An Evidence-based Critique of Synthetic Phonics in Literacy Learning

by Margaret M Clark

Background
Over the years since 2006, synthetic phonics has become the required method of teaching reading in primary schools in England, and that to be emphasized by those training primary teachers. Since 2012 a phonics check has been administered to all children in year 1 (aged five and a half to six and a half years of age) and again in year 2 to any who fail to reach the pass mark. I have evaluated:

- the research base claimed for current policy;
- the results of the first three years of the phonics check;
- its effects on practice in schools;
- some of the associated costs;
- the interim reports of the government funded three-year research by the National Foundation for Educational Research.

Here only the key points are reported, the supporting evidence is in Learning to be Literate: insights from research for policy and practice and Synthetic phonics and Literacy Learning: an evidence-based critique (Clark, 2014a and 2014b).

Is Synthetic phonics the one best method?
Phonics instruction refers to literacy teaching approaches with a focus on the relationship between letters and sounds. Many would not dispute that for most children there may be a need for systematic teaching of phonics, but within a broad programme. The question here is whether phonics should be the only method employed in the early stages, the books on which the children are learning be confined to simple texts, and whether synthetic phonics instruction is superior to analytic phonics. The defining characteristics of synthetic phonics are sounding out and blending. Analytic phonics avoids sounding out, inferring sound-symbol relationships from sets of words. The evidence presented in the Rose Report in 2006 may not be as
strong as has been claimed, and in particular the Clackmannanshire Research still frequently cited by the government (see Clark 2014a chapter 13 and for a summary chapter 2 Clark 2014b).

Drawing on a wide range of research from 1960s onwards I found little evidence for one best method of teaching reading for all children, and certainly not for the superiority of synthetic phonics as the method as opposed to analytic phonics (see Clark, 2014b: chapter 3). Concern has been expressed by many researchers about this approach, in particular with regard to learning written English with its complex ‘deep orthography’ (see Clark 2014a, chapter 21 and Clark 2014b, chapter 8 for a brief discussion).

Most researchers support the belief that:

- There is benefit from the inclusion of phonics within the early instruction in learning to read in English, within a broad programme;
- There is not evidence to support phonics in isolation as the one best method;
- There is not evidence for synthetic phonics as the required approach rather than analytic phonics.

The phonics check
A phonics check has been administered to all children in England at the end of year 1, aged from five and a half to six and a half years of age, since 2012, and retaken the following year by any child who failed to achieve the pass mark of 32 out of 40 words correctly read aloud. This pass mark was known in advance by the teachers in 2012 and 2013 but not in 2014: however, the pass mark in 2014 was still set at 32. Claims for improvement in standards of reading have been attributed by the government to this initiative and reported uncritically in most of the media.

The Statistical First Release of the results of the phonics screening test was published in September 2012. What was claimed as the ‘expected standard of phonic decoding’, namely 32 out of 40, was met by only 58% of pupils (62% of girls and 54% of boys) with wide differences between sub groups.
The following are matters of concern:

- the pass/fail decision resulting in many children aged between five and six years of age and their parents being told they have failed;
- the choice of 32 as the threshold mark;
- the inclusion of 20 pseudo words in the test;
- the decision to have the first twelve words pseudo words;
- the demand that the children who `failed` retake the test the following year;
- the lack of any diagnostic aspects or suggestion that other methods may be appropriate for some children who failed;
- possible effects on some successful readers who may yet have failed this test and been required to retake it the following year;
- large differences in percentage pass between the oldest and youngest children taking the check.

The existence of a `spike` in percentage of children on the pass mark of 32 as compared with 31 (a fail), a mark known in advance by the teachers, calls into question the validity of the check. I drew attention to this anomaly in 2012, and in 2013 when one per cent of children scored 31 and 7% scored 32. Reference is made to this in the interim report from NFER based on the 2012 results in Topic Note: 2012 Phonics Screening Check: research report May 2013, (L.Townley and D. Cotts) where they are pointed in their interpretation of these results:

- a spike at the threshold of meeting the expected standard, suggesting that pupils on the borderline may have been marked up. [my italics].

By removing pupils` scores around the spike and using regression techniques, it is estimated that 46% of pupils would meet the expected standard if there was not a spike at the borderline` (28). [that is instead of 58%]
Since the administration of the check was similar in 2013, with the pass mark known in advance, it seems likely that yet again the numbers of pupils passing the check have been over estimated. There may also be differences between schools, or markers, in the extent to which borderline pupils have been marked up. I was interested to note that the threshold mark was not in 2014 revealed in advance, though no reason for the change was given, nor for again setting the pass mark at 32. In view of this change, the legitimacy of comparing the results for 2014 with the two previous years must be questioned.

