

Since the publication of Adams' (1990) book, there has been a growing consensus that phonics teaching should form a part of the reading curriculum. Phonics is taught in most schools in Scotland as part of an eclectic approach which includes using reading scheme books, and which has a significant emphasis on reading for meaning. Five years ago we started a study to examine just how phonics is taught in Scotland, and what practices seemed to be particularly beneficial.

In a study of 10 schools in Scotland, we found that phonics teaching followed a systematic programme which extended over the first three years at school. Up until Easter of the first year, the letter sounds were taught at the speed of one letter per week. Children were introduced to these letters in the context of words which started with that initial sound, e.g. 'bat, bull, bin'etc. That is, they were introduced to the alphabet by means of alitterative groups of words. After Easter, the classes were introduced to three letter consonant-vowel-consonant (C-V-C) words, e.g. 'pat'. This was mainly by means of work book exercises and teacher devised work sheets. Words were presented with a missing letter and the child had to complete the word, having worked out what it was from picture cues. At this stage, therefore, they were alerted to letters in the middle and final position of words instead of just the initial position.

What sort of phonics?

The teaching of phonics is now a prescribed element of the Government's strategy for raising literacy standards. But how should phonics be taught and when? Dr Rhona Johnstone and Joyce Watson report on the findings of a five-year study into the teaching of phonics in Scottish schools.

However, few classes were explicitly taught to sound out the letters individually and blend them together in a systemic way.

Reading spurt

One school introduced the children to C-V-C words earlier than the others, encouraging sounding and blending, and we found that this led to a spurt in reading attainment on the British Ability Scales Word Reading Test (Elliott et al, 1977). The other classes showed a spurt later on

when they started to study C-V-C words. In Years 2 and 3, the children were systematically introduced to word families, based on consonant blends and digraphs, and vowel digraphs. Rules such as silent 'e' were also taught. This work was carried out alongside the use of a reading scheme, but was not integrated with it. This is probably due to the decrease in the use of phonic readers, which used to make a natural link with the study of word families in the phonics programme.

This study led us to look closely at the



Books are provided with pictures of the words containing the target letter, the words being presented elsewhere on the page.

value of teaching children early on in the reading curriculum to sound and blend letters to pronounce unfamiliar words. We decided to investigate whether a 'synthetic' phonics approach, whereby children are taught groups of letter sounds and then shown words made up of those letters, is more effective than getting them to break whole words down into their letter sounds (i.e. analytic phonics).

We became interested in Jolly Phonics (Lloyd, The Phonics Handbook, 1992), which Sue Lloyd developed at Woods Loke School in Lowestoft. This is a synthetic phonics approach which is introduced soon after school entry. It lasts eight weeks, and is carried out before the children are given reading scheme books. The children are taught six letters of the alphabet per week, and shown how the letters combine to form words, e.g. in week one they learn s, a, t, i, p, n, and in week two they learn c(k), e, h, r, m, d. They are shown these letters in all positions of words, 's' occurs in spots, sand and nest. Books are provided with pictures of the words containing the target letter, the words being presented elsewhere on the page. There is a great emphasis on blending, both as an oral exercise and

with printed words. Additionally, a set of irregular words are taught as sight words.

We assessed the Reception class at Woods Loke School on a wide battery of tasks, including letter knowledge (names and sounds), ability to give the sounds in spoken words (e.g. c-a-t), rhyme skills, vocabulary knowledge, and emergent reading skills. We matched them on these measures with a group of Primary 1 children in Scotland whose reading programme included an analytic approach to phonics. It should be particularly noted that the two groups were equivalent in their ability to read items on the Clay 'Ready to Read' Word Test (Clay, 1979), which is a test specifically designed to measure word recognition skills at this very early age.

Synthetic phonics

We then retested the children at the end of the first term at school. The 25 synthetic phonics children had been taught 40+ sounds, including digraphs such as *ch*, *sh*, *th*. However, they were not taught consonant blends as it is believed that they will work these out for themselves. The 29 analytic phonics children had by then been taught 8/9 letter sounds in the initial position of words.

At this stage all of the children were given the British Ability Scales Word Reading Test (Elliott, 1977). We found that the synthetic phonics taught children were 11 months ahead of the analytic phonics group on this test; their mean reading age was 5 years 11 months, mean chronological age being 5 years. The analytic taught phonics children had a mean reading age of 5 years, and a mean chronological age of 5 years 2 months. The synthetic phonics group were also ahead on the emergent reading, letter knowledge and phonemic awareness tests, but not the rhyme task. The synthetic phonics programme was now complete, whereas the analytic phonics programme continued with letter sound teaching. In March, when the sounds of the 26 letters of the alphabet had been taught to the analytic phonics sample, we compared the two groups again. It was found that

the synthetic phonics group now had a reading age of 6 years 8 months on the BASWord Reading Test, being 16 months in advance of chronological age. They were also ahead in emergent reading, letter sound knowledge, and phonemic awareness ability, but not rhyme ability. The mean reading age for the analytic phonics group was 5 years 4 months, chronological age being 5 years 6 months.

Ability to read single words is only a part of reading skill, ultimately what is important is that children can comprehend what they read. In a further study we compared a synthetic phonics taught group of children at the end of their third year at school with a group who had learnt by an analytic phonics approach who were also at the end of their third year. They were the same age (7 years and 7 months) and had the same vocabulary knowledge on the English Picture Vocabulary Test (Brimer and Dunn, 1968). Reading was measured using the Primary Reading Test (France, 1981), which uses a cloze procedure to measure comprehension. It was found that the synthetic phonics taught children were nine months ahead of the analytic group in reading on this test. Further more, only 9 per cent of them had reading ages more than 12 months behind chronological age, compared with 31.5 per cent of the analytic phonics taught children. This good performance on a comprehension task may be directly due to the rapid start the synthetic phonics taught children had in learning to recognize words. However, it is also the case that having established a procedure in the children that enabled them to read independently, the teachers would then have had more time available in the curriculum for developing their ability to comprehend text.

Conclusions

Prior to doing this research we had believed that it was good to use an eclectic approach to teaching reading from the earliest stages. So we thought that on school entry it was effective to teach children some phonics and some sight



words, but also that it was necessary to introduce them to reading books very early on so that they learn that reading is a pleasurable and meaningful activity. What we have learnt is that a 'phonics first' approach, whereby children are taught right from the start that letter sounds can be blended together to pronouncewords, gives them an excellent start, and the basic elements can be completed in the first term of school if intensive teaching is given. Of course this phonics teaching can alternatively be carried out in the context of reading attractive books from a reading scheme.

However, we have established that it is not necessary to take three years to teach phonics, slowly working through word families and rhyming words, if the children have been shown how to sound and blend letters in order to pronounce words at the start of reading tuition.

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Acknowledgements

We would like to thank the teachers and pupils at the Scottish schools for taking part in our study and are particularly grateful for the assistance of Sue Lloyd in testing the children at Woods Loke School in Lowestoft.

References

Adams, M. J. (1990) Beginning to Read:Thinking and Learning about Print. Cambridge, Massachusetts: MIT Press. Brimer, M. A. and Dunn, L.M. (1968) English Picture Vocabulary Test, Educational Evaluation Enterprises: Newnham, UK

Clay, M. M. (1979) The dearly detection of reading difficulties. London: Heinemann. Elliott, C. D., Murray, D. J. and Pearson, L. S. (1977) The British Ability Scales. Windsor: NFER-Nelson.

France, N. (1981) Primary Reading Test. Windsor: NFER-Nelson.

Lloyd, S. (1992) *Phonics Handbook.* Jolly Learning: Chigwell, UK.