PE1668/D

Dr Terry Wrigley submission of 10 December 2017

1) The myth of 'phonics neglect' in Scottish schools

The Petitions Committee have recently heard a presentation by advocates of a particular way of teaching reading known as *synthetic phonics*, and claiming to be evidence-based. The impression is created that children in Scotland are suffering from the *neglect of phonics* when taught to read.

MSPs need to be alert to an important distinction. The issue is not 'phonics or no phonics'; it is about whether children should be taught to read using the specific technique known as *synthetic phonics*. Synthetic phonics, in its pure form, is a highly artificial form of teaching which separates learning letters from the enjoyment of books. It involves teaching children to pronounce separate letters and using that knowledge to pronounce words. It neglects the many common but irregular words in English, eg *the*, *was*, *though*, without which reading English is impossible. Such words have to be recognised on sight.

The synthetic phonics method advocated by the petitioners may actually reduce the teaching of phonics, because it dogmatically insists on only one approach. For example, it ignores the rich opportunities to look at rhyme, alliteration etc. in children's picture books (as in the following pages). It explicitly denies young readers the opportunity to use the pictures in a story, or the sense of the whole sentence, as a scaffold to support their phonic decoding.

Most primary teachers use synthetic phonics along with other phonics methods (analytic phonics based on words in real books, onset-rime, etc) but distrust giving undue prominence to synthetic phonics because it can be narrow and arid. This written submission aims to present reliable evidence to the Petitions Committee.

2) The PIRLS test: what the data for England shows

Synthetic Phonics has been imposed on teachers in England for approximately ten years, and inspectors are required to check that this is the method being used in each school. There is also a statutory test at age 6, the *Phonics Check*, which rewards this way of teaching since it is based entirely on pronouncing regular words and nonsense words out of context.

In recent days, England's Schools Minister, a fervent advocate of synthetic phonics, has tried to make political capital by claiming that a movement from 10th to 8th place in the PIRLS international test is a major advance. In fact there was only a modest rise in the average score. The gains made by Ireland and Australia, using a broader repertoire of teaching methods, were twice as large. England's modest gain from 2011 to 2016 was half as much as in the previous five years. (See section 7 below.)

3) Inconclusive evidence in systematic reviews of research

Synthetic phonics was imposed across England in defiance of research evidence. Indeed, the Department of Education commissioned a systematic review of the evidence (Torgerson et al 2006)² which, while recognising the importance of phonics 'within a broad literacy curriculum', concluded that there was no evidence for the superiority of synthetic phonics over other approaches to phonics. This survey found only weak evidence that

¹ Nick Gibb: *It's official. The UK's phonics revolution has dramatically improved school standards.* Telegraph, 4 Dec 2017

² Torgerson, Brooks and Hall (2006) A Systematic Review of the Research Literature on the Use of Phonics in the Teaching of Reading and Spelling. DfE Research Report R711.

systematic phonics was helpful for reading *comprehension*. Even the Department for Education admit the lack of evidence:

The evidence is inconclusive on whether systematic phonics has an impact on pupils' reading comprehension. (Email response to T Wrigley from DfE, 2013)

An earlier systematic review of research (Ehri et al, 2001)³, commissioned for the National Reading Panel (USA), had reached similar conclusions, showing weak impact on comprehension though strong in decoding regularly spelt words out of context. We should note that its key issue for investigation is whether systematic phonics teaching (*analytic as well as synthetic*) is beneficial as an *element* of reading instruction programmes.

There is no subsequent systematic research review which has concluded that synthetic phonics is superior in terms of its impact on *real reading*, i.e. with understanding.

4) Synthetic phonics trials in Scotland

Exactly the same problem occurred with the famous Clackmananshire experiment, which led to strong initial effects on single word pronunciation tests whereas later testing for comprehension showed a very weak effect. It is impossible to ascribe even this weak impact on reading to synthetic phonics, since the same children were simultaneously experiencing other initiatives thanks to a large Scottish Government grant. [See studies by Sue Ellis ⁴) After all these interventions, HMIE declared reading and writing in Clackmannanshire to be 'below the average for comparator authorities'. ⁵

A similar event occurred on a larger scale in West Dunbartonshire. Synthetic phonics was part of a much larger set of interventions, beginning with training carers (nursery staff, parents etc) of two-year-olds how to interest children with books. The program also included over a hundred staff and volunteers trained in one-to-one remedial support up to P7. The argument here is not that the Authority's programme was of no value, but that no simple conclusions can be drawn.

5) Anecdotal evidence and misleading summaries of research

The petitioners make serious mistakes by presenting anecdotes and examples of a few specific schools rather than the systematic analysis of carefully conducted research. Where is the evidence that teachers in Scotland have a poor knowledge of phonics methods, or have not been taught how to teach reading? It is particularly strange to hear the presenter who has worked for the DfE in England citing two or three particularly successful London schools rather than data for the whole system, since all English schools have been compelled to teach this way.

