

# The End of Illiteracy?

# The Holy Grail of Clackmannanshire

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# SUMMARY

- The Government's recognition of the gravity of the problem of illiteracy in Britain is welcome. So too is its *apparent* conversion to the efficacy of phonics as a teaching method. However, its attempt to solve the problem, the National Literacy Strategy, is seriously flawed, both in principle and in practice.
- Shortly after the National Literacy Strategy was announced, some remarkable results emerged from a different series of trials, held in Clackmannanshire with the support of the Scottish Office. These trials suggest that the standards of literacy in British schools can improve dramatically.
- One particular method of teaching children to read, sometimes referred to as *synthetic phonics*, now appears to enable children from every background and of every level of ability to read properly by the age of seven years old.
- The Government is now faced with a dilemma: the National Literacy Strategy mandates an approach which was found to have been unsuccessful in the Scottish trials. Initial attempts by the DfEE to dismiss the Clackmannanshire findings have failed; officials are now trying to claim – wrongly – that their policies are in tune with them.
- The most successful methodologies for teaching children to read must be given a fair chance to compete. Transparent and objective tests will then enable parents, teachers, educationalists and Ministers to evaluate the effectiveness of the various teaching methods.

- Pencil-and-paper reading and spelling tests should be introduced for children at the age of seven. These tests must be objective and externally administered.
- A fair testing system would create a self-regulating system; a genuine internal market in teaching methods. It would eventually gain the support of teachers and would give the strongest incentive to apply and improve the very best teaching methods available.

# INTRODUCTION

IN REAL TERMS, EDUCATION SPENDING in Britain has increased almost four-fold since the war, but most authorities agree that reading standards have hardly changed. According to official Standard Assessment Tests (SATs) results, 35% of 11 year-olds have poor literacy skills – and the University of Manchester reported that English SATs were "inaccurate, misleading, and exaggerated reading ability".<sup>1</sup>

The educationalists who have informed the development of education policy over the last few decades seldom admit responsibility for this massive illiteracy. Until the advent of primary league tables, they were inclined to deny that there was a problem at all. Even when the problem was admitted, it was discussed only in sociological terms – there was an unwillingness to admit that schools could be a part of the problem, and a readiness to blame parents, poverty, or videos.

Against this background, the last Government initiated the National Literacy Project, conceived as a top-down drive against illiteracy. Under the new Government, the project emerged as the National Literacy Strategy (NLS), which mandated that each primary school reserve one hour a day for the 'Literacy Hour'.

<sup>&</sup>lt;sup>1</sup> Gauging the true extent of the problem is difficult, because of the lack of an agreed criterion for normal reading ability, and the continually changing means of assessment. The only time the same test was used consistently for 20 years, children's scores dropped by a full year. See also Appendix A for an analysis of the problems inherent in the SATs.

When the NLS was launched in March 1998, headlines in the *Daily Telegraph* heralded it as a "return to phonics".

Closer examination reveals the NLS to be rather less radical than the claims made for it. While it is true that a certain amount of phonics is specified, it is too little, too late and mostly of the wrong kind.

Against this background, the Scottish Office announced the startling results of trials conducted in eight Clackmannanshire primary schools by the University of St. Andrew's. On 6 November 1998, *The Times Educational Supplement* reported that:

A radical way of teaching children to read has easily outperformed the Government's preferred literacy strategy. [It] has produced remarkable results in even the most deprived schools... it ought to spark a serious rethink of the Government's National Literacy Strategy in England.

An editorial in *The Scotsman* likened the programme to discovering the "holy grail in education". At first, the reaction of the Department for Education and Employment (DfEE) was to discount the trials as "unfair". However, as word of a similar study by the Institute of Education leaked out, it became obvious that these results could not be dismissed. On 3 February 1999, the BBC Nine O'Clock News featured the Clackmannanshire results, and the following day the *Daily Telegraph* gave it front page coverage. By 19 February, the DfEE had changed its tune: a spokesman claimed that the NLS was in tune with the lessons of Clackmannanshire, and that it did embrace "the synthetic phonics with which the NLS is more clearly associated".<sup>2</sup> On 5 March, the Director of the NLS denounced the debate as "irrelevant", claiming that all forms of phonics were included in the NLS.<sup>3</sup>

Well, up to a point, Lord Copper. It is striking how the DfEE has managed to take research which casts serious doubt on its

<sup>&</sup>lt;sup>2</sup> The Times Educational Supplement, 19 February 1999, p. 4.

<sup>&</sup>lt;sup>3</sup> John Stannard in a letter to *The Times Educational Supplement*, 5 March 1999, p. 8.

policies, and within the space of three months, claim that the findings vindicate them. By reducing the debate to a dichotomy between 'analytic phonics' and 'synthetic phonics' (which few people understand in any case), they are trying to draw attention away from the fact that the structure of the NLS is essentially a whole-language programme with some phonics added.

However, it should be accepted that the mere existence of the National Literacy Strategy is welcome evidence of the determination of this Government (and the last) to tackle the illiteracy problem with something more substantial than rhetoric. But the NLS has been found sadly wanting. Phonics programmes vary in both theory and detail, and very few of them are as effective as the one used in Clackmannanshire; the differences cannot be explained in a few simple sound bites. To claim that "of course we teach phonics" tells us as much as saying "we live in a house". A house can be designed by Inigo Jones, Lutyens, or Tarmac.

David Blunkett MP, the Secretary of State for Education and Employment, has promised to resign in 2002 unless at least 80% of 11 year-olds meet the expected standard of literacy on official tests (11+ English SATs). Even if this modest literacy rate is to be fulfilled – and should a 20% failure rate be considered an achievement? – current policies will need an immediate and drastic reassessment.

# A BRIEF HISTORY OF THE 'READING WARS'

TO UNDERSTAND THE PROBLEMS with the National Literacy Strategy, it is necessary to enter the arcane world of teaching theory, and in particular to establish how the various ways of teaching children to read have developed over the last century.

Since the letters of English alphabet all represent speech sounds, the most obvious way of teaching a child to read is to teach him how the code works. This method is commonly known as *phonics*. This is not easy, as the English spelling code is more complicated than most. Indeed, many phonics programmes do not work very well: children cannot learn to read by being taught a lot of rules, or by filling in phonics worksheets. Unless children are explicitly taught how to *blend* sounds into words, the results are likely to be disappointing. For the teacher, phonics has an additional disadvantage: it can be boring – particularly if the teacher regards it as a chore instead of a challenge. Year after year, the teacher has to repeat the same lessons over and over – and over again.