No tables have been published of percentage pass rate by month of birth, in spite of the fact that there was a year’s difference in age between the youngest and oldest children taking the check. Each year I requested this information and found striking differences in pass rate between the oldest and youngest children. In 2014, 82% of the oldest children passed the check and only 65% of the youngest. Thus 36% of the youngest boys and 29% of the youngest girls will be required to re-sit the check in 2015. Surely a statistic such as this is important and worthy of comment by DfE. One might question whether many of the younger children might by the following year have matured sufficiently to pass the test without further synthetic phonics instruction. Yet because of the high stakes nature of the check, schools will focus on ensuring a higher pass rate.

While the results for individual schools are not made widely available, they are online for Ofsted to consult. It is disturbing that in the detailed analysis for individual schools sub group percentages, often based on very small numbers, are compared with national figures. A school’s rating by Ofsted can be influenced by the extent to which it does adopt a synthetic phonics approach.

**Costs of the phonics initiative**

Match-funding for schools to purchase commercial phonics materials and training courses for teachers on synthetic phonics (from a recommended list) was available between September 2011 and October 2013, only one of the costs of this policy. Under the Freedom of Information Act I secured information on how much this initiative cost and which specific
programmes had secured the bulk of the funding amounting to £46 million. Clearly commercial interests are gaining an increasing hold on government policy here and in many other parts of the world, including, The United States, Germany, France and also in many developing countries (see Clark, 2014a chapter 18 and 2014b chapter 6).

From the detailed technical report to which I was referred by DfE for answers to some of my questions I was not able to establish who was responsible for several of the aspects of the final check that I and others criticised. It was clear that the experts named supported the use of pseudo words, but not whether any of the decisions on the phonics check caused concern to the independent experts consulted for the pilot study. For example, it is not clear from that detailed report who decided:

- To make the first twelve words of the check all pseudo words;
- to inform the teachers in advance of the pass mark of 32 out of 40;
- to restrict the information made available (including to parents) to a pass/fail;
- not to check the relative scores for pseudo words versus real words;
- not to provide diagnostic information from the test, and
- that those who scored less than 32 retake the test the following year.

**Findings from NFER interim reports**

DfE commissioned the National Foundation for Educational Research to undertake an evaluation to assess whether the screening check is meeting the objectives set out by the Government, funded from 2012-15. The two interim reports have raised important issues about the validity of the scores and the understanding of many teachers of the distinction between synthetic phonics (that required) and analytic phonics.

The first interim report provides an overview of participating schools’ phonics teaching practices and the emerging impact of the check. Some benefits are acknowledged, `including confirming the results of other assessments and placing an emphasis on phonics teaching`. Issues are raised about the suitability of the check for certain groups of pupils. This includes not only pupils with special educational needs but also high ability pupils.
and those with English as an additional language. However, views on the value of the check seemed contradictory, since one of the key messages to emerge was that: Many schools appear to believe that a phonics approach to teaching reading should be used alongside other methods. This would not in run counter to current government policy that systematic synthetic phonics be taught first, fast and only; yet many teachers did not appear to appreciate there was a conflict. In the first interim report no discussion is reported with the teachers of analytic versus the recommended synthetic phonics and it is open to debate why the staff interviewed had not fully endorsed the government`s approach, whether from confusion or from conviction! (See also pages 19-20 and 23 in the report). A third of survey respondents felt in some way that phonics has too high a priority in current education policy. When questions were asked specifically about the check, many were negative, while others regarded it as `broadly acceptable but unnecessary`.

The second interim report, published in May 2014, together with technical appendices (Phonics Screening check evaluation: research report, Walker, M, Bartlett, S et al) provides an overview of participating schools` phonics teaching practices and highlights any changes since 2012. It also explores the emerging impact of the check. Teachers were positive about phonics as an approach to teaching reading; yet in the majority of schools other strategies alongside phonics were also supported. More than half of schools reported that they taught synthetic phonics `first and fast; however, many teachers believe that a phonics approach should be used alongside other methods`. Most schools reported discrete phonics sessions for all children in reception, year 1 and year 2 and frequently in nursery. When asked about changes to phonics teaching since the previous year the most frequently reported change was the introduction of pseudo-words.

Only about three in ten of the literacy coordinators agreed or agreed somewhat that the check was valuable to teachers. Furthermore many of the teachers interviewed in the case study schools thought the outcomes from the check told them nothing new and that the check will `have minimal, if any impact on the standard of reading and writing in the schools` To quote from page 10 on any possible impact of the check on standards:
Thus attainment in reading and writing more broadly appears unaffected by the schools` enthusiasm, or not, for systematic phonics and the check, and by their approach to the teaching of phonics.

