

Longitudinal Study from Reception to Year 2 (2010-2013)

and

***Summary of an earlier Longitudinal Study
from Reception to Year 6 (1997-2004)***

***The Effects of a Systematic Synthetic Phonics Programme on
Reading, Writing and Spelling -***

***with whole classes of children who started with the programme for first-time
teaching in Reception (aged four to five years) and received small group teaching
with the same programme for catch-up as required***

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Introduction and Summary

The aim of these studies is to demonstrate how all children can make a very good start with reading, writing and spelling at infant level (aged four to seven years) and can leave primary school (aged eleven years) well equipped for the literacy demands of secondary education.

The studies also aim to demonstrate how disadvantaged children and struggling learners can overcome their difficulties and how literacy teaching and targeted interventions can be effective and have a long-lasting impact, without being expensive.

The acquisition of literacy skills by children in the United Kingdom is a cause for concern. It has been reported that one in six eleven year olds leaves primary school in England still struggling to read (1). The Progress in International Reading Literacy Study (PIRLS) revealed that English children are amongst the poorest readers in the English speaking world (2). The OECD's PISA tests showed that the literacy skills of children in the UK lag behind many of their international competitors (3) (Organisation for Economic Co-operation and Development, Programme for International Student Assessments).

This most recent study (2010-2013) is set in the context of government initiatives to improve reading standards in England through "high quality phonic work" (4, 5, 6, 7). In the UK there are many disadvantaged children who still struggle to learn to read in school and there are specific concerns about a variety of vulnerable children. In this study the following groupings were identified from official Department for Education (DfE) classifications:

- boys,
- children from low-income families who qualify for free school meals,
- Pupil Premium children - pupils who have been registered as eligible for free school meals at any point in the last 6 years or have been looked after in public care for 6 months or longer (8),
- children whose ethnicity is non-white British,
- children whose first language is not English,
- children with special educational needs,
- children with summer birthdays.

In this study the school also identified two vulnerable groups:

- children who are struggling learners for whom the school provided extra teaching in order for the children to keep up – in so-called 'catch-up' groups,
- children with significant social, emotional and behavioural difficulties who were identified in Year 2 as a 'challenging behaviour' group, requiring additional managing.

The study also analysed girls' achievements.

Considerable funding is spent nationally on supporting such vulnerable groups through initiatives like Reading Recovery (9), through the Pupil Premium and from obtaining formal diagnoses of dyslexia.

In spite of the government initiatives to raise literacy standards through synthetic phonics, the National Foundation for Educational Research (NFER), on behalf of the DfE, reported the following evaluation findings in 2013 and in 2014 about the teaching of phonics and the attitudes towards phonics in schools (10). There is "*wide misunderstanding of the term 'systematic synthetic phonics'*". About 90% of literacy coordinators "*feel that a variety of different methods should be used to teach children to decode words*". "*Many schools believe that a phonics approach to teaching reading should be used alongside other methods*". "*Teachers in general have not yet fully adopted*" DfE recommended phonics practices (1). In other words, despite the government initiatives for schools in England, the situation has still not been achieved in which all children are receiving the best start to their literacy. Nor are all struggling learners receiving the most effective teaching for intervention. The implications are that literacy standards may not be raised as expected and that some vulnerable children may continue to struggle to learn to read.

In 2011 (11), the author reported findings on children who *did* receive government approved teaching of phonics as recommended by the DfE (1). Reading and spelling results were reported for a whole class of Reception children starting from school entry with a government approved synthetic phonics programme (6, 7). The author asked whether this government initiative was an excellent opportunity to drive up reading standards or would it “switch off” children from a love of reading, as would be claimed by some children’s authors and teacher-trainers who are critical of phonics.

In 2012 (12) and in 2013 the author followed up the achievements of this whole class of children, from Reception to Year 1 and to Year 2. Key Stage 1 English SATs (13)* results in 2013 were also reported.

This small piece of research (2010-2013) built on the author’s previous large scale longitudinal study from 1997 to 2004 (12, 14) using first-time and catch-up (keep-up) synthetic phonics teaching with about 700 pupils. Both studies found that all the Reception children learned to read and spell successfully, including potentially vulnerable groups (see groups listed on page 2). At the end of the Reception year, the outcome was that the children read with confidence and enthusiasm, and that the children in the catch-up groups caught up or were able to keep up and close the gap in their achievements. In Years 1 and 2 the children sustained their early advantage and continued to develop to read fluently and with pleasure.

The 1997-2004 research followed children who received first-time and catch-up synthetic phonics teaching through to Key Stage 1 English SATs and Key Stage 2 English SATs (13). The KS2 SATs results in 2004 showed that there were no severe literacy difficulties. Level 3B was the lowest level achieved for English, indicating some moderate literacy difficulties. Hence virtually all the children in this large cohort (94%) transferred to secondary school having met nationally expected standards for English.

Both studies (1997-2004 and 2010-2013) demonstrated what can be achieved when children receive good synthetic phonics teaching from the start of their schooling. Early in Reception it was obvious which children were slow-to-start and likely to take longer to learn. The use of simple word reading and spelling tests at Christmas (in the 1997-2004 study) ensured that no child went unidentified. These children needed extra attention, time, practice and teaching with the same teaching methods, staff and materials usually within small catch-up (keep-up) groups. This made the interventions very economical. These interventions were usually delivered 2 or 3 times per week for between 15 to 20 minutes each session, and for about 30 minutes each session for older children. Group sizes were between 4 and 9 children.

In the 1997-2004 and 2010-2013 studies the slow-to-start children had caught up by the end of Reception and continued to build on their flying start throughout Years 1 and 2. They read with confidence and enthusiasm, and all the children in catch-up groups were at least average in their achievements. The schools did not need to assess for dyslexia. Nor was it necessary to turn to different methods of teaching or to specialist dyslexia teachers or to Reading Recovery (9).

* Footnote:

See Reference (13). In England, the national curriculum is organised into blocks of years called ‘key stages’ (KS). At the end of each key stage, the children’s teachers formally assess their performance to measure their progress. They use standardised assessment tests (SATs). SATs papers are compulsory national tests for school pupils in England. KS1 SATs are taken at the age of 7 years (at the end of school Year 2). In these studies the KS1 SATs results from Year 2 pupils in 2003 still took the form of formal KS1 SATs papers. Formal KS1 SATs papers stopped in 2004 and were replaced with individual tests and tasks which are assessed by children’s teachers. Hence in these studies, KS1 SATs results from Year 2 pupils in 2013 and their national comparisons were from teacher assessments. KS2 SATs papers are compulsory national tests for primary school pupils at the age of 11 years (school Year 6). In these studies, the results from KS2 SATs in 2003 and 2004 were from compulsory formal papers. In these studies (1997-2004 and 2010-2013) no pupil was disapplied from SATs or any other assessments. All the children were included in the assessments and their results reported including those from children with complex Statements of Special Educational Needs.

The use of a systematic synthetic phonics programme was shown to give children a flying start with their reading, writing and spelling, it was effective for catch-up, it reduced special educational needs across the schools and it enabled higher numbers of children to transfer to their secondary schools well equipped to access the curriculum. Children were reading more fluently which encouraged a love of books.

In 2013 the Year 2 class, at average chronological age of 7:04 years, was on average **28** months above chronological age for reading and on average **21** months above chronological age for spelling. The achievement range was 7:07 years to 13:09 years for reading and 7:01 years to 14:09 years for spelling. 50% of the class could read within the 8:03 years to 10:11 years range and spell within the 8:03 years to 9:04 years range. Boys were the highest achieving group. 93% of the boys could both read and spell at 'above average' and above levels. 87% of the boys could read at 'high' and above levels. 60% of the boys achieved 'very high' reading levels. 60% of the boys could spell at 'high' and above levels. No boy or girl was reading or spelling below an 'average' level for their age.

The boys, the challenging behaviour group and the non-white British ethnic children were the most impressive. The boys were the highest achievers with an average of **36** months above chronological age for reading and an average of **27** months above chronological age for spelling.

Relatively, the lowest achieving group in the class was the catch-up group (**13** months above for reading, **11** months above for spelling). All the children were reading and spelling at least in the 'average' range for their age. They were confident and used phonemic strategies for reading and spelling (See 'Vulnerable Groups in the Year 2 class in 2013' on page 9).

Research Study in Reception (age 4 to 5 years), Year 1 (age 5 to 6 years) and Year 2 (age 6 to 7 years) from 2010 to 2013

A Catholic Primary School designated for travellers of Irish origin, used the systematic synthetic phonics programme *Sound Discovery*® (6, 7) to teach literacy to their whole Reception class, from September 2010 and into Years 1 and 2. The school decided to continue using their existing handwriting programme. A key feature of the *Sound Discovery*® programme is the *Snappy Lesson*® which teaches all the phonic skills needed for literacy in a fast-paced, interactive way, so that even boys with the shortest attention spans and children with concentration difficulties can be kept on task. Also, the constant review of prior learning within the *Snappy Lesson*® supports the learning of children with weak memories.