Early studies of readers' eye movements suggested a new method of teaching reading. As it was believed that adult readers recognise words as wholes,<sup>4</sup> many educators argued that children

<sup>&</sup>lt;sup>4</sup> The earliest eye-movement studies were conducted by Javal in the 19th century, and Huey used them to support whole-word teaching in his seminal work, *The Psychology and Pedagogy of Reading*, (1908). More sophisticated analysis has revealed that skilled readers process nearly every letter in a text. For a review of this research, see M.J. Adams, *Beginning to Read: Thinking and Learning about Print*, MIT Press (1990), pp. 100-102.

### A BRIEF HISTORY OF THE READING WARS

should be taught to recognise *whole words*. This became the dominant method between the wars – but one should not assume, as many researchers do, that at this time phonics was abandoned altogether. Then, as well as now, most teachers used an *eclectic* approach, or a mixture of methods. The original whole-word approach was usually known as *look-and-say*, and instruction was built around reading schemes where key words were repeated endlessly in the stilted language of Janet and John (Dick and Jane are similarly notorious for Americans of a certain age). With look-and-say, children are unable to identify words that they have not seen before unless they have picked up some phonics either by accident or design. The alternative is too grim to contemplate – a lifetime with Janet and John.

In 1955, the American Rudolf Flesch published *Why Johnny Can't Read*, a powerful critique of look-and-say. It spent 30 weeks on the best-seller list and led to enormous popular pressure for a return to phonics.<sup>5</sup> Twelve years later Jean Chall, a respected American academic, came out with *Learning to Read: The Great Debate*, a monumental review of studies which also came down firmly on the side of phonics.<sup>6</sup>

This might have been the end of it, but countervailing forces were at work. In the English-speaking world, didacticism was giving way to 'child-centred' concepts which stressed the pupil's role as an active learner and not as a passive recipient of knowledge. Most phonics programmes are unquestionably didactic, so the search continued for an alternative to phonics.

During the 1960s, Kenneth Goodman was busy formulating an entirely new theory of reading. Goodman dismissed mere wordidentification as an optional by-product of the reader's search for meaning. In his influential essay, "Reading: A Psycholinguistic Guessing Game", he asserted that a reader's eyes move randomly

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<sup>&</sup>lt;sup>5</sup> M.J. Adams, ibid., p. 24.

J.S. Chall, Learning to Read: The Great Debate, McGraw-Hill (1967; updated 1983).

over the page, sampling text in a cycle of prediction and confirmation of meaning.  $^{7}$ 

During the 1970s, Goodman's ideas attracted a lot of attention on both sides of the Atlantic, and he may fairly be considered the father of the *whole language* movement. The dominant concept of whole language is that learning to read is just as natural as learning to speak, and that 'children learn to read by reading'. For poor readers, this is a notorious Catch-22: if you cannot read, then you cannot learn to read. Nonetheless, teacher training colleges took up the crusade with alarming zeal, and a generation of teachers was led to believe that there was not much more to teaching reading than presenting it as an 'exciting' activity. During the 1980s, when the *real books* craze (a whole-language spin-off) reached its zenith in Britain, reading scores plummeted alarmingly.

In 1990, two books stopped the real books movement dead in the water. In Britain, an unknown educational psychologist from Croydon, Martin Turner, published confidential reading test results from eight LEAs which proved just how bad the situation was – average attainment of seven year-olds dropped by seven months between 1985 and 1990. As most reading tests do not even show a reading age until around five-and-a-half or six years, it is clear that a decline of this magnitude is more than just unusual.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup> K.S. Goodman "Reading: A Psycholinguistic Guessing Game" in Singer & Ruddell (eds) *Theoretical Models and Processes of Reading*, International Reading Association, (1970) pp. 497-508.

M. Turner, Sponsored Reading Failure, Education Unit, Warlingham Park School (1990). In Reading Trends 1985-1986, Greg Brooks discounts the effect of the real books craze, and argues that this drop was largely due to the retirement of large numbers of experienced teachers. His very own evidence, however, suggests very strongly that nearly all of the new teachers who replaced them were heavily influenced by whole-language texts whilst in training. See G. Brooks, et al What Teachers in Training are Taught about Reading, NFER (1992) and M. Turner & T. Burkard, Reading Fever: Why phonics must come first, CPS (1996). Among the more ingenious attacks on Turner's evidence is found in Stierer and Maybin's Language, Literacy and Learning in Educational Practice, The Open University (1994), p. 138: "This kind of backlash cannot be prevented

### A BRIEF HISTORY OF THE READING WARS

In *Sponsored Reading Failure*, Turner laid the blame squarely at the feet of whole-language enthusiasts, and aptly described LEAs as "adventure playgrounds for ambitious educational professionals".

At the same time, the American researcher Marilyn Jager Adams published *Beginning to Read: Thinking and Learning about Print,* an exhaustive study of scientific research on reading.<sup>9</sup> She concluded that there was no evidence to support Goodman's model of reading: all good readers can decode letters so effortlessly and automatically that it *appears* as though they are reading whole words. The fact that they can also read non-words, unfamiliar names, and neologisms without difficulty proves that they are in fact processing letters. Goodman's model of reading is only valid insofar as it describes the behaviour of poor readers who cannot decode very well.

Almost overnight, the politics of reading changed. Wholelanguage texts started gathering dust in university libraries.<sup>10</sup> Phonics was back in fashion. The issue now was finding the best way to teach it.

Academically speaking, there is little doubt that the proponents of phonics have won the reading war. As the School Standards Minister pointed out in a *Daily Telegraph* interview on 23 February, 1999:

...it is remarkable that we have moved the debate away from "phonics or real books" on to a debate about how to use phonics within the space of 18 months. It is now generally accepted that children cannot be expected to learn to read without being taught to do so.

### Hostility to phonics

head on. It can only be challenged indirectly through new kinds of research and evaluation which aim to produce new kinds of evidence."

<sup>&</sup>lt;sup>9</sup> M.J. Adams, op. cit.

