

A national intervention in teaching phonics: A case study from England

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Original Article

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Abstract

At the start of the 21st century, literacy teaching in state primary schools was conducted under a framework guided by a National Literacy Strategy, which recommended a model of reading called ‘The Searchlights Model’. Early on it became clear that rises in performance predicted from adoption of this strategy were not happening. This led to a review of the effective teaching of early reading under the chairmanship of Sir Jim Rose (Rose, 2006). Rose recommended that the Simple View of Reading (Gough & Tunmer, 1986) be adopted as a framework. It also recommended that pupils be taught how to read words in the first instance through the adoption of programs of systematic synthetic phonics. A change in government reinforced this policy and added a national program of early assessment of grapheme-phoneme knowledge. These changes uncovered an important issue: namely that there was no national program for ensuring that teachers had the necessary professional subject knowledge to teach phonics effectively. Steps have been taken to mitigate this. The most recent data from the Progress in International Reading Literacy Studies (PIRLS) 2016 study suggests that England is now beginning to close the achievement gap, with the pupils in the lowest percentiles making the most improvement.

This article presents a case study of changes in the literacy education landscape of England, mainly over the last two decades. It charts the progress towards a national approach to teaching systematic synthetic phonics as the first approach for teaching children to read words. This is an intervention for all.

Literacy levels often make headline news, so it is important to take a step back and look at the evidence objectively. Brooks (1997) pointed out that standards in Britain between 1948 and 1996 had been maintained. There had been no significant fall. The achievement levels of the middle to high performing pupils were comparable with the rest of the world. However, there was a considerable tail of underachievement that had persisted for decades. The developments reported here are mapped against national performance statistics and levels of attainment achieved by English pupils taking part in international studies. The jurisdiction of interest is specifically England because education is devolved to the individual countries of the United Kingdom.

The premise of education policies on literacy should be that all experience high quality, effective teaching that enables them to achieve skilled, accurate, fluent reading skills, which they then carry with them throughout their education and life. It would be naive to ignore the fact that politicians become involved in educational practice. However, the story presented here does not relate to any specific government. There has been remarkable consensus on the potential for phonics teaching to benefit particularly those children who are at risk of failing to achieve acceptable levels of literacy.

The timeline presented in Figure 1 is provided as an aide memoire for plotting events over time.

One of the most significant developments in education in England in the late 20th century was the 1988 Education Reform Act. This established a National Curriculum (NC), to be taught by all state-funded schools. It included naming school phases and teaching years. There are now four key stages of education defined in relation to the ages of pupils in each year. Key Stage 1 (KS1) covers Years 1–2 for pupils aged 5–7 years; KS2 covers Years 3–6 for pupils aged 7–11 years; KS3 covers Years 7–9 for pupils aged 11–14 years; and KS4 covers Years 10–11 for pupils aged 14–16 years. Prior to KS1 there is a Foundation Stage for 2 years covering nursery and reception classes for pupils aged 3–5 years. The final part of the Foundation Stage is compulsory, with its own Early Years Foundation Stage framework, which is separate from, but designed to feed into, the NC.

National Curriculum for English

The curriculum of interest for this article is the NC for English. Since its inception, the curriculum for English as a subject has included the teaching of literacy, notwithstanding the fact that reading and writing are skills that cross the whole of the curriculum rather than being academic

1986	Education Reform Act National Curriculum begins Key Stage Assessments begin: Levels of Attainment described
1995	Only 49% of pupils achieved Level 4 in English at the end of Key Stage 2
1996	Ofsted reports concerns about levels of literacy
1997	National Literacy Strategy (NLS) introduced
1999	Progress in Phonics published
2000	USA National Reading Panel Report: <i>Teaching Children to Read</i>
	Canada OISE report on the NLS <i>Watching and Learning 1</i>
2001	Progress in Reading Literacy Study (PIRLS 1)
	Canada OISE report on the NLS <i>Watching and Learning 2</i>
2003	Canada OISE report on the NLS <i>Watching and Learning 3</i>
2005	Australia <i>Teaching reading: National inquiry in the teaching of literacy for the Department of Education, Science and Training (Rowe)</i>
2006	<i>Independent Review into the Effective Teaching of Early Literacy (Rose Review)</i> PIRLS 2
2007	<i>Letters and Sounds</i> published
2011	PIRLS 3
2012	Phonics Screening Check end of Y1 starts
2014	New National Curriculum: Changes to program of study for reading mean children are required to be taught phonics explicitly.
2016	PIRLS 4
	National assessment in England changes: Levels of Attainment abolished, Working at Expected Level introduced (descriptors for performance changed).

Fig. 1. Timeline of events.