The school had a high level of social and special educational needs. 30 pupils were assessed in the Reception cohort, 18 boys and 12 girls. In Year 1, 26 children were re-assessed, 15 boys and 11 girls (three children had left and one child was absent). In Year 2, 26 children were re-assessed, 15 boys and 11 girls (one child had left). The 2013 study made use of Council data using the common official DfE classifications from the official Council Spring School Census 2013. This identified the usual vulnerable groups often believed to experience barriers to learning (see groups listed on page 2). The author also analysed two other classifications identified by the school. The first was a slow-to-learn group who received catch-up teaching delivered as an intervention in a small group with their class teacher or class teaching assistant using *Sound Discovery*®. This consisted of little-and-often teaching. The second was a challenging behaviour group who showed social, emotional and behavioural difficulties.

Research in the United States of America has revealed that children of lower-income, less-educated families typically enter school with poorer language skills than their more privileged counterparts. However, enriched preschool programmes for 4 and 5 year olds were reportedly unsuccessful at breaking the 'cycle of poverty' (15) and did not bring poor children up to the level of the average American child in later school success. Instead, it was found that the learning experience of babies *before* the age of three

was the crucial factor. A seminal piece of work by Hart and Risley studied children at home from poorer and professional families from 7 months to 36 months of age (15, 16, 17, 18). Hart and Risley found that it was the *amount* of talk, not the social class or income of the parents, which predicted children's intellectual accomplishments. Generally, working-class parents did speak less than professional parents but not exclusively. Some working-class families talked to their babies as much as professionals and some affluent families talked as little as those on welfare. The *type* of talk was also important - not just 'business talk' (e.g. "stop that", "come here", "what have you got there?", "hold still", "put that down") but the 'extra', 'conversational', 'talking for pleasure', 'sociable' talk which was rich in vocabulary, complex ideas, subtle guidance and positive reinforcement. This was the 'good stuff' of developmental psychology thought to be so important for intellectual development.

In the author's 1997-2004 large scale longitudinal study, national assessment on school entry was still being carried out as an educational requirement, and the children entering the study school were found to be at the very lowest level for language and at the second lowest level for social skills. In the 2010-2013 longitudinal study, similar school entry assessment had been discontinued as an educational requirement, so comparative school entry levels were unknown. However the Reception teacher assessed all 30 children on school entry. None of them knew any letter-sound correspondences and none could demonstrate any reading or spelling skills. Hence, all the study children started from a low baseline, but in spite of these beginnings the results demonstrated that schools can still give children the very best start to their learning and can potentially contribute to social mobility and alleviate the 'cycle of poverty'.

By Christmas 2010 in this study, the Reception teacher was reporting "*a huge increase in the number of children being able to read and write*" (11) compared with previous years. By July 2011 for reading, only 7% of Reception children remained at alphabet CVC (consonant-vowel-consonant) level. The remaining 93% were reading above this level (at alphabet CVCCVC, CVCC, CCVC, CCVCC, consonant digraph or vowel digraph levels and above). By July 2011 for spelling, only 10% of Reception children remained at alphabet CVC level. The remaining 90% were spelling above this level (at alphabet CVCCVC, CVCC, CCVC, CCVCC, consonant digraph or vowel digraph levels and above). The Reception children's first reading books were decodable storybooks and texts which contained only the letter(s)-sound correspondences they had been taught, and a controlled number of high frequency 'tricky' words (i.e. common words with not-yet-taught, unusual or unique letter(s)-sound correspondences).

The composition of the catch-up groups was interesting. There were a variety of reasons why the children might be relatively behind but no clear predictors.

Results in 2011

In July 2011 all 30 Reception children were assessed at the end of their first year at school on the British Ability Scales II Word Reading and Spelling Achievement Scales. The results for the whole class and for individual groups were discussed in a previous paper (11) but are summarised again below in Table 1.

The whole class, the summer birthday children, the boys and the traveller achieved 'above average' reading and spelling. The girls and the children from low-income families who were eligible for free school meals (FSM) achieved 'above average' reading and 'average' spelling. The child with behaviour difficulties including non-compliance achieved 'average' reading and 'above average' spelling. The children with English as an additional language (EAL) and the catch-up group achieved 'average' reading and spelling.

Table 1: Average (mean) Reception results 2011, for whole class and individual groups of children, using BAS II Word Reading and Spelling Achievement Scales

Group	Av CA	Reading: Average Standard Score	Reading: Average Percentile	Average (Mean) Reading Age	Reading: months above CA	Spelling: Average Standard Score	Spelling: Average Percentile	Average (Mean) Spelling Age	Spelling: months above CA
Whole Class (N=30)	5:05	116.6 Above Av	82.1 Above Av	6:07	14	113.3 Above Av	76.6 Above Av	6:05	12
Summer Birthdays (N=10)	5:01	121.0 Above Av	87.5 Above Av	6:07	18	117.2 Above Av	83.0 Above Av	6:05	16
Boys (N=18)	5:05	118.1 Above Av	83.5 Above Av	6:08	15	115.6 Above Av	79.1 Above Av	6:06	13
Travellers (N=1)	5:02	116.0 Above Av	86.0 Above Av	6:01	11	110.0 Above Av	75.0 Above Av	5:10	8
Girls (N=12)	5:04	114.3 Above Av	79.8 AAv	6:05	13	109.8 Av	72.8 Av	6:02	10
FSM (N=3)	5:07	113.0 Above Av	80.7 Above Av	6:05	10	109.3 Av	73.3 Av	6:02	7
Behaviour Difficulties (N=1)	5:03	109 Av	73 Av	5:10	7	113 Above Av	81 Above Av	6:04	13
EAL (N=4)	5:04	109.5 Av	72.0 Av	6:01	9	103.3 Av	58.3 Av	5:08	4
Catch-Up (N=5)	5:04	108.2 Av	68.2 Av	5:11	7	107.6 Av	68.4 Av	6:00	8

Key:

CA: chronological age. Chronological age, average (mean) reading age and spelling age are in years and months

Av: Average

Standard Score of the BAS II Achievement Scales has a mean of 100 and standard deviation of 15

Percentile: 50th percentile is average; a Percentile of 99.8 means that 99.8% of children of that age would score the same or below

FSM: free school meals; EAL: English as an additional language

Av: average scores: Standard Scores in 90 - 109 range, Percentiles in the 25-74 range

Above Av: above average scores: Standard Scores in 110 - 119 range, Percentiles in the 75-90 range.

Results in 2012

In July 2012 the Year 1 class was assessed at the end of its second year at school on the British Ability Scales II Word Reading and Spelling Achievement Scales. The results for the whole class and for individual groups were discussed in a previous paper (12) but are summarised again below in Table 2.

The whole class, the summer birthday children, the boys and the child with behaviour difficulties achieved 'very high', 'high' or 'above average' reading and spelling. The girls, the child from a low-income family

who was eligible for free school meals, the children with English as an additional language and the catch-up group achieved 'above average' reading and spelling, as shown in Table 2, below:

Table 2: Average (mean) Year 1 results 2012, for whole class and individual groups of children, using BAS II Word Reading and Spelling Achievement Scales

Group	Av CA	Reading: Average Standard Score	Reading: Average Percentile	Average (Mean) Reading Age	Reading: months above CA	Spelling: Average Standard Score	Spelling: Average Percentile	Average (Mean) Spelling Age	Spelling: months above CA
Whole Class (N=26)	6:04	123.6 High	90.0 Above Av	8:02	22	122.0 High	88.0 Above Av	8:01	21
Summer Birthdays (N=9)	6:00	128.9 High	95.3 High	8:00	24	124.6 High	91.2 High	7:09	21
Boys (N=15)	6:05	127.1 High	92.8 High	8:06	25	127.1 High	92.7 High	8:07	26
Girls (N=11)	6:04	118.9 Above Av	86.3 Above Av	7:08	16	115.0 Above Av	81.6 Above Av	7:05	13
FSM (N=1)	6:10	113.0 Above Av	81.0 Above Av	7:10	12	119.0 Above Av	90.0 Above Av	8:03	17
Behaviour Difficulties (N=1)	6:02	134.0 V High	99.0 V High	8:03	25	132 V High	98 V High	8:03	25
EAL (N=3)	6:05	118.3 Above Av	88.0 Above Av	7:07	14	114.0 Above Av	80.3 Above Av	7:06	13
Catch-Up (N=8)	6:04	118.8 Above Av	86.5 Above Av	7:07	15	114.8 Above Av	79.6 Above Av	7:05	11

Key:

CA: chronological age. Chronological age, average (mean) reading age and spelling age are in years and months

Av: Average

Standard Score of the BAS II Achievement Scales has a mean of 100 and standard deviation of 15

Percentile: 50th percentile is average; a Percentile of 99.8 means that 99.8% of children of that age would score the same or below

FSM: free school meals; EAL: English as an additional language

Av: average scores: Standard Scores in 90 - 109 range, Percentiles in the 25-74 range

Above Av: above average scores: Standard Scores in 110 - 119 range, Percentiles in the 75-90 range

High: high scores: Standard Scores in 120 - 129 range, Percentiles in the 91-97 range

V High: very high scores: Standard Scores in 130 and above range, Percentiles in the 98-99 range.