When summarising research, the petitioners confuse the issue by sliding between terms which are not equivalent. They switch between 'synthetic phonics' and 'systematic phonics', as if they were synonymous, and sometimes simply 'phonics'. Similarly, there is confusion between reading in the sense of decoding and sequencing letters or groups of letters in order to pronounce a word, and real reading, i.e. reading with understanding.

6) The 'phonics check' vs reading for meaning

³ Ehri, Nunes, Stahl and Willows (2001) *Systematic phonics instruction helps students learn to read:* evidence from the National Reading Panel's meta-analysis. Review of Educational Research

⁴ Ellis (2007) *Policy and research: lessons from the Clackmannanshire synthetic phonics initiative*. Journal of Early Childhood Literacy, 7(3), pp281-297

Ellis and Moss (2014) Ethics, education policy and research: the phonics question reconsidered. British Educational Research Journal 40(2), pp241-260

⁵ HMIE (2006) Inspection of the Education functions of Clackmannanshire Council in October 2005.

Children in England have to take a special test (the 'phonics check') consisting of **pronouncing** 20 simple words and 20 pseudowords. Schools minister Nick Gibb frequently claims that each year thousands more children are "on their way" to becoming confident readers. The problem is: there has been *very little change* in the percentage of children reaching specific standards when tested a year later on *reading for understanding*.

Here is the percentage of children passing the Phonics Check each year, and below it, in the same column, the results in Reading (i.e. comprehension) tests for the same children a year later. The first three columns show a dramatic change in the Phonics Check results with minimal change in reading for understanding. (Columns 4 and 5 cannot be used because of changes in the test criteria which have reduced the numbers passing KS1 Reading.) Teachers have simply got better at preparing children for the phonics test. Indeed, hundreds of hours are wasted practising reading non-words.

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      2012
      2013
      2014
      2015
      2016
      2017
      Phonics (Y1)

      58%
      69%
      74%
      77%
      81%
      81%

      2013
      2014
      2015
      2016
      2017
      KS1 Reading (Y2)

      86%
      89%
      89%
      (74%) (76%)
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This is reinforced by a longer series of data, showing results for Y2 Reading tests since 2001. Given that the policy change affected Reception classes from September 2007, one would expect a significant impact on Y2 reading around June 2009. This has clearly not happened.

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2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 84% 84% 84% 85% 85% 85% 84% 84% 84% 85% 85% 85% 87%
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It should have impacted on KS2 (Y6) Reading tests around 2013, which is also not apparent:

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2008 2009 2010 2011 2012 2013 2014 2015
87% 86% 83% 84% 87% 86% 89% 89%
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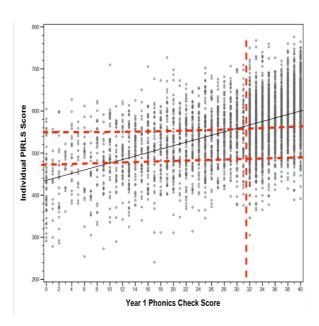
7) Synthetic phonics vs real reading: new evidence from PIRLS

The recent PIRLS international tests confirm the weak link between synthetic phonics and reading comprehension. The national PIRLS report for England⁷ shows a poor match between individual children's competence in decoding separate regular words and pseudowords at age 6 and reading for understanding at age 10. The correlation between the two is only 0.52, described as 'moderate' in the document. The reflects the disconnect between synthetic phonics and reading for meaning.

Figure 4.6 (copied below, with additional dotted lines inserted) clearly shows that many children who pass the phonics test are poor readers at age 10, and many who fail are good readers.

⁶ See the recent book edited by Margaret Clark: *Reading the evidence: synthetic phonics and literacy learning.*

⁷ McGrane, Stiff, Baird, Lenkeit and Hopfenbeck (2017) *Progress in International Reading Literacy Study (PIRLS): National Report for England.* OUCEA, Department of Education, University of Oxford



Children pass the phonics check by scoring 32 or more (i.e. to the right of the vertical dotted line).

Children scoring 550 or more (above the top dotted line) are categorised High or Advanced by PIRLS

Children scoring 475 or less (below the lower dotted line) are categorised Low by PIRLS Between these lines, the grade is Intermediate.

The *bottom right* rectangle shows how many children *pass* the phonics test in Y1 but are *poor readers* at age 10

The *top left* rectangle shows children who *fail* the phonics test in Y1 but are *good readers* at age 10

The segment to the left of the vertical line (less than 32 on phonics) and above the lower dotted line (475 on PIRLS) suggests that more than half the 'phonics failures' are reading quite competently at age 10.