Note: OISE, Ontario Institute for Studies in Education; Ofsted, Office for Standards in Education.

subjects in their own right. The first curriculum and programs of study (PoS) were published in 1988, followed by updates in 1995, 1999, and 2013 (see the Appendix for the last two PoS). The curriculum documents cover the PoS, which are statutory, but not the methods by which the programs are to be delivered. Sitting alongside the statutory requirements is nonstatutory guidance designed to support and augment the PoS. The 1999 document can be accessed at dera.ioe.ac.uk/18150/7/QCA-99-457_Redacted.pdf. The preamble to the current 2013 curriculum (Department for Education [DfE], 2013) specifically states that the PoS for KS1&2 consist of two dimensions: word reading and comprehension. Thus, without stating it explicitly, the framework for teaching reading is the Simple View of Reading (SVR; Gough & Tunmer, 1986). The SVR states that reading is the product of decoding print and language comprehension skills. With the SVR as a framework, the NC now requires all children to be taught *how* to read words directly, starting with a program of systematic synthetic phonics. The full current document can be accessed at www.gov.uk/government/publications/national-curriculum-in-england-english-programmes-of-study.

National Assessment of Reading

With the introduction of the NC, national assessments called Statutory Assessment Tests (SATs) were mandated.

A common scale of attainment of levels of performance from Level 1–8 for KS1–3 was introduced. For each subject there was a descriptor for each level of performance. This was an ordinal, not a ratio, scale. The expectation was that pupils should achieve Level 2 at the end of KS1 and make one level of progress every 2 years so that at the end of KS2, before moving to secondary school, the expected level was 4. Reading SATs took the form of a booklet with passages and questions, some of which required answers in the form of ticks, some of which required written responses.

Characterisation of performance at the end of KS1 is the level of skill of interest here since by this stage children are expected to have mastered word reading, enabling them to move from learning to read (words) towards reading to learn.

The Level 2 descriptor for reading was:

- *Pupils' reading of simple texts shows understanding and is generally accurate. They express opinions about major events or ideas in stories, poems and nonfiction. They use more than one strategy, such as phonic, graphic, syntactic and contextual, in reading unfamiliar words and establishing meaning.*

Reporting attainment in Levels was abolished in 2014, with 2015 being the last year that this happened. From the academic year 2015–16, attainment has been reported with reference to exemplification statements about expectations of performance at the end of each key stage. However, SATs retained the form of booklets with text and written in answers.

The Expected Level of Attainment at the end of Y2 is now encompassed in the following statements.

- *The pupil can:*
 - *Read accurately most words of two or more syllables*
 - *Read most words containing common suffixes*
 - *Read most common exception words*
 - *In age-appropriate books, the pupil can:*
 - *Read most words accurately without overtly sounding and blending, and sufficiently fluently to allow them to focus on their understanding rather than decoding individual words*
 - *Sound out most unfamiliar words accurately, without undue hesitation*
 - *In a book that they can already read fluently, the pupil can:*
 - *Check it makes sense to them, correcting any inaccurate reading*
 - *Answer questions and make some inferences*
 - *Explain what has happened so far in what they have read*

Both the Level 2 descriptor and the Expected Level characterisations have just short statements about comprehension of reading, with genre being listed in 1999 and inference being specifically mentioned in 2014. The major differences relate to detailing word reading skills. In the 1999 Level 2 descriptor for reading unfamiliar words there is just one sentence detailing four strategies. These are listed as equal approaches to working out the identities of words. The PoS (see Appendix) in 1999 did not specifically include teaching how to read words directly. Although there was an implication that phonics teaching should be happening through teaching about phonemic awareness and phonic knowledge, there was no direction about how it was to be achieved. The 2014 PoS is much more specific about requirements to provide a program of phonics teaching to establish skills to work out how to read unfamiliar words. As detailed above, the new descriptor of the Expected Level details what pupils should be able to achieve as a result of the PoS that now addresses how to read words beginning with a program of phonics.

Concerns About Levels of Literacy

NC developments and associated assessments provide a backdrop to the whole-country interventions that have taken place in the last two decades. Office for Standards in Education (Ofsted) reports (e.g., Ofsted, 1996) expressed concerns about standards of reading and approaches to teaching. Ofsted is a nonministerial department reporting to Parliament on their inspections of state schools. Almost 10 years after the introduction of the NC, in 1996 only

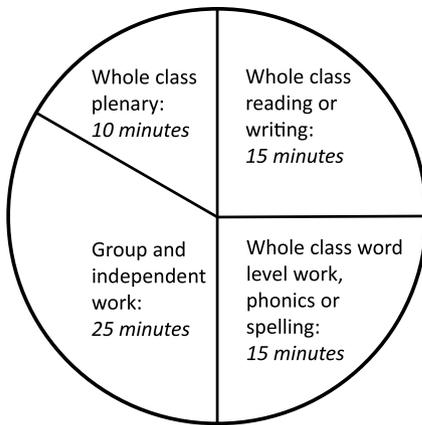


Fig. 2. The structure of the literacy hour.

57% of pupils left KS2 having achieved Level 4 in reading. Translated, this meant that 43% entered secondary schools with a reading ability that would not support learning across the curriculum. Ofsted (Ofsted, 1996) reported that phonics (when taught well) contributed to accuracy and fluency across all abilities, but such teaching was patchy. Often children were introduced to only a letter a week as an initial letter but without any allied teaching about phonemes or phonemic awareness. They also commented that teacher subject knowledge was often inadequate and not accompanied by knowledge of the empirical evidence about word reading or effective teaching.

The National Literacy Strategy

These concerns led in 1997 to a National Literacy Strategy (NLS) designed to supplement the PoS. This provided nonstatutory guidance about teaching reading to be rolled out across England in 1998 (Department for Education and Employment [DfEE], 1998).