<sup>&</sup>lt;sup>10</sup> This is at least true at the University of East Anglia library. Books by the most prominent whole-language advocates, which were previously being checked out as often as six or seven times per year, have laid virtually dormant since 1992-93.

Even though the worst excesses of the real books craze have been quietly laid aside, the general principles of whole language teaching have been instilled in the current generation of primary teachers. There is little emotional support for phonics among either teachers or educationalists.

It is no surprise therefore that the minimal phonics content of the National Literacy Strategy has already provoked a backlash from the whole-language lobby. In *Literacy is not enough* (ed. Brian Cox), Bethan Marshall denounces "the bleak spectre of utilitarianism (which) hangs over our schools like a pall". Henrietta Dombey likens the NLS to "an arid formalism more appropriate to the 19th century". Margaret Meek adds the peculiar observation that "literacy is too important to be taught".<sup>11</sup>

The danger which now confronts us is that because the NLS is seen to herald a 'return to phonics', phonics will be discredited unless the NLS brings about a dramatic improvement in reading standards. This, unfortunately, is very unlikely.

<sup>&</sup>lt;sup>11</sup> These quotes come from Chris Woodhead's *Sunday Telegraph* review of Cox's *Literacy is not Enough* (op. cit.). In a letter to the *Guardian*, Margaret Meek took umbrage with the way this was taken out of context. The full sentence it came from is: "Those who emphasise the functional nature of literacy, who believe that there is a set of basic competences to be taught and learned according to a single pattern of instruction, will have difficulty with the underlying assumptions of this chapter: that literacy is too important to be taught or to serve as an instrumental commodity". Meek claims that "the partial quotation is surely mischievous". It is difficult to see how the surrounding context that Woodhead eliminated in any way qualifies or alters the bald fact that one of Meek's underlying assumptions is that "literacy is too important to be taught."

# A COMPARISON OF ANALYTIC AND SYNTHETIC PHONICS

THE RECOGNITION THAT PHONICS is the best way of teaching children to read is, as has been pointed out, welcome. The issue is now: which *type* of phonics is most effective? To answer the question requires a knowledge of the differences between the two types of phonics which can be used in the classroom.<sup>12</sup>

Analytic phonics (as presented in the NLS)<sup>13</sup> starts out at the whole word level. Children are first taught a limited 'sight' vocabulary through the use of graded readers and children's literature. Children are taught one letter sound per week and are shown a series of alliterative pictures and words which start with that sound (eg car, cat, candle, cake, castle). When the 26 initial letter sounds have been taught in this way, children are introduced to the middle sounds (eg cat, bag, rag), and final sounds (nap, cup, pip). Children are then taught the initial consonant blends (eg bl, cr, sp); final consonant blends (eg nt, ng, st); vowel and consonant digraphs (eg ee, oo, ch, sh). The general idea is that children will then go on to use this phonological knowledge as *one* of the many means by which they attempt to identify unknown words.

The starting point of *synthetic phonics*, on the other hand, is the fact that:

<sup>&</sup>lt;sup>12</sup> See Appendices B and C for the latest research on the effectiveness of the two main types of phonics teaching.

<sup>&</sup>lt;sup>13</sup> The term *analytic phonics* has, unfortunately, become shorthand for a much broader eclectic approach characterised by the NLS. In a purely academic sense, analytic techniques have a much narrower meaning.

...the word recognition skills of the good reader are so rapid, automatic, and efficient that the skilled reader need not rely on contextual information. In fact, it is poor readers who guess from context – out of necessity because their decoding skills are so weak.<sup>14</sup>

Since it is implausible that children can become good readers by encouraging them to use the skill of poor readers, synthetic phonics programmes begin by teaching children to recognise, articulate and blend the 42 to 44 basic sounds of English *before* they are introduced to books.<sup>15</sup> In the Clackmannanshire trials, pupils in this group were first taught the sounds for the letters 's', 'a', 't', 'p', 'i', and 'n'. They were then taught to blend these sounds into words (eg 'pat', 'sit', 'nap', 'tin'). Within a matter of a week or two, children were reading the same way adults do.

With the emphasis on blending skills, there is no need to teach consonant blends – an activity which consumes a lot of time in the NLS. Since in practice children can learn these sounds in nine weeks, their introduction to literature is not long delayed. Even though great stress is placed upon these synthetic techniques, children are also taught the analytical skills which underpin beginning spelling strategies. This requires a highly structured, step-by-step approach. This structure is logical, but it is by no means *obvious*. It is certainly not something you can make up as you go along, doing a bit of this and a bit of that.

Under the National Literacy Strategy, it takes more than *two* years to teach these same sounds. To give an example of the

<sup>&</sup>lt;sup>14</sup> K. E. Stanovich and P Stanovich, "How Research might inform the Debate about Early Reading Acquisition", *Journal of Research in Reading* 18:2 (1995).

<sup>&</sup>lt;sup>15</sup> The number of phonemes of English depends both on dialect, and on what is considered a phoneme. A phoneme itself can have several distinct sounds, which are called *allophones*; eg, the letter 'I' can be voiced or unvoiced, depending upon whether it is at the beginning or end of a syllable. Most people would not notice the difference unless it were pointed out to them, so for teaching purposes it is not usually important to make these distinctions. On the other hand, most people can easily distinguish the difference between different phonemes.

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dilatory pace of the NLS, the spellings 'er' and 'or' are not taught until the second term of year 2. Synthetic phonics pupils will learn these before their first half-term break.

## 'Analytic' and synthetic phonics compared

### 'Analytic phonics'

- the whole word is seen and children have their attention drawn to certain letters and to their sounds
- is often taught after an initial sight vocabulary has been established, alongside reading-scheme books
- can take up to three years

### **Synthetic phonics**

- all of the letter sounds are taught very rapidly and the emphasis is on blending sounds
- starts before children are introduced to reading-scheme books
- can be taught in a few months

# PROBLEMS WITH THE NATIONAL LITERACY STRATEGY

FOR ALL ITS FLAWS, THE NLS at least carries a tacit assumption that all children can be taught to read in the early years of primary school. It is no longer acceptable to excuse failure on the grounds that a child is developmentally slow or has inadequate (or over-anxious) parents.<sup>16</sup>

Before its publication in March 1998, the NLS was extensively trialled under the National Literacy Project. Unfortunately, the results of these trials have never been published in sufficient detail to allow for peer review. But it is striking that the Clackmannanshire trials compared the effectiveness of both synthetic phonics *and* the NLS methods – with conclusive evidence that the methods now used in the NLS prove to be a failure.