Results in 2013

In July 2013 the Year 2 class was assessed at the end of its third year at school on the British Ability Scales II Word Reading and Spelling Achievement Scales. The results for the whole class and for individual groupings are summarised below in Table 3. Results for the following official classifications of children were obtained for:

- the whole class,
- the boys,
- the girls,
- children eligible for Pupil Premium/free school meals,
- children of non-white British ethnicity,
- children with English as an additional language (first language non-English),
- children with special educational needs,
- children with summer birthdays.

Results from two school groups were also analysed: the 'catch-up' group and the 'challenging behaviour' group. The catch-up group received extra small group synthetic phonics teaching with their teacher or teaching assistant using the same teaching methodology and materials used for first-time teaching. The challenging behaviour group was identified by school and school received advice from the Local Authority BESD service for pupils with behavioural, emotional and social difficulties.

The whole class, the boys, the non-white British children, the summer birthday children and the challenging behaviour group achieved 'very high', 'high' or 'above average' reading and spelling. The girls, the children eligible for Pupil Premium and free school meals and the children with special educational needs achieved 'above average' reading and spelling.

The non-English language children and the catch-up group achieved 'above average' reading and borderline 'above average/average' spelling, as shown in Table 3 below:

Table 3: Average (mean) Year 2 results 2013, for whole class and individual groups of children, using BAS II Word Reading and Spelling Achievement Scales

Group	Av CA	Reading: Average Standard Score	Reading: Average Percentile	Average (Mean) Reading Age	Reading: months above CA	Spelling: Average Standard Score	Spelling: Average Percentile	Average (Mean) Spelling Age	Spelling: months above CA
Whole Class (N=26)	7:04	124.4 High	88.8 Above Av	9:08	28	118.8 Above Av	83.7 Above Av	9:01	21
Boys (N=15)	7:04	130.6 VeryHigh	94.8 High	10:04	36	123.3 High	89.6 Above Av	9:07	27
Girls (N=11)	7:04	115.9 Above Av	80.5 Above Av	8:07	15	112.6 Above Av	75.5 Above Av	8:05	13
Pupil Premium/FSM (N=3)	7:08	117.9 Above Av	78.3 Above Av	9:08	24	111.0 Above Av	75.0 Above Av	9:03	19
Non-White British Ethnicity (N=8)	7:02	123.6 High	90.6 High	9:09	31	119.5 Above Av	84.1 Above Av	8:10	20
Language Non-English (N=4)	7:04	117.5 Above Av	85.0 Above Av	8:08	16	111.8 Above Av	73.0 Average	8:05	13

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Special Educational Needs (N=11)	7:04	118.8 Above Av	84.5 Above Av	8:11	19	113.5 Above Av	77.7 Above Av	8:06	14
Summer Term of Birth (N=8)	7:00	127.5 High	93.5 High	9:03	27	121.6 High	87.8 Above Av	8:08	20
Catch-Up Group (N=9)	7:04	114.7 Above Av	81.3 Above Av	8:05	13	111.4 Above Av	74.6 Average	8:04	11
Challenging Behaviour Group (N=7)	7:05	128.0 High	92.1 High	10:03	34	120.1 Above Av	84.3 Above Av	9:07	26

Key:

CA: chronological age. Chronological age, average (mean) reading age and spelling age are in years and months

Av: Average

Standard Score of the BAS II Achievement Scales has a mean of 100 and standard deviation of 15

Percentile: 50th percentile is average; a Percentile of 99.8 means that 99.8% of children of that age would score the same or below

Individual Groups taken from official Council Data based on common official DfE classifications:

Pupil Premium and Free School Meals children were the same in this class

Ethnicity: Non-White British; Special Educational Needs: School Action and School Action Plus; Summer Term of Birth;

School groups: Catch-up group; Challenging Behaviour Group

Av: average scores: Standard Scores in 90 - 109 range, Percentiles in the 25-74 range

Above Av: above average scores: Standard Scores in 110 - 119 range, Percentiles in the 75-90 range

High: high scores: Standard Scores in 120 - 129 range, Percentiles in the 91-97 range

VeryHigh: very high scores: Standard Scores in 130 and above range, Percentiles in the 98-99 range.

Vulnerable groups in the Year 2 class in 2013

For the Year 2 class in 2013 the boys, the challenging behaviour group and the non-white British ethnic group were the most impressive, at 'very high', 'high' and 'above average' levels. The boys were the highest achievers with an average reading age of **36** months above chronological age and an average spelling age of **27** months above chronological age. 60% of the boys achieved 'very high' reading levels.

The summer birthday children were also high achievers at **27** months above chronological age for reading and **20** months above chronological age for spelling.

The Pupil Premium children in this class cohort were from low-income families and were all eligible for free school meals. These children performed at 'above average' levels for reading and spelling (**24** months above chronological age for reading and **19** months above chronological age for spelling).

The special educational needs group (**19** months above for reading and **14** months above for spelling) and the girls (**15** months above for reading and **13** months above for spelling) had 'above average' levels for both reading and spelling.

The non-English language group (**16** months above for reading and **13** months above for spelling) was 'above average' for reading and borderline 'average/above average' for spelling.

Relatively, the lowest achieving group in the class was the catch-up group (**13** months above for reading and **11** months above for spelling) which was 'above average' for reading and borderline 'average/above average' for spelling. All the individual children were reading and spelling at least in the 'average' range for their age. They were confident and were using phonemic strategies for reading and spelling.

Individual children in the Year 2 class in 2013

The most successful children in the Year 2 class were in the 'very high' range (see 'Key' on page 9). The child at the highest level in the Year 2 class for reading and spelling was a boy aged 7 years 5 months. He was completely fluent at reading and spelling at 13 years 9 months for reading and 14 years 9 months for spelling. He achieved the highest achievable Standard Score of 145 and the highest achievable Percentile of 99.9, for both reading and spelling. He had also been the highest achieving boy in Year 1. He had made a gain of 2 years 6 months (**30** months) for reading and 3 years 0 months (**36** months) for spelling since the previous year. One other boy, aged 7 years 4 months, achieved the highest achievable Standard Score of 145 and the highest achievable Percentile of 99.9 for reading and a 'very high' score of 141 (Standard Score) and 99.7 (Percentile) for spelling. His reading and spelling ages were both 11 years 9 months and he had made 2 years 6 months (**30** months) gain in both reading and spelling since the previous year. So, the two highest achieving pupils in the class were boys. For reading, they had both made 2 years 6 months (**30** months) improvement in the previous 12 months. For spelling, the pupil at the highest level had made 3 years (**36** months) improvement since the previous year and the other boy had made 2 years 6 months (30 months) improvement.

The child at the lowest level in the Year 2 class for reading was a girl in the 'catch-up' group, aged 7 years 4 months, with reading age 7 years 7 months (Standard Score 103, Percentile 58). Her spelling was also relatively low at an age appropriate 7 years 4 months (Standard Score 101, Percentile 53). Reading and spelling were both in the 'average' range. Another child, a girl, aged 6 years 11 months, had the lowest spelling age of 7 years 1 month but a slightly higher Standard Score and Percentile because of her young age (Standard Score 102, Percentile 55). Her reading was more secure at 7 years 10 months (Standard Score 115, Percentile 84). This girl had a summer birthday and her first language was not English. Her reading was 'above average' and her spelling was 'average' for her age. No child in the Year 2 class achieved lower than an 'average' level for either reading or spelling. Both of these girls had made gains over time but at a more modest rate, ensuring they were at least within the 'average' range for their age.

The child in the Year 2 class with the most significant behaviour difficulties, including non-compliance, was a boy. He remained in the catch-up group and was included in the challenging behaviour group. He continued to grow in confidence with his reading and spelling. He was eligible for the Pupil Premium, had a summer birthday, and was aged 7 years 3 months at the time of assessment. His reading was at the 11 year 3 months level (Standard Score 137, Percentile 99). His spelling was at the 8 year 8 months level (Standard Score 116, Percentile 86). His reading was 'very high' and his spelling was 'above average'. Whatever his social, emotional and behavioural difficulties he was able to function well in the class and had the skills to read and write fluently.