A Literacy Hour was established for all KS1&2 classes (Figure 2), meaning that all children would have at least an hour a day dedicated to being taught to be literate throughout KS1&2.

There was a requirement that all teachers in training should receive instruction about the strategy, and a national network of NLS professionals was established to support current teachers. There was a suggestion that phonics would be taught in KS1, but no requirement for this to be systematic. It often arose from words encountered in the whole-class reading session rather than being structured or systematic.

In addition to the Literacy Hour, the NLS presented a model of reading called the Searchlights Model to act as the framework for informing teaching. The four ‘searchlights’ were four cueing systems said to support word identification (Clay & Cazden, 1990; see Figure 3). These were the same as in the descriptor for Level 2 reading.

It is more accurate to call this a metaphor since it did not arise out of models of reading developed from empirical research into how skilled readers read words (e.g., Coltheart, Rastle, Perry, Langdon, & Ziegler, 2001), or how children develop word reading skills (e.g., Ehri, 1995, 1999, 2002). Implied in the NLS framework was that the four cueing systems were of equal use and value. At least the inclusion of phonics as a way into word reading was a step forward, and the NLS was committed to the early teaching of phonics in a discrete way. There were concerns that teachers might not have the skills or resources to do this, so Progress in Phonics (DfEE,

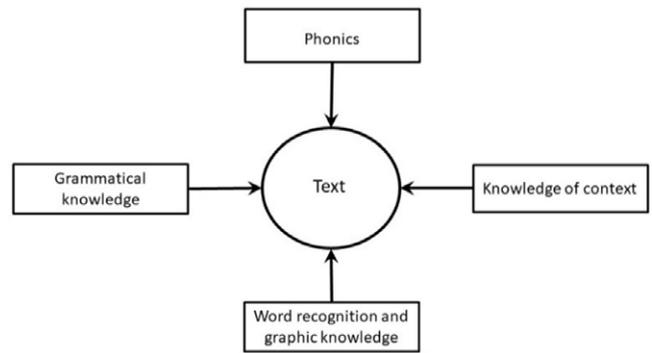


Fig. 3. The searchlights model.

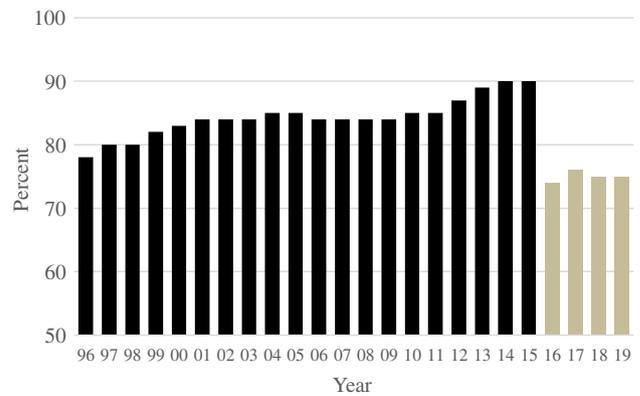


Fig. 4. Percentage of pupils achieving Level 2 in reading at the end of Key Stage 1 (Working at Expected Level from 2016).

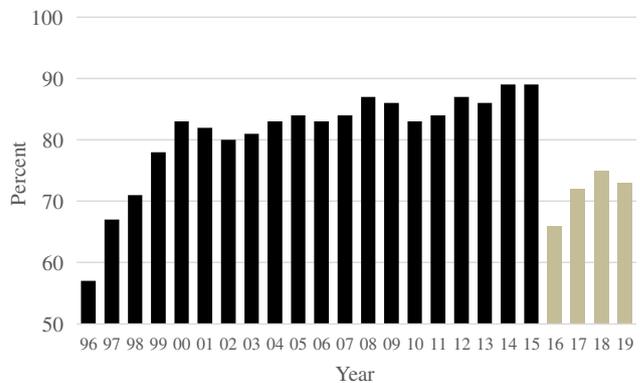


Fig. 5. Percentage of pupils achieving Level 4 in reading at the end of Key Stage 2 (Working at Expected Level from 2016).

1999), a resource for teaching phonics, was published. There was also provision of a day’s training about teaching phonics for approximately 20,000 Reception and Y1 teachers. This was radical because there was opposition to the introduction of phonics teaching in Reception under the belief that the children were too young for this type of activity.

Figures 4 and 5 present the percentages of pupils achieving the expected levels of reading at the end of KS1 and KS2 from 1996 — the year before the NLS was introduced — to the latest performance in 2019. These figures show what appears to be an abrupt

change in performance for both Key Stages between 2015 and 2016. This reflects the changes in the National Curriculum and the SATs that came into place in 2016, which are discussed later.

Of initial interest is the performance before, and for the first few years after introduction of the NLS. Reading levels in KS1 were below 80% prior to the introduction of the NLS and then rose steadily until they plateaued out at 84–85%. Reading levels in KS2 were poorer, but there was a steady rise until 2000 when 83% achieved Level 4. The 11-year-olds in 2000 had not received any of their initial reading instruction under the NLS, but most of their teaching in KS2 had been under the NLS with the Literacy Hour with more focused teaching. These data suggest that the strategy had been some influence for good.

