies in New Zealand to examine whether or not more instruction to teach the child to be aware of the phonemes within words will enhance teaching of the alphabetic principle. Castle, Riach and Nicholson (1994), in such a study of New Zealand 5-year-olds, found that spelling was enhanced but there was no robust effect on word reading attainment. In a study of 5-year-olds with low oral language skills, Nicholson (1996) obtained similar results. Tunmer and Chapman (1998) have presented preliminary results of a study in which the first-year classroom programmes were modified to include not only instruction in phonemic awareness in the first term but also productive phonics in the third and fourth terms of the year, so reaching beyond the first purpose of phonics, teaching the alphabetic principle. Positive effects of these teaching modifications on children's reading attainments were reported from a comparison over time of the prior and modified programmes at the same schools. But we do not know from this preliminary report whether the phonemic awareness instruction itself contributed to the effects obtained. Nor do we know to what extent the teachers were making effective use of receptive phonics prior to these modifications. The full report of this study will not be available until 2002.

It must be noted that in these three studies the children were experiencing some teaching of letter-sound relationships. Such has been the case in nearly all research on phonemic awareness and reading. In fact, it makes little sense to try to teach awareness of phonemes without also demonstrating to children the link with letters, as the purpose of phonemic awareness instruction does not extend beyond the purposes of phonics teaching and is likely to be most relevant to the first purpose of that teaching.

In New Zealand, many teachers and their educators fail to distinguish between phonemic awareness and phonics. Phonemic awareness can only be assessed by the child listening to words or parts of words. Print has no role in this assessment, although it is claimed to have some role in the child's *learning* of phonemic awareness.

There is the issue of whether or not the acquisition of awareness of phonemes is an outcome or an accompaniment to reading, rather than a pre-requisite of learning to read. Blaiklock (1994, 1999) and Fletcher-Flinn & Snelson (1997) have New Zealand research results on this issue, which indicate that phoneme awareness is an accompaniment or outcome of learning to read. How much phoneme

awareness (if any) is necessary to accompany the learning of reading under particular teaching/learning regimes is yet to be determined. This matter was raised by the case of an extremely advanced reader in New Zealand who at 33 months of age had a word reading level matching that of average 7-year-olds but no phoneme awareness, only an awareness of the larger rhyme units (Fletcher-Flinn & Thompson, 2000).

Omitting and Guessing

A common view among advocates of "more phonics" is that it is necessary to ensure children do not skip over words when reading; that they do try to work on identifying each word, including the highly unfamiliar. The evidence shows this view to be wrong. In the direct comparison of New Zealand teaching and a Scottish programme with intensive productive phonics, it was found that neither group of 6-year-olds omitted words without any pausing. The reading texts included many words that would be unfamiliar to each child (Connelly, Johnston & Thompson, 2001).

The advocates of "more phonics" also claim it is needed to ensure children do not "guess" at words. The more informed of these advocates are not talking about random guesses but "context cues" in which the child uses the preceding text as a cue (a source of partial information) to aid identification of the word. It is sometimes called "prediction" from context, but as Clay (1991, p. 336) points out, this term can be misleading: "Prediction in this sense does not mean predicting the word that will occur; it means the prior elimination of unlikely alternatives. Those possibilities that are unlikely are set aside." Tunmer and Chapman (in press, b; to appear) have shown that such contextual constraints are useful to the child for identifying words but only if used in conjunction with letter-sound information from the word.

Do New Zealand children make less use of letter-sound information, in conjunction with context, than other children receiving "more phonics"? Such a direct comparison was made by Johnston et al. (1995) on 8-year-old children, matched on attainment in general reading comprehension. They found no difference in silent reading for meaning, for tasks in which the children had to use letter-sound information from unfamiliar words in sentence contexts. On the other hand, when responding to the same words as single items out of context, the "more-phonics" children were making more use of letter-sound information. So the New Zealand children of matched general reading comprehension levels were at no disadvantage in use

of both contextual and letter-sound information when both were available, as in reading texts or sentences.

Tunmer and Chapman (1993, pp. 3-4) have been advocating that teachers in New Zealand should encourage children to attend to the letter-sound information in each unfamiliar word *before* they attend to the information from contextual constraints on the word. Do teachers in this country already do that? In a simulation study, Greaney (2001) has found that sometimes teachers do, when prompting children who have made an error during oral reading of text. On reflection, it is apparent to me that all children who are understanding the text as they read it will have already attended to the context while reading the text preceding the unfamiliar word. Teacher prompts about the context are unnecessary *if* the child is already understanding the text. To continue to spend time on such is to engage in a mere ritual of the teaching culture. Also, continual prompting about using the letter-sound information from words is also unnecessary once the child has grasped the alphabetic principle. Having grasped this, the child will automatically be attending to the letter-sound information.