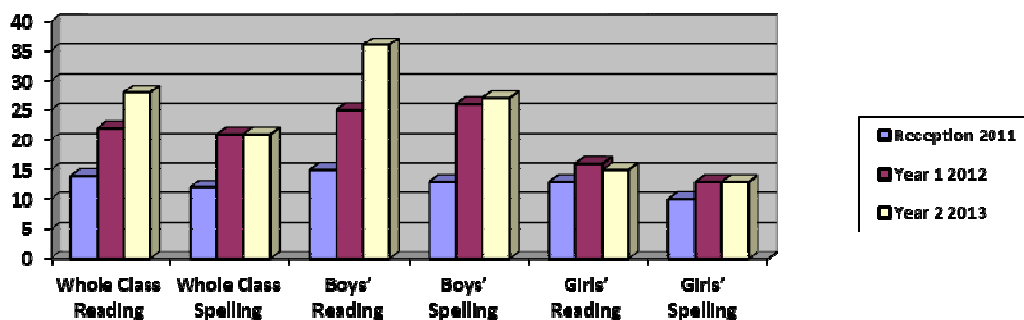
Average (mean) achievements over time

A summary of whole class, boys' and girls' achievements above chronological age over time is given below in Table 4.

Table 4: Average (mean) achievements in reading and spelling above chronological age in Reception, Year 1 and Year 2, for whole class, boys and girls.

Group	Whole class numbers	Whole Class Reading above CA in months	Whole Class Spelling above CA in months	Boys' Reading above CA in months	Boys' Spelling above CA in months	Girls' Reading above CA in months	Girls' Spelling above CA in months
Reception 2011	30	14	12	15	13	13	10
Year 1 2012	26	22	21	25	26	16	13
Year 2 2013	26	28	21	36	27	15	13

Key: Reading and Spelling are reported as months above chronological age on BASII assessment of word reading and spelling



The following observations can be made:

- Reading has improved relatively each successive year from Reception to Year 2 for both the whole class and for boys.
- Boys' spelling has improved relatively each successive year from Reception to Year 2.
- Comparing Reception and Year 2, all measurements have improved relatively: whole class reading and spelling, boys' reading and spelling and girls' reading and spelling.
- The relative gains for boys are greater than those for girls.
- The relative gains for reading are greater than those for spelling.

Distribution/spread of achievements for Year 2 class (age 6-7 years) in 2013

Table 5: Percentage distribution of reading and spelling achievements, for whole class, boys and girls in Year 2 in 2013 , showing ‘very high’, ‘high’, ‘above average’ and ‘average’ results

Group	Pupil Numbers	Reading				Spelling			
		‘very high’	‘high’	‘above average’	‘average’	‘very high’	‘high’	‘above average’	‘average’
whole class	26	42%	15%	27%	15%	15%	27%	35%	23%
boys	15	60%	27%	7%	7%	20%	40%	33%	7%
girls	11	18%	0%	55%	27%	9%	9%	36%	45%

Key for Tables 5 and 6:

Very high:	Standard Score range 130 and above,	Percentile range 98 - 99
High:	Standard Score range 120 -129,	Percentile range 91 - 97
Above average:	Standard Score range 110 -119,	Percentile range 75 - 90
Average:	Standard Score range 90 -109,	Percentile range 25 - 74

Figures may not total 100 per cent because of rounding.

Table 6: Percentage distribution of reading and spelling achievements, for whole class, boys and girls in Year 2 in 2013 showing the sum of all results above the ‘average’, and ‘average’ results

Group	Pupil Numbers	Reading		Spelling	
		sum of all results above the ‘average’	‘average’	sum of all results above the ‘average’	‘average’
whole class	26	84%	15%	77%	23%
boys	15	94%	7%	93%	7%
girls	11	73%	27%	54%	45%

The following observations can be made about the distribution of reading and spelling achievements at the end of the third year at school:

- No achievements were below the ‘average’ range.
- 42% of the whole class read at a ‘very high’ level.
- 84% of the whole class read at ‘above average’ levels and above.
- 77% of the whole class could spell at ‘above average’ levels and above.
- 60% of boys read at a ‘very high’ level and 87% at ‘high’ levels and above.
- 94% of boys read at ‘above average’ levels and above.
- 93% of boys could spell at ‘above average’ levels and above.

- 20% of boys could spell at a 'very high' level.
- 60% of boys could spell at 'high' levels and above.
- This suggests that boys were very secure with both reading and spelling.
- 73% of girls read at 'above average' levels and above.
- 54% of girls could spell at 'above average' levels and above.
- 18% of girls had 'very high' reading.
- 18% of girls could spell at 'high' levels and above.
- Boys' achievements on average were higher than girls' achievements for both reading and spelling, but a good percentage of girls were achieving "above the 'average'" as well.

Several of the children had attention difficulties but they were all able to focus on their reading and spelling and they were confident. All of them were able to use phonemic strategies for reading (sounding out and blending) and for spelling (saying the sounds as they were writing down the letters), but the children had been doing this sub-vocally since Year 1.

The distribution of reading and spelling achievements in the whole class is summarised below in Table 7.

Table 7: The measure of spread/distribution of reading and spelling scores in Year 2 (age 6-7 years) for the whole set of 26 pupils in 2013

Achievements N=26; CA 7:04	Range	Median	Lower Quartile	Upper Quartile	Interquartile Range
Reading Ages	7:07 to 13:09	9:03	8:03	10:11	8:03 to 10:11
Spelling Ages	7:01 to 14:09	8:09	8:03	9:04	8:03 to 9:04

Key:
 Range: measure of spread between lowest and highest values in the data set
 Median: middle value of data set arranged in ascending order of magnitude. Extreme values in the data are not included
 Lower Quartile: is median of lower half of the data set
 Upper Quartile: is median of upper half of the data set
 Interquartile Range: is the spread of the middle 50% of data values. The interquartile range is a more useful measure of spread than the range as it describes the middle 50% of data values and ignores extreme values.

The table above shows that 50% of the Year 2 class had reading ages between 8:03 and 10:11 years and spelling ages spread between 8:03 and 9:03 years at chronological age 7:04 years.

This study demonstrates that potentially all children can learn to read and spell successfully if they are taught through "high quality phonic work" (4, 5, 6, 7). If they have a strong start with their reading and spelling in Reception, they can sustain and build on that success in their second year (Year 1) and third year (Year 2) of schooling. The phonics teaching appears to be more powerful than the usual barriers to learning (see groups listed on page 2). The high-flying children are not held back and can continue to make impressive gains in reading and spelling each successive year. All of the children in this study started school with no prior knowledge of the alphabetic code or ability to read or spell simple words, but this does not need to predict a risk of literacy problems. As part of the government approved synthetic phonics programme used in this study the children were taught phonemic-awareness and letter-sound knowledge from the beginning. Those children identified as slow-to-start were recognised very quickly. They showed that they were responsive to their catch-up intervention in small groups using little-and-often instruction with the same teaching methodology and teaching materials already in use in their classroom.

Phonics Screening Check (10) and Key Stage 1 Teacher Assessment SATs Results, 2013

- 100% of the Year 2 study class had achieved the expected level in the Phonics Screening Check.
- In KS1 SATs:
- 96% of all pupils in the Year 2 study class achieved Level 2+ for reading compared with 87% nationally (19) (See Table 8 below).
 - Only one child in the study class, the girl identified in the study with the lowest reading age, achieved Level 1 for reading. This girl achieved Level 2C for writing.
 - 100% of all pupils in the study class achieved Level 2+ for writing compared with 83% nationally (See Table 8 below).
 - 85% of all pupils in the study class achieved Level 2B+ for reading, which is the level at which children are predicted to achieve the nationally expected level (Level 4) at Key Stage 2 SATs and with which they are expected to transition successfully to secondary education, able to access the curriculum, compared with 77% nationally (See Table 8).
 - 81% of all pupils in the study class achieved Level 2B+ for writing which is the level at which children are predicted to achieve the nationally expected level (Level 4) at Key Stage 2, with which they can transition successfully to secondary education, compared with 65% nationally (See Table 8 below).
 - 100% of boys in the study class achieved Level 2+ for both reading and writing compared with national figures of 84% and 78% respectively (See Table 9 below).
 - 93% of boys in the study class achieved Level 2B+ for reading which predicts Level 4 at secondary transfer compared with 72% nationally (See Table 9 below).
 - 87% of boys in the study class achieved Level 2B+ for writing which predicts Level 4 at secondary transfer compared with 57% nationally (See Table 9 below).
 - 33% of boys in the study class achieved Level 3 for reading and 20% achieved Level 3 for writing compared with national figures of 23% and 10% respectively (See Table 9 below).