A positive decision was taken to have independent evaluations made of the NLS. The Ontario Institute for Studies in Education (OISE) was commissioned to undertake this. They reported in a series of publications called *Watching and Learning* (Earl, Fullan, Leithwood, & Watson, 2000; Earl, Levin, Fullan, Leithwood, & Watson, 2001; Earl et al., 2003). What emerged from these reports was evidence of high quality leadership from NLS leaders, which supported a gradual rise in standards. However, from the start they identified a need to ensure that ‘the teaching force has the knowledge and skills to make the best use of NL[N]S resources in their unique school settings’ (Earl et al., 2000, p. 40). They were more explicit about these concerns in the second report (Earl et al., 2001). They noted weaknesses in teacher subject knowledge and an erosion of confidence as they struggled with the new and unfamiliar pedagogy that was leading to inconsistencies in implementation. These concerns were still there in the final report (Earl et al., 2003). Their perception was that there was more of an adoption of a system rather than an understanding of effective pedagogy for literacy.

The one day’s training provided in 1999 would appear to have been tokenism. The NLS supported the importance of teaching word reading strategies, but there was no clear support for any evidence-based approach to teaching phonics and certainly no recommendation to take a systematic approach using synthetic phonics teaching.

International Reports into Teaching Reading

Around the time of concerns in England, in the United States the National Reading Panel (NRP) was formed at the request of congress. *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implication for Reading Instruction* was published in 2000 (National Institute of Child Health and Human Development [NICHD], 2000). There were six panels covering Alphabets, Comprehension, Fluency, Methodology, Teacher Education and Technology/Next Steps. Of interest here is the report of the Alphabets panel chaired by Ehri. They concluded that ‘systematic phonics instruction makes a bigger contribution to children’s growth in reading than alternative programs providing unsystematic or no phonics instruction’ (National Institute of Child Health and Human Development [NICHD], 2000, pp. 2–92). They also found that early systematic phonics teaching was the most effective. However, they found no difference in effect between different the types of phonics programs they investigated: namely small-unit synthetic programs, large-unit programs (e.g., onset-rime), and miscellaneous programs.

Since the NRP report there have been further studies — for example, Christensen and Bowey (2005), Hatcher, Hulme, and Snowling (2004), Johnston and Watson (2005) — that have compared teaching phonics at the phoneme level versus at the

onset-rime level. These found that phonics teaching per se was effective. Christensen and Bowey found a focus on grapheme-phoneme correspondences was a better approach; Hatcher et al. found teaching synthetic phonics (at the level of the phoneme) was more beneficial for those children at risk; and Johnston and Watson found synthetic phonics to be more effective than analytic phonics.

In 2005, the Committee for the National Inquiry into the Teaching of Literacy published its report and recommendations for how reading should be taught in Australia (Rowe, 2005). This unequivocally suggested that systematic phonics teaching is critical if pupils are to be taught to read well. They found that where there was unsystematic or no phonics teaching, progress towards skilled reading was significantly impeded. The recommendation was that teachers should provide direct, systematic phonics instruction as an essential arm of a program that supported language development, reading fluency, reading comprehension and skills in new technologies. In making this recommendation they recognised that teachers and trainees should know the evidence base for the teaching approaches and be equipped with the necessary strategies for effective teaching.

The Rose Review 2006

In terms of reviews into the impact of phonics teaching, England may be considered to have been a ‘Johnny-come-lately’. In 2005, Sir Jim Rose was commissioned to chair an Independent Review into the Teaching of Early Reading (Rose Review; Rose, 2006). The review recommended a discrete program of systematic synthetic phonics teaching for all children as the initial primary approach to learning to read and write words; this to be done in the context of a broad and rich language curriculum. Before the age of 5, it recommended that teachers provide an environment with prereading activities to pave the way to phonics instruction.

Also recommended was that the searchlights model be replaced by the SVR as a framework to inform teachers. As with the Rowe report, Rose recommended that all schools appoint as least one member of staff who was fully able to lead on phonics work.

The review was accepted enthusiastically by the Department for Children, Schools and Families (DCSF), so from 2007 onwards all primary schools were expected to include a discrete, systematic phonics program for all children in KS1, which if necessary would continue into the first years of KS2.

Letters and Sounds

Having accepted the recommendations of Rose for all schools to include phonics teaching, in 2007, the Department for Education and Science (DfES) published *Letters and Sounds* (L&S), a free phonics program (DfES, 2007). This six-phase program was designed for teaching phonics throughout KS1. Unlike *Progress in Phonics*, this is a specific systematic synthetic phonics program whereby pupils are taught phonemes-letters mappings, and how to convert the letters into phonemes and to blend the results into words.

Phase 1 introduces pupils to sound discrimination activities and develops their phonological and phonemic awareness through seven aspects of sound: (1) general sound discrimination using environmental sounds; (2) general sound discrimination using instrumental sounds; (3) general sound discrimination using body percussion; (4) rhythm and rhyme; (5) alliteration; (6) voice sounds; and finally (7) oral blending and segmenting. It is recommended that these activities are part of the integrated activities in the Early Years Foundation Stage, which may last for as long as a

year for some children, depending on their month of birth and the organisational structures in their local area.