The National Literacy Strategy specifies:

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The concept of 'reading readiness' was invented to explain why some children didn't learn how to read in primary school. This was based primarily upon the work of the influential Swiss psychologist Piaget, who believed that children were harmed when they were 'forced' to learn anything, including reading and writing skills, before they were developmentally ready to exhibit these behaviours spontaneously (Steiner schools are based on this principle). Piaget's work is mere assertion, based upon observations made in the course of his case studies. Even though studies by Stanovich and others have demolished this concept, some primary schools are loath to give up this convenient excuse. Parents of pupils taught by the author still complain that they are being dismissed as over-anxious, and assured that their children will catch up later. It is striking that these children never seem to catch up in primary school.

# PROBLEMS WITH THE NLS

- the introduction of a Literacy Hour, which requires that each primary school reserve set times for teaching reading;
- extra training for all primary teachers;
- additional spending of £50 million pa, mainly to cover the cost of new books for primary schools;
- recommended methods for the teaching of reading skills as detailed in the *Framework for Teaching*, a document published by the DfEE to support the NLS.

The *Framework for Teaching* specifies how the NLS should be implemented and was distributed to every primary school in the country. A close study of this document gives rise to the suspicion that it was conceived with an eye to avoiding controversy. In this respect it most certainly has failed: inevitably, it includes something to offend every faction.

### Look-and-say methods in the NLS

Pupils should be taught...to recognise the critical features of words, eg shape, length..." (p.19).

This premise of look-and-say was demolished as far back as 1918.17

Pupils should be taught...to read on sight a range of familiar words... (p.19)

Again, the belief that beginning readers recognise words as wholes is a belief which is typical of the *look-and-say* tradition.

### The alphabetic system

17

Pupils should be taught...knowledge of grapheme-phoneme correspondences through: reading the letter(s) that represent the sound(s): a-z ch, sh, th...(p.18)

For a review of research on this issue, see M. Adams (op. cit.), pp 96-97.

This practice can be traced back to its roots to the 19th century *alphabetic* system. This element was probably included because pre-school children's letter-naming ability is a fairly accurate predictor in their later success in reading. Not for the first time, educators have confused cause and effect.

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Onset and rime training
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Pupils should be taught...to discriminate 'onsets' from 'rimes' in speech and spelling..." (p.18)

This is pure *onset and rime* training. The word 'rhyme', or some variant, appears nine times in the Framework for reception year alone. Broadly speaking, this is an analytic technique.

#### Analytic phonics

...hearing and identifying initial sounds in words... (p.18)

This is the ultimate objective in *analytic phonics*, to be mastered after onset-and-rime training.

#### Whole-language

to re-read a text to provide context cues to help read unfamiliar words... (p.18)

This idea is central to *whole-language* practices and all eclectic strategies. The following statement in the *Framework for Teaching* could easily have been written by the whole-language guru Kenneth Goodman:

... pupils become successful readers by using a range of strategies to get at the meaning of a text. This principle is at the heart of the National Curriculum for English...Successful readers use as many of these strategies as possible.

There are also numerous off-shoots of the whole-language philosophy, including *language experience*, *real books*, and *big books* – all of which are explicitly or implicitly covered in the NLS.

### PROBLEMS WITH THE NLS

The *Framework for Teaching* appears to be written with more of an eye to reading 'experts' than to the hapless teacher who is expected to implement its multitude of disjointed imperatives. In the draft version of the NLS, it was even argued that in the early stages when children are reading familiar stories, "there is little need to use phonic strategies" and they need pay "relatively little attention to the sounds and spellings of words".

This is pure whole-language philosophy. Indeed, throughout the NLS, there is nothing to upset the most ardent advocate of child-centred learning. The scientific evidence on how children are best taught to read cannot be fudged in a spirit of compromise, as some suggest.<sup>18</sup>

### The NLS is not based on synthetic phonics

An official spokesman for the DfEE is reported as having claimed that the NLS is based on synthetic phonics:

Analytic phonics is different from the so-called synthetic phonics with which the National Literacy Strategy is more clearly associated. The strategy has a very clear focus on the explicit and systematic teaching of phonics, that is the segmentation and blending of sounds in words.<sup>19</sup>

This is not accurate. There is no "clear association" with synthetic phonics. In the *Framework for Teaching*, there is no mention at all of blending in reception year, when basic learning patterns are established. By contrast, eight items specifically refer to analytic techniques.

In Years 1 and 2, there are a total of five references to teaching blending skills. As this document contains no less than 315 recommendations for the first three years, five references to synthetic tasks is hardly an impressive emphasis. It is, of course,

Adams (op cit.) goes out of her way to be conciliatory to the whole-language faction, giving them as much credit as possible while demolishing their theoretical assumptions. The American Federation of Teachers adopts a similar attitude after their Damascene conversion to phonics.

<sup>&</sup>lt;sup>19</sup> The Times Educational Supplement, 19 February 1999, p. 4.

an improvement on the draft document published in 1997: that contained no mention of synthetic phonics or blending at all. Comparing this document with the final version reveals the *ad hoc* manner in which it was all put together.

### Limited impact of the NLS

A fundamental problem with the NLS is that there is no provision for ensuring that the skills taught are actually learnt. The NLS lacks statutory force: it is the responsibility of the LEAs to interpret and enforce it as they see fit. As a result, there is mounting evidence that the phonics which is in the NLS is not reaching the classroom. The *Daily Telegraph*, citing a recent OFSTED/HMI report, claims that:

Half the primary teachers implementing the new 'literacy hour' are boycotting the phonics element...of the half who are teaching phonics, a third do it badly.<sup>20</sup>

The National Literacy Strategy therefore not only advocates the wrong type of teaching methods; it also fails to get them implemented in the classroom.

<sup>&</sup>lt;sup>20</sup> The OFSTED/HMI report *The National Literacy Project – an HMI Evaluation* was published in November 1998.