8) Unfounded claims that synthetic phonics helps close the poverty-related attainment gap

The petitioners see their approach to literacy as a solution for the poverty-related attainment gap. We should beware of such quick-fix claims. England is a gigantic experiment in synthetic phonics, so if this really did work, English data would show it.

In 2016, 51% of children with Free School Meals (FSM) entitlement were failed in Reading at the end of primary school. 2 out of 3 FSM children were failed in at least one of Reading, Writing or Maths. In 2017, 2 out of 5 seven-year-old FSM children failed their reading test compared with 1 in 5 other children.)⁸

A recent statistical study (Machin, McNally and Viarengo⁹) compared schools which had implemented synthetic phonics in the pilot and initial years with other schools which had yet to implement. This too shows a strong early impact vanishing by the end of primary school. The exception is for FSM and EAL (English as an Additional Language) pupils but even for these groups, the impact was slight (0.06-0.07 of a Standard Devision or around one month's learning). This result is inconclusive, given the problematic methods which

⁸ DfE data contained in SFR49_2017, SFR62_2016 and other statistical reports

⁹ Machin, McNally and Viarengo (2016) 'Teaching to teach' literacy. Centre for Economic Performance, no 1425

the researchers had to apply to compensate for mismatched 'experimental' and 'control' groups.)

9) Evidence on remedial use of synthetic phonics

Synthetic phonics can also be used in remedial tuition for children who are struggling. The DfE-funded Education Endowment Foundation commissioned a study of 11-12 year olds taught with the *Fresh Start* scheme, a synthetic phonics program produced by its best known advocate Ruth Miskin (Gorard, Siddiqui and See, 2015)¹⁰. The headline claim (in line with government policy) is "approximately three months additional progress in reading age". However, the schools themselves were allowed to select pupils for the 'experimental' and 'control' groups., The research report reveals a serious mismatch in terms of their reading difficulties when they started the program. Once the evaluators compensated for this, the impact of *Fresh Start* turned out to be almost zero (+0.04 SD), and some of this may have been due to additional staffing.

This is not to say that synthetic phonics cannot help struggling readers, as part of individualised plans of action; simply that there is no evidence of its superiority to other methods.

10) Synthetic phonics has not reduced gaps in England

There are no signs that synthetic phonics is closing gaps in attainment, even in the simple decoding of regularly spelt words. According to official data for the 2017 Phonics Check¹¹:

- 28% of FSM pupils were failed, compared with 15% of other pupils
- 26% of the youngest children in Year 1 failed the phonics check, compared with 12% of the oldest
- 20% of boys were failed and 14% of girls.

An equal proportion of pupils with English as their first language and children with other first languages passed the phonics check. This is not surprising, given that the test simply requires learning the most typical match between letters and sounds, without any requirement to understand. This does not help with real reading.

11) The vocabulary issue

This last point may explain the petitioners' focus on several very successful East London schools to demonstrate the success of their preferred method. Indeed, many of the children there are learning to read Koranic Arabic in the sense of pronouncing words they may not understand, thus reinforcing the children's response to synthetic phonics teaching at school.

The situation is different from First Language English children growing up in poverty. The petitioners make an ill-founded assumption that most of these children are so short of English vocabulary that they need a literacy method which does not expect words to make sense. The range of words used in early reading texts is well within the range of almost all five-year-olds in their spoken language.

12) Learning from good practice internationally

Rather than copy the English model, Scottish policy makers would do well to heed what has been happening recently in primary schools in the Republic of Ireland. ¹² Ireland is ranked fourth by PIRLS, the highest in Europe. Its score has improved by 15 since 2011, twice the advance of England. PIRLS data shows that it has very few poor readers, and

¹⁰ Gorard, Siddiqui and See (2015) Fresh Start: evaluation report and executive summary. EEF

¹¹ DfE data contained in SFR49_2017

¹² Eivers, Gilleece and Delaney (2017) Reading achievement in PIRLS 2016: initial report for Ireland.

various studies shows that its teachers enjoy high levels of job satisfaction. Chief Inspector Harold Hislop, in a letter to the Irish Independent¹³, ascribes it to *concerted action* by all the partners (teachers, school leaders, parents, teacher educators); a national strategy with a *'range* of linked actions'; an increase in literacy teaching time but also literacy across a broad and balanced primary curriculum; *intelligent* use of data and school self-evaluation. The situation in Northern Ireland is also of interest. Using the model of 'linguistic phonics', Northern Ireland has adopted a broadly based and child-friendly approach to early literacy. Researchers and policy makers in Scotland need to investigate the detail and see what can be learnt.

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¹³ Hislop: How we raised pupils' reading standards. Irish Independent, 6 Dec 2017