This is followed by Phase 2, which is designed to teach pupils grapheme phoneme correspondences (GPCs) and how to blend and segment with letters so they can read simple regular words. Because of rapid teaching, after 6 weeks pupils should have learned 19 letters and sounds. The program is informed by the characteristics of English orthography, so included in this stage are activities supporting whole-word recognition of high frequency exception words that cannot be read accurately through application of GPC knowledge. Phase 3 is designed to last about 12 weeks when the few remaining letters and sounds are introduced, followed by consonant digraphs (e.g., <CH> <SH>) and vowel digraphs (e.g., <AI> <OW>). By the end, pupils will have been taught to represent 42 phonemes by a grapheme, to blend these into words for reading, and to segment words into component phonemes for spelling. Phase 4 is a short phase of 4–6 weeks designed to consolidate knowledge and secure blending for reading and segmenting for spelling.

The rest of Y1 is devoted to Phase 5 where pupils are introduced to the many 2- and 3-letter graphemes that have alternative pronunciations to the canonical correspondences learnt in the earlier phases. Depending on progress throughout Phases 2–4, this phase may take up the whole of the final term (around 12 weeks). By the end of the phase pupils are expected to be able to read hundreds of words independently. These should be both regular words on which they have applied their phonics knowledge many times; and exception words that have been learnt by rote. They are expected to have become expert in decoding words quickly and silently through well-established sounding and blending routines. And finally, they are expected to decode aloud to support word identification where they recognise that silent decoding has not worked.

Phase 6, designed for the whole of Y2, is one of consolidation to build up speed, and accuracy in word reading. L&S is a program for teaching how to read words to establish the word reading skills element of the SVR. It also recommends that pupils have a rich diet of reading books independently and with support, and that they listen to experienced readers reading aloud from a wide variety of texts.

In addition to the phases, L&S recommends an approach to teaching based on a sequence of teaching for each lesson which is recognised as best practice; namely, introduction → revisit and review → teach → practise → apply → assess learning against criteria. There are suggestions for teaching activities and resources that teachers can make themselves, but there are no commercially produced materials to accompany the program. The requirement for assessment is for the teacher to monitor progress in order to provide support for all children. This monitoring provides them with objective evidence where pupils fail to make progress. This is invaluable information for consultations with educational psychologists.

Following the requirement for schools to include a structured program of systematic phonics, publishers produce programs and resources for schools to buy in addition to the freely available L&S. In 2010, the DfE published a set of core criteria that defined effective systematic synthetic phonics programs (DfE, 2010). Schools are free to choose, but they are advised to map their program against these criteria. L&S meets all the criteria and is still very widely used by schools despite the commercially available programs (Flynn, Stainthorp, Powell, & Stuart, 2020).

Impact of the Rose Review

The performance data shown in Figures 4 and 5 provide some evidence about the impact of phonics teaching post Rose. First,

Figure 4 suggests there was limited impact of phonics teaching on reading performance in the first few years immediately following the Rose Review. However, from 2013 there was a steady rise to a peak of 90% in 2014 and 2015. There is also a suggestion in Figure 5 that the phonics teaching might have fed forward into performance at the end of KS2 from 2011 onwards. These data relate to KS2 pupils who would have all experienced a phonics program in KS1 from the start of their literacy education. Nevertheless, there was still some concern about the tail of underachievement and the degree to which schools were secure in their provision of quality phonics teaching for KS1.

The Phonics Screening Check

In 2011, the DfE began developing a Phonics Screening Check (PSC). This was designed to provide an objective measure of the ability of pupils to apply their phonics knowledge at the end of Y1. The check comprises 40 items: 10 easier regular words and 10 easier non-words, followed by 10 more challenging regular words, including some bisyllabic words and 10 more challenging nonwords. All non-words are paired with pictures of aliens to signal that these are not real. Trialling data on performance on possible items led to a difficulty gradient of item structure and an initial threshold of 32 correct. The difficulty gradient and threshold mark have remained the same in all iterations of the check, though the items vary year on year. Pupils who do not achieve the threshold in Y1 have to retake it at the end of Y2. The expectation is that those whose performance is below par will be given targeted support in Y2.

It would be disingenuous to say that the introduction of the PSC was not without controversy. Some related to a misunderstanding of the purpose of the PSC (e.g., Rosen, 2012; UK Literacy Association, 2012). It is not intended as an assessment of reading. It is an assessment of ability to read regular words and to use grapheme-phoneme correspondences; that is, to apply knowledge learned in phonics lessons throughout Reception and Y1. A purer form would have been to include only nonwords because it is not possible to interpret whether regular real words are read by application of GPC knowledge or by whole-word recognition. However, this would have been politically unwise and would have risked alienating many teachers.

Figure 6 shows the percentage of pupils meeting the threshold in all iterations of the PSC. The percentages for Y2 include those pupils who achieved the threshold in Y1 plus those who subsequently achieve it one year later. The percentage meeting the threshold in Y1 in 2012 was only 58%. This was evidence that phonics teaching was not as successful as it should have been. This percentage then rose until it has now plateaued at just above 80%. The extra targeted work in Y2 had an effect since, in 2013, half of the pupils who were below threshold at the end of Y1 achieved it at the end of KS1. However, these results mean that around 10% of pupils enter KS2 with poor word reading skills, and schools should recognise that just achieving the threshold or slightly above it in Y2 means those pupils are one year behind in their word reading.