# THE SUCCESS OF SYNTHETIC PHONICS

THE DATA NOW AVAILABLE from a remarkable series of trials in Scotland and elsewhere prove that synthetic phonics programmes work far better than other systems.<sup>21</sup> Indeed, not only will synthetic phonics work with all but the most severely dyslexic children, they will do so in a normal state primary school, with no additional funding. They work even when a high percentage of the pupils come from disadvantaged homes, or from homes where English is not spoken. The programmes can be introduced without lengthy training for the teachers involved. Synthetic phonics also eliminate the gender gap – if anything, boys outperform girls.

### The remarkable results from Clackmannanshire

Since 1992/93, a research team from the University of St. Andrews School of Psychology has studied the teaching of reading in the early stages of primary school education within the Clackmannanshire LEA. The study, which was funded by the Scottish Office, was an impeccably designed trial to see if various teaching methods could be replicated elsewhere. One of the teaching methods studied was based on the synthetic-based Jolly Phonics programme developed at Woods Loke Primary School in

<sup>&</sup>lt;sup>21</sup> Full details of the success of the programme were reported by J.E. Watson & R.S. Johnston in Accelerating Reading Attainment: the effectiveness of synthetic phonics, School of Psychology, University of St. Andrews, 1999. See also Appendices B and C for full details of studies on the relevant effectiveness of analytic and synthetic phonics.

Lowestoft, a working-class school which has been near the top of Suffolk's confidential reading tables since 1976.<sup>22</sup> Previous trials in Toronto had already demonstrated that Jolly Phonics works very well in inner-city schools with a high immigrant population.

There is a striking symmetry between the Clackmannanshire and Toronto trials; in both studies, teachers originally believed that it was impossible to teach the most common spelling of each of the 44-odd phonemes of English in the first term of reception – or at least that it was wrong to do so. In both trials, 'disadvantaged' pupils turned out to have hardly any disadvantage at all, and the researchers concluded with that the had been totally converted to the methods they originally distrusted. Headteacher Joyce Ferguson at Abercrombie Primary School admitted that:

The scheme [based on Jolly Phonics] might have been contrary to my educational philosophy, but very quickly we were impressed by the results for the less able as well as the able. The children have developed remarkable listening and concentration skills as well as confidence and self-esteem.<sup>23</sup>

The key findings of the Clackmannanshire Study can be summarised as follows:

- children who had been taught analytic phonics were *reading* one month behind their chronological age and *spelling* two to three months behind their chronological age;
- children who had been taught synthetic phonics were *reading* seven months ahead of their chronological age and *spelling* seven months ahead of their chronological age;

<sup>&</sup>lt;sup>22</sup> T. Burkard, "Phonological Training in Reception Year", British Journal of Curriculum and Assessment 6:3 (1996). Their materials are now published as Jolly Phonics, and they were previously trialled in inter-city Toronto schools by Professor Dale Willows. See K. Sumbler and D. Willows, "Time Management: Monitoring Activities In Jolly Phonics and Control Classrooms", unpublished paper (1998).

<sup>&</sup>lt;sup>23</sup> The Scotsman, 28 October 1998, leader.

## THE SUCCESS OF SYNTHETIC PHONICS

- for children from disadvantaged homes, analytic phonics teaching produced the highest levels of underachievement while synthetic phonics produced the lowest proportion of underachievement;
- in classes where synthetic phonics is used, there are fewer underachieving children and, as a result, teachers were able to spend more time with those making a slow start in reading.

# INTRODUCING SYNTHETIC PHONICS TO THE CLASSROOM

THE TRACK RECORD OF SYNTHETIC PHONICS is undoubtedly impressive. Yet while some teachers can be persuaded to use these programme, few are prepared to abandon their old ways altogether. The belt-and-braces mentality in education is pervasive: teachers simply cannot believe that the practices taught in training could actually make it *more difficult* for children to learn how to read.

It takes an act of faith for teachers to forget everything that they have been taught in college, everything that they have been told by their LEA reading adviser, everything they have read in the educational press, and – now – almost everything in the Government's National Literacy Strategy. It seems implausible that these qualified professionals could all be wrong.

Richard Sloper, a reception teacher in Bristol who uses one version of synthetic phonics, "Jolly Phonics", explains:

...with Jolly Phonics we needed to change some of the practices we had taken for granted.... I see other teachers who use Jolly Phonics, but less whole-heartedly, and I find myself telling them how much their results could improve if they followed it more thoroughly.<sup>24</sup>

The same problem has been recognised in America. Indeed, in 1998, the American Federation of Teachers (not previously known as an enemy of child-centred theory and practice) conceded that:

Quoted in Jolly Learning promotional literature.

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## INTRODUCING SYNTHETIC PHONICS TO THE CLASSROOM

The debate over what role skilled decoding plays in reading comprehension is over; we know it is central. The debate over whether decoding should be taught systematically or incidentally is over; why leave anything to chance when we can give children an organised, thorough, and efficient grounding in the sound-to-symbol architecture of the written language?...*this renewed attention to decoding won't amount to much unless it is taught well, which it now typically is not* [author's emphasis added].<sup>25</sup>

One reason why phonics is still taught badly (when it is taught at all) is that very few schools accept the central concept of synthetic phonics – which is that children should invariably sound out unknown words. A child either does this, or he guesses. It is not possible to do both at the same time – the strategies are wholly incompatible. They cannot both be embraced under some fuzzy eclectic blanket.

To overcome these eclectic instincts requires firm leadership and a whole-school approach to synthetic phonics. Until there is a more wide-spread appreciation of the advantages of a rigorous approach, it is unlikely that many schools will adopt it successfully in the absence of personal contact with successful teachers. Fortunately, once teachers have seen just what you can do with synthetic phonics, they are only too eager to share their discovery.

<sup>&</sup>lt;sup>25</sup> Leader entitled "The Unique Power of Reading And How To Unleash It", *American Educator*, Spring/Summer (1998), p. 4.

# RECOMMENDATIONS

THE EVIDENCE PRESENTED HERE constitutes a *prima facie* case for change. Indisputably, the Clackmannanshire model must be adopted on a much larger scale.

However, the problems associated with implementing educational reform must not be underestimated – particularly when the proposed teaching methods are likely to arouse the hostility of most educational administrators. If synthetic phonics are to be taught successfully in more schools, both sticks and carrots will be required.