Table 8: Percentage children in whole class achieving Level 2+ and 2B+ in Key Stage 1 teacher assessment SATs for reading and writing, compared with national figures (19)

	Level 2+ Reading	Level 2+ Writing	Level 2B+ Reading	Level 2B+ Writing
Study School	96	100	85	81
National	87	83	77	65

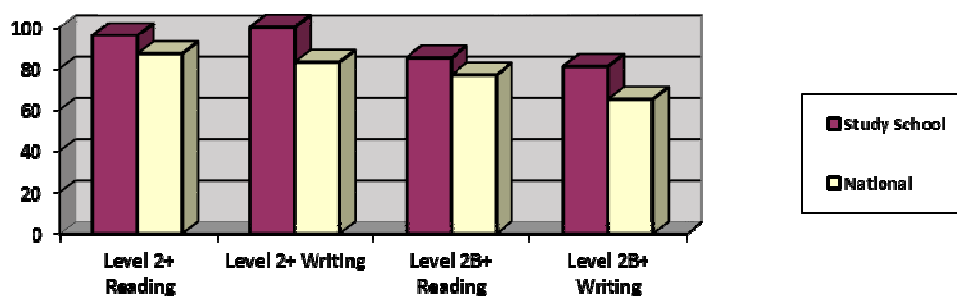
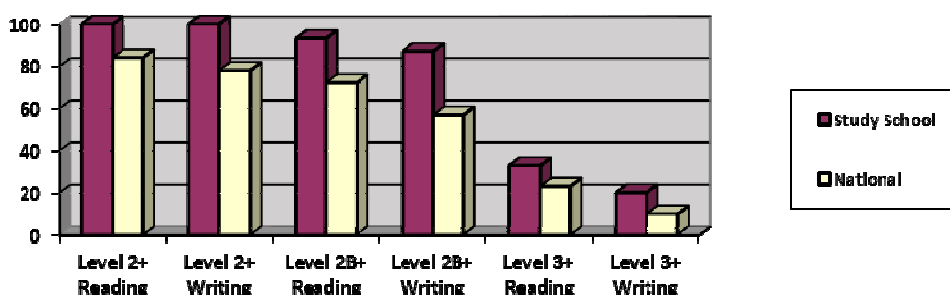


Table 9: Percentage boys in whole class achieving Level 2+, 2B+ and Level 3+ in Key Stage 1 teacher assessment SATs for reading and writing, compared with national figures for boys (19)

	Level 2+ Reading	Level 2+ Writing	Level 2B+ Reading	Level 2B+ Writing	Level 3+ Reading	Level 3+ Writing
Study School	100	100	93	87	33	20
National	84	78	72	57	23	10



The following observations can be made about the KS1 teacher assessment SATs:

- The achievements of children in reading and writing in the study school are above national figures.
- Boys' achievements in reading and writing in the study school are substantially above national figures for boys at Levels 2+, 2B+ and 3+.

Recommendations to the school at the end of the third year of school

In spite of the good results achieved by the Year 2 class, close analysis of their reading and spelling indicated areas which could benefit from continuing skills work. Without constant review and repetition of good practice certain children can become 'lazy' and slip into bad habits. Some schools believe that the work of teaching explicit phonics is completed by the end of Year 1. However, there is much to be gained by continuing to teach and reinforce phonics throughout Key Stages 1 and 2 and by continuing to apply phonemic strategies throughout the whole curriculum during the school day. In this way the school can interleave 'incidental' phonics practice throughout the school day using opportunities that crop up naturally in the course of the broad and balanced curriculum. It was an advantage for the school to have chosen a synthetic phonics programme which extends beyond the advanced code to polysyllabic and more complex words. In the programme used by the school, phonics is extended beyond the advanced code to develop meaning and vocabulary through morphological units and syllable work.

The following recommendations were made to the school:

- Several children showed weak handwriting e.g. poor pencil grip and letter formation and some remaining b/d confusions. It remains important to assign some dedicated time each day for handwriting practice, using a developmental handwriting programme which is linked to their phonics and is multisensory (e.g. 20). Children need to revise good posture for writing, revise good pencil grip, revise the three main ways for letter formation and be sure that they know the start points of all letters, the direction of hand movement and the position of letters relative to the line. Joined digraphs and trigraphs should be reinforced as representing one sound, right from the

beginning in Reception. This should be extended to joining all through the word in Year 1. Joining should be taught as a process of going from the end point/exit stroke of one letter to the start point of the following letter. The language of letter formation should be rehearsed so that, on request, pupils can articulate the start points of letters and explain how to form the letters automatically whilst 'sky writing' the letters. Handwriting practice that develops a fluent joined script will also improve handwriting speed. Fluent automatic handwriting frees cognitive capacity for constructing meaningful sentences. Poor handwriting and uncertainty about how to form letters seemed to be having a negative impact on the spelling and writing of some of the children in this Year 2 class. Poor letter formation can often go un-noticed as the finished written words may look satisfactory. The teacher may only be aware of this when actually observing the children while they are writing. Several boys still had problems with letter formation and did not join their letters possibly because they had forgotten the start points of some letters. They were forming certain letters from the bottom up and using clockwise instead of anticlockwise shapes for others. Their other literacy achievements were outstanding so it was a shame that their handwriting was less secure. This could become a source of frustration and underfunctioning.

- Explicit phonics input should continue every day, throughout KS1 and into KS2. The progression of the programme enables the school to extend to more complex language and vocabulary. All of the Year 2 class were ready as a whole class to learn how to split up longer words and to practise with syllables for both reading and spelling. The class could then break into smaller differentiated groups to apply this new learning and for some revision at lower levels e.g. with digraphs (Step 2), with the advanced code for vowels (perhaps two groups: one at the beginning of Step 3A and the other at the end of Step 3A), with the advanced code for consonants (Step 3B) and with syllables, suffixes, prefixes and root words (Steps 4-7). This could be part of their daily literacy teaching and it would help with grammar, sentence structure, comprehension and vocabulary too.
- A greater awareness of separate syllables and morphological splits would have helped the reading and spelling of many of the Year 2 children and would probably have improved their results.
- Generally, word reading was better in the Year 2 class than spelling. At this age when children are encountering more of the advanced code and are dealing with polysyllabic words, teaching with the phonics programme needs to keep moving forward. More complex phonics should be taught explicitly each day and earlier phonics should be revised incidentally in the course of the school day. With older children, the programme becomes increasingly useful for spelling.
- It is beneficial to revise the advanced code and other phonics in the classroom as words crop up. This incidental phonics learning, revision and application throughout the school day is what will help children remember and become really confident and fluent. Even the most able readers and spellers need ongoing reinforcement of spelling choices, as some errors revealed.
- Simple progression wall charts (one for the basic code presented in the order taught and one for the advanced code presented in the order taught) on the wall of every teaching area in the school would really support incidental phonics learning and revision. Both teachers and children would benefit from these. No programme or wall chart can cover every possible spelling choice, nor would you want them to, as they would be too complicated. Simple progression wall charts which are not too cluttered probably work the best (21). Photocopiable desk mats can also help (22).
- Care should be taken that some children are not learning certain words (so-called 'key words') visually by sight as whole words. Some errors indicated occasional lapses into guessing. High frequency words should be taught through decoding using letter(s)-sound correspondences without the words being taught separately as 'sight words'. The 'tricky' parts of words should be identified and then sounded and blended as usual. A newly developed resource for high frequency words (23) provides specially prepared words, sentences and texts to make it easier

for children to practise sounding and blending so that, "...they begin to be able to read them (the words) without overt sounding and blending, thus starting to experience what it feels like to read some words automatically" (24).

- The pace of learning should be kept up, aiming to cover all the basic code (one spelling for each sound) "*first and fast*" (10) preferably by Christmas of Reception, and trying to introduce the more frequently occurring alternative spellings from Easter of Reception (e.g. the three main ways of spelling /ai/: <ai> as in 'rain', <ay> as in 'play', split digraph <a-e> as in 'gate'; ck as in 'back'; all 5 split digraphs: a-e, e-e, i-e, o-e, u-e; the single vowels a, e, i, o, u as 'long-vowel' sounds: /ai/, /ee/, /ie/, /oa/, /ue/ (if the /a/ sound does not work try /ai/, if the /e/ sound does not word try /ee/ etc.). This would help with words like 'paper', 'he', 'we', 'she', 'me', 'wild', 'child', 'tiger', 'I', 'no', 'so', 'music', 'tuna' as children will be coming across these types of words in their reading books in Reception and they should not be learning such words by sight. The advanced code should be covered in Year 1, revising the basic code all the time too. In Year 2 the advanced code should continue to be revised. Syllable work, prefixing, suffixing and root words should also be tackled so that children can learn to split up longer words to make them easier to read and spell.
- In their catch-up groups the children should be having a mini Snappy Lesson® and not solely revising letter(s)-sound correspondences. They should be applying their phonics by doing some actual reading and writing-down-from-dictation of words and sentences. Some children can become 'lazy' and revert to looking and guessing unless they are reminded to sound all-through-the-word. For spelling they should be able to say the word and then identify the sounds all-through-the-word. The Snappy Lesson® is another opportunity to revise letter formation. Writing down will also reinforce reading. It is worth checking that well-behaved, quiet girls with good handwriting do not get missed out of catch-up groups. Simple standardised word reading and spelling assessments can help to identify children who might otherwise be overlooked for catch-up groups. The lessons should be kept pacy and should be delivered at least twice per week.
- Precision Monitoring and Speed Reads (25) can be used for developing fluency and the speed of reading. The 'speed read' method can be used for any piece of text.
- Phoneme Spotter Stories (26) help children to make good spelling choices: when the focus is just one sound and there are different ways of spelling it. There are activities to do in whole class time. The column sort activities can be done as whole class revision and other activities can be given as individual exercises e.g. comprehension exercises and children love to count examples of the different spelling choices.
- There were so many high fliers in the Year 2 class that they could have benefited from some stretching to the Phoneme Spotter Stories and the Speed Reads. These books contain numerous polysyllabic words to really extend children's ability to deal with longer words, vocabulary and comprehension. This means that they can be used throughout Key Stage 2.
- Decodable texts should continue to be used to reinforce phonics as children move through the progression and for skills practice. Children should also have a rich experience of good literature which can be read with them and to them if they are unable to read the books independently.