Returning to Figure 4, from 2012 to 2015 there was a steady rise in performance in KS1 with percentages rising to 90% achieving Level 2. This coincides with the introduction of the PSC.

The Impact of Changes to Reading SATs and the National Curriculum in 2016

Due to the change in assessment since 2016, it is not possible to interpret trends at the current time. As can be seen from

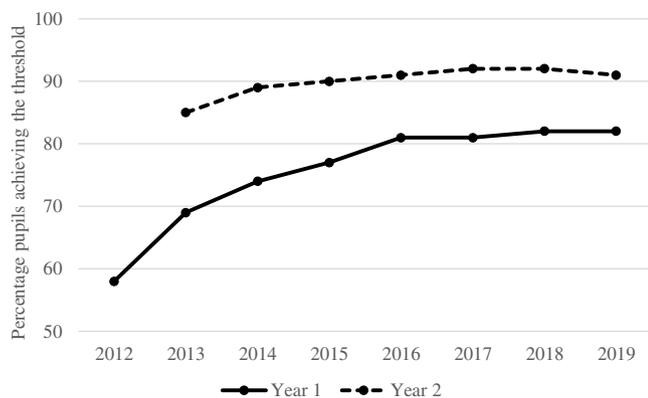


Fig. 6. Percentage of pupils achieving 32 in the Phonics Screening Check.

Figures 4 and 5, there was an abrupt change in performance between 2015 and 2016. This was due to both changes in the curriculum *and* changes in the demands of the tests. Then, coupled with this, there were the changes in how performance was scored from Levels to scores with a pass mark of 100. This all leads to performance in 2016 as being ground zero in terms of comparison.

It was appropriate that the content of the SATs had to change because the pupils were being taught under the new curriculum that covered different material. The new NC was designed to be more challenging than the previous iterations with it being described by the DfE as a 'knowledge-based curriculum' (Gibb, 2017). This was a deliberate policy because (a) the DfE believed that standards expected of pupils in Y6 prior to 2016 had not been high enough, and (b) the belief was that harder tests would lead to higher standards. The new SAT was designed to accommodate a higher 'expected standard' threshold (Newton & Cuff, 2017). An Expected Level of 100 is now set with the possibility of most scores ranging from 80–120. The DfE acknowledge that it is not possible to compare performance under the original NC testing regime with the new one (Roberts, 2017). However, since the bar was deliberately set higher, it was expected that initially at least the percentage of children achieving 100 or more would be likely to be lower than the percentage of children achieving Level 4 under the original reporting criteria. As can be seen in Figures 4 and 5 this was the case. Performance at KS1 appears to have plateaued, but after the initial low level of percentage passes in KS2 overall performance has picked up.

There were concerns expressed by teachers that the first KS2 SATs papers under the new system were unduly difficult. The House of Commons, Select Committee on Education held an inquiry into Primary assessment in 2016 (House of Commons Education Committee, 2017). The committee acknowledged concerns of teachers that the Standards and Testing Agency (STA), which is responsible for developing SATs, did not oversee the implementation of the new system effectively. The Select Committee took a considerable amount of evidence from a wide range of educationalists who felt that the test had been inaccessible to some groups of pupils who had not been disadvantaged under the previous system. Subsequently, a report by the Office of Qualifications and Examinations (Ofqual; Newton & Cuff, 2017) into the 2016 assessment was published. Ofqual is a nonministerial government department. They reached the following conclusion:

On balance of the evidence presented, it seems plausible that the combined impact from multiple ostensibly negligible challenges — stemming from both question and text factors — may have rendered the 2016 reading test unduly hard to access for at least some pupils. (Newton & Cuff, 2017, p. 6).

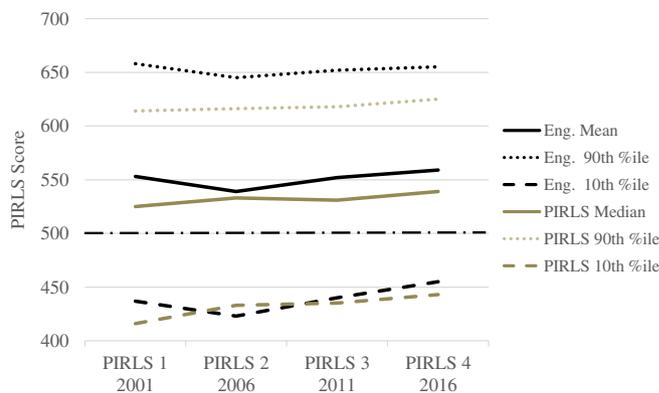


Fig. 7. PIRLS mean scores for England and the PIRLS countries with performance levels at the 10th and 90th percentiles.

The types of pupils for whom the test might have been unduly hard to access were considered to be low-attaining pupils, some pupils from low socio-economic backgrounds, pupils with English as an Additional Language, and pupils with special educational needs and disabilities.