When children pause over a word, without saying anything, we must not assume that they have not attended to several sources of information. Moreover, when they do make overt errors, we must be aware that these are usually for not more than about 7 percent of the total number of words in the text (if this is at an appropriate level of difficulty for each child). Among the other 90 percent or so of the child's correct responses for the same text, there must be a significant proportion of responses that result from correct usage of both letter-sound and context information. While learning any skill, children make slips in processing information. Among the 7 percent or so of responses that are overt errors, the child may have been attending to both context and letter-sound information, but there could have been slip-ups in processing that information. Effective responsive teaching takes these considerations into account. Without doing so, the teaching will be a repetition of mere rituals of a teaching culture that serve no effective purpose for the child's learning.

There are other instances of ritual use of teaching practices. In examining Ministry of Education guideline materials for teaching beginner readers, Blaiklock (2001) finds excessive emphasis on teaching children to gain meaning, when children already understand the language and concepts involved. And they should already have this understanding, as beginning reading is about learning the print

medium of language, not about trying to understand new ideas. The place for that is still mainly in the oral language medium, at this developmental level.

Gaining Meaning

Opponents of "more phonics" often claim that it will result in children being able to "read" the sounds of words but not understand the text so effectively. The Connelly et al. (2001) comparison gave results which contradict this claim. In this study the "more-phonics" children did read story texts as part of their classroom programme. Moreover, the children in the study were well within the normal range for understanding spoken English. In New Zealand, with its teaching emphasis on gaining meaning from text, we would expect to have only an insignificant proportion of children who "read" the sounds of words well but do not comprehend the text effectively. Dymock (1998) has found about 10 percent of 11- and 12-year-olds in a New Zealand sample were like this. However, she showed that such students were having equal difficulties with comprehension when listening to the same texts being read to them (Dymock, 1992, 1993). This finding points to the need to consider carefully individual children's oral language comprehension skills (for the language they are learning to read) and their levels of conceptual understanding of the world around them, before embarking on teaching them to read. Although children may make progress in learning to give the correct sounds for words, there is no point to it if they are unable to understand what they "read". The priority in teaching effort, as explained in detail by Clay (1991, pp. 37-38, 70-72, 88-89) and echoed by Smith and Elley (1997, pp. 21-23), would be on teaching that assists the children's understanding of spoken language and knowledge of the world around them. The teaching culture, or family and societal expectations about reading progress, cannot be allowed to subvert the provision of such teaching. Nor can the offering of "more phonics" be accepted as a substitute solution for these children.

Conclusions

No sense can be made of the call for "more phonics", nor of opposition to that call, without knowledge of the status quo practice of phonics teaching in New Zealand. The New Zealand practice has been receptive phonics, which is not recognised as phonics at all by some proponents

of "more phonics". This contrasts with productive phonics that is commonly advocated for "more phonics". Children's usage of different learning pathways apparently varies according to whether they receive receptive or productive phonics teaching. Compared to those receiving productive phonics, children in New Zealand apparently use faster reading procedures, including quick recall of words. While such procedures require more exposures to a word, the children's faster text reading makes this available to them within an equal period of learning time.

In the phonics debate, accounts of the purpose of phonics teaching for learning reading skills are rarely informed by up-to-date theory and research. When so informed, there is much to be learnt, by both sides in the debate, about tailoring receptive and/or productive phonics to meet the successive developmental teaching purposes for the child's learning of: (i) the alphabetic principle, (ii) self-initiated acquisition of new instances of the principle, and (iii) the transition between these two purposes. In both the teaching cultures of receptive phonics and of productive phonics there is much to be learnt about phonics teaching practices which fail to serve any of these purposes and are mere ritual repetitions. Also, in other aspects of the New Zealand teaching culture there were found to be such rituals, as in the sometimes excessive use of teacher prompts for the child to attend to meaning.

Should the call for "more phonics" in New Zealand teaching of reading be answered by a shift from receptive phonics to productive phonics? The evidence provides no substantial support for overall benefit to children from such a shift. There is a reasonable case for receptive phonics that is more sharply tailored to the successive developmental purposes outlined. In the evidence presented on the New Zealand teaching culture there are several leads toward sharpening of teaching practices in this and other aspects that will better serve our children in their initial years of school instruction in reading.

Notes

1. The culture of teaching practice (abbreviated to "teaching culture") is the totality of shared teaching practices, discourse and beliefs. For the purposes of this review, where relevant, the practices in the teaching of reading will be considered as part of this totality.
2. "Teaching ritual" is used in the sense of a practice maintained as significant (at least symbolically) in the teaching culture but having no relevance to the effective learning of children. It is not suggested here that most teaching practices are rituals; only that sometimes practices can be so.

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