Research Studies in Reception from 1997 to 2004 (12, 14)

For eight years, *Sound Discovery*® was used throughout the whole of the largest primary school in the Local Authority. On school entry, children were at the very lowest level for language and at the second lowest level for social skills on national assessment. Nearly 700 children were assessed at the end of their Reception years. In 1997, the Reception children had only one term with synthetic phonics, starting after Easter. In June 1997, the children were 6 months ahead of chronological age for both reading and spelling. Subsequent cohorts started synthetic phonics near the beginning of the school year. The results for whole Reception cohorts, with no child omitted, are summarised below in Table 10. An extra

gain of **5** months in average reading age was made between 1998 and 1999 when the first set of decodable reading books was introduced, other teaching variables remaining the same. Decodable reading books closed the gap between reading and spelling. The decodable reading books continued to be used and in subsequent years both reading and spelling remained very close.

Averaged over the eight years, the Reception children were **14** months ahead of chronological age for reading and **15** months ahead for spelling at the end of the Reception year. Averaged over the six years during which Reception children started synthetic phonics near the beginning of the school year and read decodable books, the children were **16** months ahead for reading and **17** months ahead for spelling. Children in 'catch-up' intervention groups caught up and there was no gender gap, no summer birthday gap, no FSM effect and no EAL effect. Slow-to-start children received 'catch-up' intervention, three times per week for 15 minutes each session with a Nursery Nurse, during Registration, starting after Christmas for two terms until June. Simple word reading and spelling assessments helped to identify children for the intervention groups. Intervention group sizes were between 4 and 8 children out of the whole year cohorts of three classes. The remaining children in the Reception classes were making good progress.

Table 10: Reception results (age 4-5 years) 1997-2004, for whole cohorts using the Burt Individual Word Reading Test and the Schonell Test for spelling

Reception	Pupil Numbers	Reading above chronological age in months	Spelling above chronological age in months
Summer 1997	66	6	6
Summer 1998	90	12	17
Summer 1999	85	17	18
Summer 2000	86	16	18
Summer 2001	84	16	18
Summer 2002	89	15	16
Summer 2003	88	15	15
Summer 2004	86	15	15

Longitudinal Research to Key Stage 1 SATs (age 7 years) and Key Stage 2 SATs (age 11 years) (12, 14)

In this 8 year study, the children who started with the systematic synthetic phonics programme *Sound Discovery*® in Reception and received *Sound Discovery*® catch-up as necessary, were followed up to the end of Key Stage 1 and to the end of their primary education (end of Key Stage 2). The results are summarised below in Tables 11, 12 and 13. No child was disapplied from the tests or results.

2003: For Key Stage 1 SATs, Level 2+ (95%) and Level 2B+ (88%) results for reading and writing were significantly high compared with national standards. 40% Level 3 reading was significantly high and boys and girls were reading equally well. 24% Level 3 boys' writing was significantly high compared with national figures and also in comparison with the Local Authority figure of 8%. These results are summarised in Table 11. Figures in bold with a double asterisk are statistically significant.

Table 11: English SATs results Key Stage 1, 2003 for large primary school (study school)

Key Stage 1						
Reading	Level 2+	95%**			Local Authority	
	Level 2B+	88%**				
	Level 3	40%**	Girls 40%**	Boys 39%**		
Writing	Level 2+	95%**				
	Level 2B+	88%**				
	Level 3	31%**	Girls 35%**	Boys 24%**	Girls 20%	Boys 8%

** Indicates differences which are statistically significant when compared with national figures

2003: For Key Stage 2 SATs, 89.4% Level 4+ English was significantly high, with little gender gap. A third of the boys achieved Level 5 writing which was significantly high compared with national figures and also in comparison with 9.5% boys' writing for the Local Authority. These results are summarised in Table 12.

Table 12: English SATs results Key Stage 2, 2003 for large primary school (study school)

Key Stage 2						
English	Level 4+	89.4%**	Girls 90.9%**	Boys 87.9%**	Local Authority 79%	
	Level 5 Writing	27.3%	Girls 21.2%	Boys 33.3%**	Girls 19.4%	Boys 9.5%

** Indicates differences which are statistically significant when compared with national figures

2004: For Key Stage 2 SATs, Level 4+ (94%) and Level 5 (65%) results for English were statistically above national averages. It was perhaps even more exciting that there was no score below Level 3B in the three class cohort and no severe difficulties with literacy, which was also significant statistically. All* the children were able to transfer to their secondary schools equipped to access the curriculum. These results are summarised in Table 13. There was no dyslexia, as defined by the British Psychological Society (27), whose working definition focuses on severe and persistent difficulties with literacy learning at the 'word level' and states that, "*dyslexia is evident when accurate and fluent word reading and/or spelling develops very incompletely or with great difficulty. This focuses on literacy learning at the 'word level' and implies that the problem is severe and persistent despite appropriate learning opportunities*".

* Footnote One pupil from the cohort achieved Level 3B. He was the lowest achieving pupil. He had complex and severe learning difficulties (BAS II Verbal Ability 0.2 Percentile, Non-Verbal Reasoning less than 0.1 Percentile). He was followed up when he transferred to his local mainstream secondary school (14). In Year 7 he was "holding his own in mainstream classes". He had made good gains in reading and spelling since his Year 5 Annual Review and could read and understand complex words in the curriculum. He was increasingly able to access the curriculum independently and was de-stated at the Annual Review of his Statement of Special Educational Needs in Year 9, which was the Transition Review (28).

Table 13: English SATs results Key Stage 2, 2004 for large primary school (study school)

	Level 4+	Level 5	Level 3	Below Level 3B	Level 2 and below
Study School	94%**	65%**	6%	0%**	0%
Local Authority	82%	29%			
Similar Schools	80%	28%			
England	77%	26%	15%		7%

** Indicates differences which are statistically significant when compared with national figures

Dyslexia

These studies demonstrate that dyslexia does not develop when children begin with a good synthetic phonics programme and when slow-to-start children are given extra practice and teaching with synthetic phonics in order to keep up. Not a single child in the studies developed severe literacy difficulties.

Using the definition of dyslexia from the BPS (27) it can be said that “*accurate and fluent word reading and spelling*” developed for all the children in the study schools, even those who struggled initially. It is proposed that this sort of synthetic phonics teaching provided “*appropriate learning opportunities*” for all.

Looking at the “*best available evidence*” to teach children diagnosed with dyslexia to read, the House of Commons Science and Technology Committee (29) supported the use of “*a structured phonics-based programme*” “*for all poor readers, whether they have been diagnosed with dyslexia or not*”.

There is another definition of dyslexia which is used in the Rose report on dyslexia (30) and which is adopted by national charities such as Dyslexia Action (31), “*Dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling. Characteristics of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed*”. It is proposed that the sort of phonics teaching the children received in the study schools developed their phonological awareness and supported any memory and processing difficulties, so that in spite of these learning difficulties all the children still managed to develop accurate and fluent word reading and spelling. Similar symptoms are often used to describe other conditions such as attention deficit hyperactivity disorder and dyspraxia (32). Appropriate strategies should be used to support children with these and additional learning difficulties for other aspects of the curriculum. However the children will be hugely advantaged by having developed good literacy skills. It cannot be stressed sufficiently that in these studies all the children including those with ‘dyslexic’ learning profiles and symptoms still managed to learn to read, spell and write to a good standard.