### The carrots...

The Government should do all it can to make the teaching of synthetic phonics attractive to schools. This would include:

- funding the implementation of promising methods in any primary school willing to participate in controlled trials;
- introducing synthetic phonics programmes in schools and LEAs which have already been identified for intervention by OFSTED or under the SSFA Act;
- commissioning further research of a similar kind to the Clackmannanshire trials. Objective, open trials undertaken on a much larger scale would tell heavily in the hearts and minds of primary school teachers.

#### ... and the stick

League tables are, without doubt, one of the more enduring legacies of the last Government's education reforms.

All children should be reading independently long before the age of seven. The ability to read independently is totally dependent upon the pupil's word identification skills. This ability can easily be measured by objective, standardised tests. Externallyadministered tests at this level are therefore both essential and practical, and primary league tables must be based on them.

These tests should have the following features:

- they must be externally administered;
- they must be standardised;
- reading tests must be group reading tests (pencil-and-paper tests);
- spelling tests must be included;
- there must be enough parallel forms to discourage "teaching the test";
- the results of tests should be "norm-referenced": few parents know whether a child achieving "Level 2C at 7+" is a good, bad or indifferent reader. But all parents know exactly what is meant if they are told that their seven year old child has a reading age of five years nine months.

With synthetic phonics being effective with children from disadvantaged backgrounds, the question of whether to measure absolute or value-added performance becomes irrelevant.

Of course, it has to be recognised that having a transparent means of evaluating schools' effectiveness is, in itself, only a competitive device to allow the most effective reading methods to prevail. It would, without question, spur all teachers to choose proven materials, and would inspire the best teachers to reach for ever more exacting standards.

In the light of the Clackmannanshire results, this leads to two final questions: what should the Government consider as an 'acceptable' level of illiteracy? And should we really be satisfied with a system which leaves 20% of children unable to read properly by the time they are eleven years old?

# **PROBLEMS WITH SATs**

TESTING MAY BE IMPERFECT. But it is the only means of ensuring any kind of accountability in state schools. As a measure of their efficacy in that respect, consider the furore that greeted Martin Turner's disclosure of confidential LEA test results: the current cycle of Government action on literacy can, to a large extent, be traced back to it.

The previous Government was on the right track with its decision to publish test results for primary schools. Unfortunately, the official measure of reading ability – the 11+ English SATs – are deeply flawed.

There are a number of reasons for concern:

- In areas of the country where children often attend separate infant schools, parents are none the wiser as to where to send their children for those first critical years. League tables should be based upon 7+ testing.
- Despite the most stringent precautions, the tests are still open to, at worst, cheating and, more often perhaps, optimistic interpretation. Only if tests are externally administered can a level playing field be guaranteed.
- Studies have consistently shown the tests to be unreliable. Peter Pumfrey, a leading expert on reading tests, found that children reaching 'Level 2' on the 7+ SATs had reading ages anywhere from five years nine months to eleven years six months.

- The results are not easily understood by teachers, let alone parents. A researcher at Leeds University doubted the consistency of scores, and claimed that "...the usefulness of level descriptions as a means of reporting to parents and other agencies is highly questionable."<sup>26</sup>
- The tests are time consuming and distracting.

With a broad consensus now emerging – that the testing system should be reformed – the Government should not lose sight of one central fact: we are testing schools, not children. Educationalists always favour cumbersome methods of assessment (such as the SATs) on the grounds that simple pencil-and-paper tests only measure a narrow range of 'mechanical' skills.

But that is precisely their strength.

<sup>26</sup> 

The Times Educational Supplement, 5 March, 1999 p. 26.

# A SUMMARY OF RECENT RESEARCH ON ANALYTIC PHONICS

IT IS A MEASURE OF HOW FAR researchers have moved away from serious consideration of whole-language approaches that St Andrew's University did not feel it necessary to include one in their trials. Even though various whole-language methods, such as 'big books' and 'story experience' are still very popular in many schools, the scientific community has firmly rejected such approaches as irrelevant to the critical question of teaching wordidentification skills.

### The development of onset-and-rime

The research finding that spurred the analytic-phonic movement was the discovery that, with pre-school children, *phonemic awareness* predicts reading success very strongly (the other important predictor, as we have seen, is *letter-naming ability*). Phonemic awareness is the ability to separate individual letter sounds from words: for example, the ability to say the word 'cat' begins with the 'k' sound.

While it was certainly legitimate to postulate that teaching phonemic awareness to young children would enhance their acquisition of reading skills, some researchers took this assumption for granted without seriously examining it. A warning was sounded by the Austrian researchers Wimmer and Hummer in 1990; they found that in German-speaking countries (where synthetic phonics has long been the accepted method of teaching early reading), pupils' reading skills developed *irrespective* of their of phonemic awareness:

The surprising finding was that, despite widespread deficiencies in phonemic awareness at the beginning of Grade One, most children acquired an alphabetic strategy without difficulty, as shown by their successful reading and spelling of pseudo-words at the end of Grade One.

Unfortunately, by this time the analytic-phonics movement was too big to be deflected by such trifles. Indeed, they believed that the central problem in teaching reading was that children under the age of seven find phonemic analysis difficult. Even though most young children learn these skills easily once they are taught, it is almost an axiom of contemporary education that tasks must be made as easy as possible.

Psychologist Usha Goswami's innovations are based upon this principle. Her early work involved children's use of analogy to learn; by synthesising this with Bradley and Bryant's work on rhyming, she devised the **onset-and-rime** approach – also known as the 'new phonics'. Even though young children usually need to be taught to break words up into phonemes, they need little training in order to break single-syllable words into **onsets** (the initial consonant or consonant cluster) and **rimes** (the vowel and remaining consonants). In other words, while children often find it difficult to break the word 'shrink' into the sounds sh/r/i/n/k, they can very easily break it into shr/ink. Once the child has learnt this, he or she will presumably find it much easier to learn other words ending in 'ink'. Operating at this level, it is argued, facilitates the child's acquisition of phonemic-level skills.<sup>27</sup>

The 'new phonics' was very skilfully presented, but it really is little more than the venerable 'word families' approach to spelling and word recognition dressed up in fancy new clothes. Onset-andrime is strictly an analytic technique, so it co-exists quite happily with word-guessing and the whole-language practice. Usha Goswami makes this quite explicit:

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U. Goswami and P. Bryant, *Phonological Skills and Learning to Read*, Lawrence Erlbaum (1990).