Progress in International Reading Literacy Studies (PIRLS)

Since 2001 there have been four international studies investigating reading conducted by the International Association for the Evaluation of Educational Achievement (IEA; Mullis, Martin, Gonzalez, & Kennedy, 2003; Mullis, Martin, Kennedy, & Foy, 2007; Mullis, Martin, Foy, & Drucker, 2012; Mullis, Martin, Foy, & Hooper, 2017). PIRLS is a wide ranging and in-depth program. Reading tasks centre on reading with understanding a range of texts from different genres, and answering questions relating to these.

Participating countries select a sample of pupils aged around 10 years to take part. The pupils from England are in Year 5, that is, 3 years after they leave KS1 and 1 year before the end of KS2. England participated in all studies, so there are external data against which the national events discussed here can be mapped.

Figure 7 shows the overall mean performance, the levels of those at the 10th and 90th percentiles, and the median for PIRLS overall. The PIRLS centre point is 500, but medians are reported here because these counterbalance any skew from the economically advantaged nations.

There appeared to be much to celebrate in the England PIRLS 1 performance levels. The average score placed it as third in the overall ranking. Pupils above the 90th percentile achieved the best in the study. These children had received their early literacy instruction before the introduction of the NLS. However, the attainment gap between the 90th and the 10th centile (Figure 8) was higher than the PIRLS average and indicated that there was a tail of underachievement.

The picture was not so rosy in 2006. England dropped to 19th, and there was a significant drop in the average level of performance. These pupils had received their literacy instruction under the NLS. The attainment gap was still wide; a worrying picture since the international average gap had closed significantly and was significantly smaller than England's.

In 2011, average performance rose, and England was equal 11th. These pupils began school in 2007, so had received their instruction post-Rose. The attainment gap had been closed slightly, but there was still evidence of the tail of underachievement.

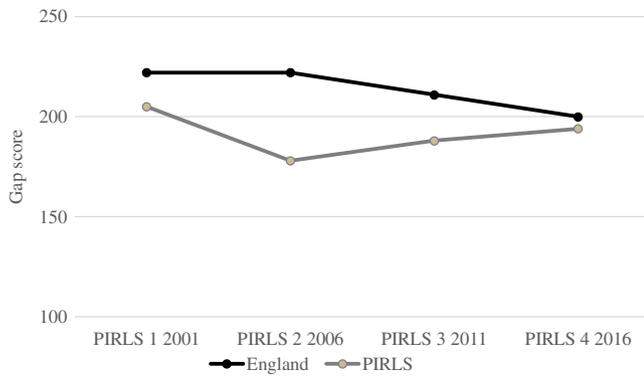


Fig. 8. PIRLS attainment gaps between the 90th and 10th percentiles for England and total participating countries.

In the latest PIRLS, average performance rose to where it was 15 years earlier and was significantly higher than in 2006 and 2011, with pupils in the 90th percentile again among the best in the world. Good news was that the attainment gap had been significantly reduced. The average improvement score overall can be accounted for by improvements of the lowest performing pupils. This 2011 cohort had received all their instruction post-Rose, and specifically they were the first whose word reading was assessed using the PSC. The correlation between PSC and PIRLS was a moderate statistically significant .52 (McGrane, Stiff, Baird, Lenkeit, & Hoepfenbeck, 2017). The average PIRLS score for those pupils achieving 32 or above on the PSC was 587. This is 28 points above the overall national mean. The average score for pupils who achieved 100% on the PSC was 617. A tentative interpretation of this is that introduction of the PSC has led to more effective phonics teaching, which has led to enhanced word reading, which in turn means pupils and teachers are able to focus their energy and enthusiasm on enjoying and understanding texts; hence, improved performance on the PIRLS assessments. This interpretation is supported from a further analysis of PIRLS and KS1 data by Double, McGrane, Stiff, and Hopfenbeck (2019).

The evidence about teaching phonics is that it is most effective at the start of instruction, and particularly helpful for those pupils who are at risk. The data from PIRLS 2016 support this. The requirement to teach systematic synthetic phonics as the first approach to word reading seems to be having a positive effect overall and to be particularly effective for those pupils who might otherwise have struggled in the early years.

Teacher Subject Knowledge

A theme running through Ofsted and OISE reports has been the patchy level of teachers' subject knowledge about how children read words, and why phonics is an effective approach. This issue remains. Trainee primary teachers are required to learn how to teach phonics, but the majority of them have just a 1-year course for learning all aspects of teaching young children. There is a tendency to ignore the fact that most adults are not explicitly phonemically aware (Moats, 1994; Stainthorp, 2004) and need practice to raise their explicit phonemic awareness to a high enough level to teach phonics. There is evidence that some teachers are unaware of their lack of subject knowledge and skills, or overestimate what they do know (Cunningham, Perry, Stanovich, & Stanovich, 2004; Cunningham, Zibulsky, & Callahan, 2009). After the introduction of the PSC, the DfE funded a series of day training sessions called Phonics

Roadshows for teachers in areas where there was significant underachievement to provide them with the research underpinning of why to teach phonics as well as how to teach it. Feedback from roadshows delivered by the University of Reading provided evidence about why such training is needed. After taking part in the training, participants were asked what they were most likely to take back to their schools. The top four things were: the importance of staff training and of monitoring practice following training; the need for practice to be consistent; the need to enhance staff subject knowledge; and the need to assess pupil progress in acquiring phonic knowledge more regularly (Flynn et al., 2020).