These findings challenge the occasional press headline such as “*Dyslexic pupils not helped by reading method – Report reveals teachers doubt effectiveness of synthetic phonics as a literacy strategy for all*” (33) and “*Phonics fails dyslexics, says head*” (34). It may be that it is the **way** that phonics is taught in the majority of our schools that “*fails dyslexics*”. Instead the headlines should be promoting phonics as a fail-safe way of teaching all children to read and to write accurately and fluently. This will be successful if the phonics is taught as described in these studies and as summarised below and when DfE recommended phonics practices (1, 10) are being followed.

How to teach phonics effectively

- Use a government approved systematic synthetic phonics programme (6).
- Teach synthetic phonics right from the beginning of Reception for the whole class.
- Identify slow-to-start children as soon as possible, at least by the Christmas of Reception.
- Provide extra teaching and practice for slow-to-start children in small catch-up groups straight away using the same resources and teaching. Continue this as required throughout KS1 and KS2.
- Teach in a multi-sensory and fast-paced way.
- Deliver structured lessons which teach reading by decoding and blending (all-through-the-word), spelling by segmenting and encoding (all-through-the-word) and writing down of sounds, words and sentences from dictation. Once written down, they should be read back again.
- Apply phonics to word and sentence levels right from the very first lessons, thus engaging with meaning straight away.
- Apply phonics to both reading and writing so children learn the reversibility of the alphabetic code.
- Teach letter formation, joining and handwriting explicitly to the whole class and in small groups as necessary, using a developmental handwriting programme which supports their phonics. Even very able children continue to need this practice. Also reinforce handwriting through the structured phonics lessons. Continue with some additional explicit handwriting practice daily at least throughout KS1 and possibly into KS2 as some children can forget how to form letters and lapse into bad habits which impact negatively on their writing.
- Teach high frequency words through grapheme-phoneme correspondences, not as 'sight words'.
- Thread phonics throughout the school day for incidental phonics learning. Provide simple progression wall charts for reinforcement and development of the alphabetic code. These will assist both teachers and children. Simple progression desk mats can also help.
- Develop fluency through precision monitoring.
- Develop the speed of reading through speed reads.
- Achieve reading fluency early, so children enjoy reading.
- Provide reading and writing experiences which develop vocabulary, oral language and comprehension.
- Provide a synthetic phonics programme which goes beyond the basic and advanced alphabetic codes to polysyllabic and complex words. Teach morphological units, syllables and Latin prefixes to develop vocabulary and comprehension as well as literacy.
- Set phonics teaching in a curriculum rich in good literature, so children can experience and enjoy quality books which are read to them and with them and which they can enact.

Features of the synthetic phonics programme used in these studies which promote reading comprehension and develop oral language

- Every word in the programme is a real English word which can increase vocabulary if not already in oral language.
- Every phonics lesson (from the fourth Snappy Lesson® in Step 1) works at phrase or sentence level as well as at word level, thus triggering a meaningful response and developing syntax. This happens from the very beginning from the first week of teaching phonics in Reception.
- Decodable texts and comprehension exercises are written for every Step of the programme.
- An expressed aim of lessons at Steps 4 to 7 of the programme is to “*develop oral language, vocabulary and word meanings*” (35). These lessons make a structural analysis of words into syllables and morphological units which convey meaning. About 50% of English words come from Latin, 10-12% come from Anglo-Saxon and about 5% directly from Greek. Latin words are

likely to have a prefix, a stem/root and a suffix/ending. A prefix is likely to be a Latin preposition and it is helpful to learn the meanings of prefixes. The root word furnishes the basic meaning of the word and it is helpful to know about the meaning of these and other root words. The suffix indicates the part of speech or function the word has in the sentence. The suffix also has a meaning which a dictionary will supply (35, 36).

- An overarching aim of the programme is to read for meaning.
- The programme is set in the context of the 'Simple View of Reading' (5) which states that reading comprehension is the product of accurate and fluent word decoding and language comprehension. Schools are advised to provide children with a wide range of high quality literature which can be shared with them to develop oral language and a love of books even before children are equipped to read these books independently. If a pupil has additional oral language difficulties either with expressive or with receptive language, the school is advised also to incorporate the recommendations of speech and language therapists.

Conclusions

These studies with Reception, Year 1 and Year 2 children demonstrate that teaching with a government approved systematic synthetic phonics programme can be an excellent opportunity to drive up literacy standards. There is no evidence to indicate that such phonics teaching is a "straightjacket" or that it will "switch off" children from a love of reading books. Nor is there any evidence that such teaching damages children's development.

On the contrary, children taught in this way pick up reading quickly. They become enthusiastic and confident in their reading and are more able and willing to engage in the world of reading around them. Teaching in this way also appears to be more powerful than potential barriers to learning experienced by vulnerable groups such as boys, children eligible for Pupil Premium and for free school meals, children whose ethnicity is non-white British, children whose first language is not English, children with special educational needs, children with summer birthdays and children with challenging behaviour. Children who are slow-to-start, for a variety of possible reasons, can be identified early and are responsive to catch-up intervention in small groups, also using synthetic phonics teaching. These early strugglers were shown to close the gap and to keep up with both reading and spelling.

Longitudinal studies showed that the children did not lose their early advantage. This study (2010-2013) reported on a whole class of children after their first, second and third years at school. In Reception the children made a strong start with reading and spelling (**14** months ahead for reading and **12** months ahead for spelling). They built on this in Year 1 (**22** months ahead for reading and **21** months ahead for spelling) and in Year 2 (**28** months ahead for reading and **21** months ahead for spelling). They achieved above average national expectations for reading and writing at the end of Key Stage 1 in standardised assessment tests (KS1 SATs). The other Grant study (1997-2004) reported that children who started with synthetic phonics in Reception went on to achieve above national expectations for reading and writing throughout their primary schooling to the end of Key Stage 2, in their KS1 and KS2 SATs, equipping them for a more successful secondary transfer. Boys' writing was found to be particularly successful.

The aims of these studies have been realised. They have demonstrated how all children can make a very good start with reading, writing and spelling at infant level (aged four to seven years) and can leave primary school (aged eleven years) well equipped for the literacy demands of their secondary education. They have demonstrated how children from low-income and other disadvantaged families and struggling learners can overcome their difficulties and how literacy teaching and targeted interventions can be effective and have a long-lasting impact, without being expensive.

Crucially, these studies have demonstrated how an **early grounding** in synthetic phonics can make it possible for all children to leave primary school better able to access the secondary-school curriculum. By the age of seven years, children can be reading accurately and fluently. They can have made a good start with writing and handwriting. They can understand the logic of spelling in a way that underpins the learning of harder words which needs to continue throughout primary and secondary school.

Phonics teaching is not an end in itself. Phonics is the key which unlocks the literacy engine so that children are more able to access a wide range of texts thus contributing to their educational achievement.

Some critics of synthetic phonics point to the complexity of written English saying that children have to go further than being able to sound out words phonemically. But good synthetic phonics programmes, such as those approved by the government, take the complexity of the English written code seriously. They systematically, cumulatively and explicitly teach both the advanced as well as the basic alphabetic codes and they teach morphological units which develop vocabulary and oral language as well as literacy.

Likewise some critics of synthetic phonics point out that phonic recognition, although important, is only a part of learning to read English. However again good synthetic phonics programmes include strands which develop vocabulary and reading comprehension and they will provide structured decodable texts and structured writing practice.

Other critics point to the importance in the early years of outdoor and indoor play which is active, stimulating and exploratory. Children need to enjoy running, skipping, climbing, singing, dancing and messy play with sand, mud and sticks. They need opportunities to play socially with other children. Some critics have said that it is more important to read stories to children and enjoy stories with them than to teach them to read. The author agrees wholeheartedly that all these activities are important for young children's development but she believes that they can be taught phonics as well, in a simple and enjoyable way. In the studies reported here, all these activities were recognised as being vitally important and could be incorporated into the children's lives and daily curriculum but alongside that, they were given a flying start with their literacy.

Children's expressive language and understanding of language are crucially important. Schools will be developing speaking and listening skills in the classroom and putting interventions in place, following the advice of speech and language therapists as necessary. Children with delayed or disordered speech articulation are often helped when they start phonics and begin working with sounds which can be represented by visual symbols.

Everything should be done at preschool level to develop children's oral language following the recommendations of Hart and Risley (15, 16, 17, 18). Parents, families, health visitors, child minders, early years staff and others are likely to be involved. However, even if children start from a low baseline on school entry, these studies have demonstrated that schools in England can still give children the very best start to their learning. This is a positive message which means that UK schools, starting with four and five year olds, have the potential to contribute to social mobility and to alleviate the 'cycle of poverty'.

Some critics believe that formal teaching of literacy should be postponed until children are older. In the studies reported here all the children benefited from synthetic phonics in their early years of school, including children in potentially vulnerable groups and those with learning difficulties.