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The main Oxford Reading Tree scheme is based on a 'story experience' or 'whole language' approach to reading...The Rhyme and Analogy programme preserves the story experience approach...<sup>28</sup>

Leaving aside the objection that analytical skills (while essential to spelling) do not in themselves confer the ability to read, recent studies suggest that onset-and-rime is based upon other fundamental misconceptions. Even Bradley and Bryant's early work with rhyme should have offered a warning: rhyme and alliteration training produced no gains in reading unless it was accompanied by letter-sound training.<sup>29</sup> Macmillan (1997) reviewed five other recent studies which all indicate that Goswami and her collaborators are putting the cart before the horse.<sup>30</sup> Children are unable to obtain any benefit from onset-and-rime training unless they can already operate at the level of the individual phoneme – and if they can do that, the rime training is redundant. The role of 'phonemic awareness' is frequently misunderstood. A 1991 Australian study by Byrne found that:

...phonemic awareness by itself is not enough to produce alphabetic insights – it needs to be supplemented by direct letter-sound

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<sup>&</sup>lt;sup>28</sup> U. Goswami with C. Kitley, *Rhyme and Analogy Teacher's Guide*, OUP (1996).

L. Bradley and P. Bryant, *Rhyme and Reason in Reading and Spelling*, University of Michigan Press (1985).

<sup>&</sup>lt;sup>30</sup> The studies cited by Macmillan are: L.C. Ehri and Robbins, "Beginners need some decoding skills to read words by analogy", *Reading Research Quarterly* 27 (1992); M. Bruck and R. Treiman, "Learning to pronounce words: The limitations of analogies", *Reading Research Quarterly* 27:4 (1992); P. Seymour and H. Evans, "Levels of phonological awareness and learning to read", *Reading and Writing: an Interdisciplinary Journal*, 6:3 (1994); L. Cary and A. Verhaeghe, "Promoting phonemic analysis ability among kindergartners: effects of different training programs", *Reading and Writing: an Interdisciplinary Journal*, 6:3 (1994); T. Hoien, I. Lundberg, K. Stanovich, and I Bjaalid, "Components of phonological awareness", *Reading and Writing: an Interdisciplinary Journal*, 7:2 (1995). This last study involved a sample of around 1500 pupils, and it showed that phoneme tasks were four times more important than rhyme or syllable tasks in predicting later reading achievement.

training... knowledge of phoneme identity is a firmer foundation for discovering the alphabetic principle than is segmentation ability.<sup>31</sup>

A 1994 study by Morais and Kolinsky utilising PET brain scans revealed that different areas of the brain are activated by rhyming and syllable tasks on one hand, and phoneme-level tasks on the other. This is not particularly surprising; the former are natural language activities which require little thought or concentration, whereas the latter requires training and attention. They also found that illiterates could perform rhyme and syllable tasks, but not the phoneme tasks.<sup>32</sup>

Since Macmillan's 1997 review, four more studies have questioned the utility of onset-and-rime training. Savage (1997) concludes that:

The findings suggest that the analogy model developed by Goswami (1993) may have limited applicability in naturalistic settings.<sup>33</sup>

Prior to the Clackmannanshire trials, there was already strong evidence that onset-and-rime produces meagre results in service conditions. A 1998 study by the National Foundation for Educational Research (NFER) found that Buckinghamshire Phonological Awareness Training (PAT) was among the least

<sup>&</sup>lt;sup>31</sup> B. Byrne, "Experimental Analysis of the Child's Discovery of the Alphabetic Principle" in C. Perfetti and L. Rieben (eds) *Learning to Read*, Lawrence Erlbaum (1991), p. 83.

<sup>&</sup>lt;sup>32</sup> J. Morais and R. Kolinsky, "Perception and awareness in phonological processing: the case of the phoneme", *Cognition* 50 (1995).

<sup>&</sup>lt;sup>33</sup> R. Savage, "Do Children Need Concurrent Prompts in Order to Use Lexical Analogies in Reading", *Journal of Child Psychology* 38:2 (1997), p. 235. The other studies are: V. Muter, "Segmentation, Not Rhyming, Predicts Early Progress in Learning to Read", *Journal of Experimental Child Psychology* 65, (1997), pp. 370-396; P. Seymour and L. Duncan, "Small versus Large Unit Theories of Reading Acquisition", *Dyslexia* 3 (1997), pp. 123-134; R. Savage and M. Stuart, "Sublexical Inferences in Beginning Reading: Medial Vowel Digraphs as Functional Units of Transfer", *Journal of Experimental Child Psychology* 69 (1998), pp. 1-22.

effective interventions for slow readers.<sup>34</sup> PAT is pure onset-andrime work.

It is curious that, despite this contrary evidence (most of which was brought to the attention of its authors<sup>35</sup>), the 'new phonics' has become central to the National Literacy Strategy. By contrast, Appendix C of this study contains an impressive array of results for different synthetic phonics programmes deployed in varying conditions. In all cases, the results indicate that the huge tail of underachievement in British schools can be eliminated without additional spending.

<sup>&</sup>lt;sup>34</sup> G. Brooks, N. Flanagan, Z. Henkhuzens, and D. Hutchison, What Works for Slow Readers? The Effectiveness of Early Intervention Schemes, NFER (1998), pp. 95-96.

<sup>&</sup>lt;sup>35</sup> Jennifer Chew presented a well-researched brief to John Stannard's committee. It was acknowledged and ignored. She is the author of "Traditional Phonics: What it is and what it is not", *Journal of Research in Reading* 20:3 (1997). Woods Loke Primary School also submitted similar evidence in a letter dated 8 January 1998.

# **RESEARCH ON THE EFFECTIVENESS OF SYNTHETIC PHONICS**

THIS SECTION SUMMARISES SOME of the various synthetic phonics programmes which are widely available and the research on how effective they are in teaching children to read.

### 1. Jolly Phonics data

A. Woods Loke – an uncontrolled study

Burkard, T. (1996) "Phonological Training in Reception Year" British Journal of Curriculum and Assessment, 6:3

Woods Loke is where this all began. Sue Lloyd has taught reading there since 1976, and in 1994 her programme was published by Jolly Learning.