What Have We Learnt?

In the last 20 years the landscape for teaching reading in England has completely changed. The research evidence about effective phonics teaching has fed into teaching practices and is now sufficiently embedded such that all primary teachers have some expertise. The reduction in the tail of underachievement is something to be celebrated. Combined with a more fully specified PoS and evidence from performance on the PSC, teachers can now identify those children who are at risk sufficiently early to ensure in-class intervention can be provided in Y2. Where there are persistent difficulties, any subsequent interventions and assessments can be carried out in the knowledge that pupils with difficulties will have received explicit focused instruction.

This case study provides an account of what one country has done; it is not a blueprint. Phonics teaching is now embedded and having a positive effect. The PSC provides teachers with evidence about how well pupils have learnt and where some are struggling. This enables them to instigate early support. There remains a danger that phonics teaching is seen as sufficient in terms of teaching reading. The evidence is that it is necessary but not sufficient. The SVR remains the framework for teachers and should ensure they provide teaching that develops both word reading and comprehension.

In 2002, Willows wrote:

Training teachers to implement instructional methods when they don't truly understand the underlying rationale is futile. Without understanding teachers do not have the knowledge to adapt an instructional strategy to address various student needs. Without understanding teachers become cogs in a machine, with neither the responsibility nor the rewards of being in control. Without understanding teachers can become inflexible and dogmatic: unable to integrate new research-supported practices into existing approaches. (p.1., Willows, 2002)

This is as true now as it was then. PIRLS 4 has provided objective evidence of a rise in performance possibly due to phonics teaching and assessment. The proof of the pudding will come with data from PIRLS 5 in 2021.

Relevance for Educational Psychologists

The clear guidance about the teaching of word reading and the program of assessment that accompanies it that is now in place in England means that schools have detailed information on the performance of children in the first few years of primary education that correlates with the approach taken to teach word reading. These data are invaluable. Schools are able to identify those children who fail to make expected progress and who may be at risk for having word reading difficulties despite having had a program of high-quality teaching. Thus, dialogues with educational psychologists can be data driven in a way that has not been possible in the past. This has the potential for early evidence-based interventions being implemented

so that those children at risk of being left behind are caught and supported before they have a chance to fail.

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Appendix

NC PoS 1999 Reading strategies KS1	NC PoS 2014 Reading — word reading KS1–Y1
<p>1. To read with fluency, accuracy, understanding and enjoyment, pupils should be taught to use a range of strategies to make sense of what they read. They should be taught to:</p> <p><i>Phonemic awareness and phonic knowledge</i></p> <p>(a) hear, identify, segment and blend phonemes in words</p> <p>(b) sound and name the letters of the alphabet</p> <p>(c) link sound and letter patterns, exploring rhyme, alliteration and other sound patterns</p> <p>(d) identify syllables in words</p> <p>(e) recognise that the same sounds may have different spellings and that the same spellings may relate to different sounds</p> <p><i>Word recognition and graphic knowledge</i></p> <p>(f) read on sight high-frequency words and other familiar words</p> <p>(g) recognise words with common spelling patterns</p> <p>(h) recognise specific parts of words, including prefixes, suffixes, inflectional endings, plurals</p> <p><i>Grammatical awareness</i></p> <p>(i) understand how word order affects meaning</p> <p>(j) decipher new words, and confirm or check meaning</p> <p>(k) work out the sense of a sentence by rereading or reading ahead</p> <p><i>Contextual understanding</i></p> <p>(l) focus on meaning derived from the text as a whole</p> <p>(m) use their knowledge of book conventions, structure, sequence and presentational devices</p> <p>(n) draw on their background knowledge and understanding of the content</p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • apply phonic knowledge and skills as the route to decode words • respond speedily with the correct sound to graphemes (letters or groups of letters) for all 40+ phonemes, including, where applicable, alternative sounds for graphemes • read accurately by blending sounds in unfamiliar words containing grapheme phoneme correspondences (GPCs) that have been taught • read common exception words, noting unusual correspondences between spelling and sound and where these occur in the word • read words containing taught GPCs and –s, –es, –ing, –ed, –er and –est endings • read other words of more than one syllable that contain taught GPCs • read words with contractions (e.g., I'm, I'll, we'll), and understand that the apostrophe represents the omitted letter(s) • read aloud accurately books that are consistent with their developing phonic knowledge and that do not require them to use other strategies to work out words • reread these books to build up their fluency and confidence in word reading. <p>KS1–Y2</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • continue to apply phonic knowledge and skills as the route to decode words until automatic decoding has become embedded and reading is fluent • read accurately by blending the sounds in words that contain the graphemes taught so far, especially recognising alternative sounds for graphemes • read accurately words of two or more syllables that contain the same graphemes as above • read words containing common suffixes • read further common exception words, noting unusual correspondences between spelling and sound and where these occur in the word • read most words quickly and accurately, without overt sounding and blending, when they have been frequently encountered • read aloud books closely matched to their improving phonic knowledge, sounding out unfamiliar words accurately, automatically and without undue hesitation • reread these books to build up their fluency and confidence in word reading.