Another government initiative, the Year 1 phonics screening check (37), should assist in the process of raising standards. It will focus schools' efforts on teaching children to read early in their schooling when they are most receptive. The phonics screening check will assist in identifying children who are struggling, so that they can receive extra help to keep up or to catch up at an early stage.

Early phonics teaching should be set in a rich and balanced curriculum which develops oral language and provides high quality literature. Children have the greatest chance of becoming literate if they develop both accurate and fluent word decoding as early as possible in parallel with developing their language comprehension. This so-called 'Simple View of Reading' (5) will simply provide all children with the greatest chance to realise Nick Gibb's vision, "*Through phonics we are ensuring all children learn the mechanics of reading early in their school career. Helping children to develop a love of reading and a habit of reading for pleasure every day is key to ensuring we have well educated and literate young people by the time they leave school*" (38).

These studies challenge the national findings of the Boys' Reading Commission (38) that the reading gap between boys and girls is increasing. On the contrary, these studies found that boys' achievements were high and often significantly higher than those of girls and of other boys nationally.

The National Literacy Trust believes that lives can be "*transformed through literacy*" (39). The International Literacy Centre believes that "*being literate is an essential, a right and a joy*" and that "*all children should receive the support they need to become effective, efficient and enthusiastic readers and writers*" (40). The United Kingdom Literacy Association "*is committed to promoting good practice nationally and internationally in literacy and language teaching*" (41). These are laudable aims. However, these organisations do not promote teaching with systematic synthetic phonics as described in these studies. This report provides evidence of how such aims, aspirations and objectives can be realised for all children through government approved systematic synthetic phonics teaching which is simple and effective.

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References

1. DfE (2011), *The Importance of Phonics: Securing Confident Reading*, policy and evidence paper, File Name: DFE-00155-2011B.pdf
2. PIRLS (2011) *Progress in International Reading Literacy Study*. www.nfer.ac.uk/pirls
3. PISA (2009) Technical Report, 2012, OECD. <http://www.oecd.org/pisa/pisaproducts/50036771.pdf>
4. House of Commons Education and Skills Committee (2005), *Teaching Children to Read*. www.publications.parliament.uk/pa/cm200405/cmselect/cmeduski/121/121.pdf
5. Rose, J. (2006), Department for Education and Skills, *Independent review of the teaching of early reading*. 'Simple View of Reading' replaced 'Searchlights model' from National Literacy Strategy, p77. <http://media.education.gov.uk/assets/files/pdf/i/independent%20review.pdf>
6. Department for Education (2014), *Information to help schools choose a phonics teaching programme*. <https://www.gov.uk/choose-a-phonics-programme> (Previously *Publishers and their Products*).
7. Eastern Shires Purchasing Organisation (2012), *The Importance of Phonics Catalogue – Issue 2*, pp 64-68 and 178 for Sound Discovery®. <http://www.espo.org/phonics>

8. DfE (Updated 2014), *Raising the achievement of disadvantaged children*.
<https://www.gov.uk/government/policies/raising-the-achievement-of-disadvantaged-children/supporting-pages/pupil-premium>
9. Tunmer, W. E. et al. (2013), *Why the New Zealand National Literacy Strategy Has Failed and What Can Be Done About It: Evidence from the Progress in International Reading Literacy Study (PIRLS) 2011 and Reading Recovery Monitoring Reports*.
<http://www.massey.ac.nz/massey/fms/Massey%20News/2013/8/docs/Report-National-Literacy-Strategy-2013.pdf>
10. NFER/DfE (2013, 2014), *Evaluation of phonics screening check: first interim report* (pp 8 and 56); *Phonics screening check evaluation* (p70). www.gov.uk/government/publications keywords: phonics.
11. Grant, M. (2011), *Matched Funding for Teaching Phonics – Opportunity or straightjacket?*
<http://rrf.org.uk/pdf/Matched%20Funding%20Article-august%2011a%20MG.pdf>
12. Grant, M. (2012), *Follow-up Study from Reception to Year 1 (2010-2012) and Summary Report of an earlier Longitudinal Study (1997-2004). The Effects of a Systematic, Synthetic Phonics Programme on Reading and Spelling*. <http://www.rrf.org.uk/pdf/Grant%20Follow-Up%20Study%202010-2012.pdf>
13. Key Stages (KS) and Standardised Assessment Tests (SATs) (2014):
<https://www.gov.uk/national-curriculum>
<http://www.sats-papers.co.uk/>
<http://www.sats-papers.co.uk/sats-papers-ks1.php>
14. Research papers, Grant, M. (2004, 2005, 2008):
<http://www.syntheticphonics.net/pdf/Raising-literacy-attainment.pdf>
<http://www.syntheticphonics.net/pdf/Accelerated-reading-and-writing.pdf>
<http://www.syntheticphonics.net/pdf/All-children-paper.pdf>
15. Risley, T.R. (2013), *The everyday experience of American babies: Discoveries and implications*, Learning Difficulties Australia Bulletin, Volume 45, No. 2, September 2013.
16. Hart, B. and Risley, T.R. (1992), *American parenting of language-learning children: Persisting differences in family-child interactions observed in natural home environments*. Developmental Psychology, 28, 1096-1105.
17. Hart, B. and Risley, T.R. (1995), *Meaningful differences in the everyday experience of young American children*. Baltimore: Paul H. Brookes Publishing Co.
18. Hart, B. and Risley, T.R. (1999), *The social world of children learning to talk*. Baltimore: Paul H. Brookes Publishing Co.
19. KS1 National Tables of Teacher Assessments, SFR 21/2012. Tables 9, 10 and 11.
<https://www.gov.uk/government/publications/phonics-screening-check-and-national-curriculum-assessments-at-key-stage-1-in-england-2012>
20. *Developmental Handwriting Series* (DHS0) (2007, 2014). www.syntheticphonics.net
21. *Rapid Phonics Progression Wall Charts* (2012). Two A1 posters required - one side shows basic code and other side shows advanced code. ISBN: 9780435126759. customer.orders@pearson.com

22. *Rapid Phonics Programme Handbook* (2012), desk mats on pp28-29. customer.orders@pearson.com
23. *High Frequency Words Version 2* (2014). www.syntheticphonics.net
24. *Letters and Sounds: Principles and Practice of High Quality Phonics, Notes of Guidance for Practitioners and Teachers* (©Crown Copyright 2007), p16 Primary National Strategy.
25. *Precision Monitoring and Speed Read Books* (2009). www.syntheticphonics.net
26. *Phoneme Spotter Stories* (2008, 2009). www.syntheticphonics.net
27. The British Psychological Society (1999, updated and reprinted in 2005), *Dyslexia, Literacy and Psychological Assessment. Report by a Working Party of the Division of Educational and Child Psychology of the British Psychological Society*. BPSShop@bps.org.uk
28. Advisory Centre for Education (2010), *Understanding Annual Reviews*. Statements of Special Educational Needs and Reviews. <http://www.glospps.org.uk/Docs/Uploads%20Oct%2012%20-%20ACE%20leaflets/ACE%20-%20Understanding%20Annual%20Reviews%202010.pdf>
29. House of Commons Science and Technology Committee, *Evidence Check 1: Early Literacy Interventions* (2009-10), Second Report, para 86, p31. See also para 85 re Reading Recovery. <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmsctech/44/44.pdf>
30. Rose, J. (2009), *Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties*. DCFS Publications.
31. *Dyslexia Still Matters* (2012), Dyslexia Action. info@dylexiaaction.org.uk .
32. Elliot, J. G. (2008), *The Dyslexia Myth*, Learning Difficulties Australia, Vol 40, No 1, pp10-14. joe.elliott@durham.ac.uk
33. *Dyslexic pupils not helped by reading method* (2014), Independent Newspaper, 30th March 2014. <http://www.independent.co.uk/news/education/education-news/dyslexic-pupils-not-helped-by-reading-method-9223729.html>
34. *Phonics fails dyslexics, says head* (2008), TES Newspaper, 26 Sept 2008. <http://www.tes.co.uk/article.aspx?storycode=6002967>
35. *Snappy Lesson® Plans at Steps 4 to 7* (2009). www.syntheticphonics.net
36. *Sound Discovery® Words and Sentences, Part 2, Steps 4 to 7*, (2001) pp8-35 www.syntheticphonics.net
37. Department for Education (2011), *Year 1 Phonics Screening Check*. <https://www.gov.uk/government/policies/reforming-qualifications-and-the-curriculum-to-better-prepare-pupils-for-life-after-school/supporting-pages/statutory-phonics-screening-check>
38. The Boys' Reading Commission (July 2012). www.literacytrust.org.uk/boys
39. National Literacy Trust. www.literacytrust.org.uk
40. International Literacy Centre (2014). www.ioe.ac.uk/95588.html
41. United Kingdom Literacy Association. www.ukla.org About UKLA.