Next steps in the NFER research will include endpoint surveys and case studies; analysis of national pupil database data and of value for money. It is hoped that the final NFER Report due in May 2015 includes consideration of the following:

a) The extent to which the teachers do appreciate the difference between synthetic and analytic phonics.

b) Whether the teachers have accepted the government`s demand for synthetic phonics `first and fast only` in the early stages. So far the evidence is conflicting on this as the practice seems to contradict many of the statements.

c) The effect of the new emphasis on pseudo-words generated in many schools following the introduction of the phonics check. How do children, and parents, perceive the role of such words?

d) The effect on the curriculum of practice for the phonics check and of children`s view of literacy.

e) An analysis of the children`s perspective on the check and their attitude to literacy, including the effect on the reading materials offered to children who were already reading with understanding prior to the check.

f) A further analysis of the effect of this new emphasis on children whose mother tongue is not English, those with speech and language disorders and any who continue to fail to reach the required standard even by year 2.

**Phonics Screening Check: 2013 post-administration technical report:**

On page 5 it is stated that the technical report published in December 2012, concluded that:

Having examined all of the evidence gathered so far through the pilot and the live sample, the Department is satisfied that the phonics screening check is sufficiently valid for its defined purpose and has acceptable levels of reliability.

It is worth noting the comment on page 22 that: ‘This could be an indication that there is now more emphasis in the classroom on decoding pseudo-words’. That comment may be worrying and is a suggestion supported by the latest NFER report. However, it should also be noted that there is more latitude in what is accepted as a correct pronunciation of the pseudo-words.

The final conclusion by DfE is that having examined the evidence so far:

it is satisfied that the phonics screening check is sufficiently valid for its defined purpose and has acceptable levels of reliability (page 23).

The NFER research referred to above and the evidence I have gathered from other sources would make me question this statement.

**The Statistical First Release from DfE issued on 25.9.14**

This states that there has been an increase in Year 1 pupils passing the test from 58% in 2012, to 69% in 2013 and 74% in 2014, and that 88% of pupils met the expected standard by the end of Year 2. This includes those retaking the test or taking it for the first time in 2014. It is also stated that within the various groupings the proportions achieving the expected standard have increased within the last year. In the media the claims from DfE are mainly cited uncritically, for example: `Pupils doing better on phonics tests year in year` (The Independent 25.9.14)

**Unresolved issues concerning the phonics check**
No clear rationale has been provided for identifying the mark of 32 as meeting what is referred to as the expected standard in the phonics check;

no clear explanation has been given for the inclusion of pseudo words in the test;

no analysis has been undertaken of the contribution of the pseudo words to the final scores, yet more latitude is permitted in pronunciation of pseudo words than the real words;

de the evidence of a spike in percentage of children gaining a mark of 32 rather than 31 in the first two years of administration of the test, a pass mark known to the teachers in advance, raises serious questions about the validity of this test;

the rationale for and implications of not revealing the pass mark in advance in 2014 yet having the same pass mark as in the previous years;

the implications of a large difference in pass rate between the youngest and oldest children, a year different in age;

the needs of those who failed to reach the arbitrary pass mark on this test which may not be met by a continuing focus on synthetic phonics;

the effects on children who could already read with understanding, who failed the test and were required to re-sit it;

The phonics check is not diagnostic and there is no specific funding linked to the needs of individual children, other than commercial synthetic phonics programmes following the identification of children as failing the check. Yet this test has become so high stakes, rather than as originally claimed `light touch`, that it is affecting the curriculum experienced by young children.

**Final comments**

Lacking so far is any assessment of the effects of these developments on young children`s experiences of and attitudes towards literacy. How will the isolated nature of much of their tuition in phonics, the new emphasis on pseudo words and the phonics check itself influence their understanding of
the nature of literacy and attitude to reading? We need to interview the children and gain insight into their views, including those who passed the check, any who could read but failed the check, and those who were required to re-sit the following year. There is so far no evidence of the effects of this government policy on the training of teachers, where all courses are required to focus on synthetic phonics as the main aspect of their programme. Finally, what messages are we giving parents on how to help their young children to become literate and to value the written word?

There is surprisingly little research information on the difference in complexity in learning to read in languages where there is a more or less regular relationship between the sounds and spelling of words, or of learning to read in a language that is not your first language. Yet, it is increasingly common for children to learn to read in more than one language, and is estimated that currently at least half the world’s children learn to read in their second language. Figures released following a question in the House of Lords on 3 March 2014, revealed that by January 2013 19 per cent of pupils starting school in England in Year 1 had English as an additional language. The effect of this on literacy learning has received little attention, yet this percentage is likely to increase.

In shallow orthographies it may be natural to teach reading by synthetic phonic methods by which letters are decoded to sounds and then combined to form larger units such as syllables. In deep alphabetic orthographies, such as English, a combined method by which children learn basic alphabetic decoding procedures and at the same time master a sight vocabulary of familiar words may be more appropriate. (See chapter 21 in Clark 2014a for a discussion of the researches on this topic). This has so far received little attention by those responsible for literacy policy in England.

England is not the only country where evidence from research is being ignored, simplistic tests are driving the curriculum, available resources for schools are being spent on commercial products linked to the tests and schools are being ranked on the basis of such tests. How do people with knowledge that should count make themselves heard.
References


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