Woods Loke has a working-class catchment in Lowestoft, an isolated fishing and industrial town. About 15% of its pupils live in social housing and average ability is probably somewhat on the low side. Pupils are nearly all white English. The mean score of the 1995 intake on the BPVS (British Picture Vocabulary Scale – a rough measure of verbal intelligence) was 97.52.

Suffolk infant schools administer the Suffolk Reading Test at 6+ and 8+. This study analysed the percentages of pupils with standardised scores under 80 and under 90 who took the 8+ at Woods Loke between 1991 and 1995 (N=283) and compared them with county-wide results in 1991 (N=6,844).

At Woods Loke, 1.8% of all pupils scored below 80, compared with 14.3% for all Suffolk pupils. 8.1% of Woods Loke pupils scored below 90, while 31.6% was the LEA-wide figure. It should be noted that Suffolk is not a particularly deprived LEA: in the 1998 GCSE league tables, it ranked 33rd out of 149.

Subsequent unpublished results at Woods Loke have shown that even that small tail of poor readers has all but disappeared, despite a considerable increase in pupil numbers. In the 6+ results for 1997 and 1998 (N=130), only three pupils (2.3%) scored below 90, and two of those (1.5%) scored below 80. Of the latter two, one spoiled the test paper, and the other later was transferred to a special school.

The average quotient (or standard score) in 1997 was 104.4 (Suffolk county average = 99.59); in 1998, Woods Loke beat the rest of the LEA by 104.619 to 100.86. Boys outscored girls at Woods Loke by 107.2 to 103.5, and pupils on free school meals nearly held their own at 104.4.

### B: St. Michael's - school data

(unpublished)

St. Michael's, located near Bristol Parkway Station, is the second largest primary school in South Gloucestershire. It serves a new council development of mixed social and private housing. A large majority of the pupils speak English at home, but relatively few have parents with professional qualifications. County intake assessments for September 1997 were below average.

Jolly Phonics was introduced by psychologist Dr Marlynne Grant in 1997. Of the 66 pupils who started then, 61 were scored at or above their age on the Burt Single Word Reading Test after one term. On an average, the pupils were six and a half months ahead in reading, and six months ahead in spelling. The 90 pupils who started Jolly Phonics in September 1997 were tested in July 1998. Here, the results were even more impressive: only three pupils reading below their age level, and on average pupils were one year ahead in reading, and one year five months ahead in spelling. Special Needs teacher Trudy Wainwright states that:

...this 'Phonics First' approach has dramatically raised our standards for reading and writing. We are using a synthetic phonics approach so that children are taught decoding and encoding skills before they encounter text.

C: Toronto – controlled studies by Willows et. al. (University of Toronto)

 K. Sumbler and D. Willows (1996) "Phonological Awareness and Alphabetic Coding Instruction within Balanced Senior Kindergartens", Paper presented at the National Reading Conference, S. C.; December, 1996

In this study, kindergarten pupils from eight suburban Toronto primary schools (N=281) were divided into ten experimental (Jolly Phonics) and ten control groups. The Jolly Phonics group (N=151) had 33% of ESL pupils, and the controls (N=130) 18%.

The post-test results near the end of senior kindergarten showed the Jolly Phonics pupils with a very substantial advantage on every measure. On the WRAT-3 reading test, their average score was 107.5, compared to 101.3 for the controls. The advantage on the WRAT-3 Spelling test was 104.8 to 98.1.

The data were also analysed to determine what happened to pupils who were adjudged "at-risk" from low pre-test scores in letter-naming. Post-test scores showed that between 1/4 and 2/3 (depending upon the measure) of the Jolly Phonics at-risk pupils were performing at acceptable levels; by contrast, "...the distribution of control at-risk children changed little".

 J. Morgan and D. Willows (1996) "Early Phonological Awareness Training for At-Risk Children in Junior Kindergarten", Paper presented at the National Reading Conference, Charleston, S. C.

This study looked at the effects of Jolly Phonics on the phonemic skills of children in six primary schools (N=225) in low-income areas with a high percentage of ESL pupils (mainly Punjabi). This technical study found that pupils in the ESL experimental group performed at least as well (and often much better) than the English-speaking controls on every measure except the auditory discrimination of phonemes. Since phonemes vary considerably from one language to another, this last result was not surprising.

 D. Stornelli and D. Willows (1998) "Effect of More and Earlier Phonics Instruction on Kindergarten Literacy Outcomes", Paper presented at the National Reading Conference, Austin, Texas; December, 1998

This study is similar to the Sumbler & Willows study, but it includes an experimental group which received the Jolly Phonics

### APPENDIX C

intervention in junior kindergarten as well as senior kindergarten. Its aim was to determine whether very young children (equivalent to reception pupils in Britain) could benefit from this training. When tested at the end of senior kindergarten, the performance of these pupil on reading, spelling, and phonemic tests was markedly superior to both the controls and to the pupils who only received Jolly Phonics instruction in senior kindergarten.

(iv) Kwan and D. Willows (1998) "Impact of Early Phonics Instruction on Children Learning English as a Second Language", Paper presented at the National Reading Conference, Austin, Texas

This study of ESL pupils found that "...truly remarkable achievements were made on measures of phonological processing by the [Jolly Phonics] children who received training in both junior and senior kindergarten." It argues against the accepted Canadian practice of avoiding the ESL problem by fostering cognitive growth through instruction in the pupil's native language.

#### D: Clackmannanshire – controlled study by Watson & Johnston

J.E. Watson & R. S. Johnston in Accelerating Reading Attainment: the effectiveness of synthetic phonics, School of Psychology, University of St. Andrews, 1999

This programme involved eight schools, three of which used Jolly Phonics. Two of the schools in this group had large numbers of pupils on free school meals – 42% and 55% respectively. All schools involved had broadly similar socio-economic factors. One of the other two groups used analytic phonics, and one used analytic phonics plus rhyme and phoneme awareness training.

At the end of the intervention, the Jolly Phonics group were an average of seven months ahead of their chronological age in reading and spelling. Follow-up testing done at the end of the school year revealed that this advantage had widened to 12 months in reading and 14 months in spelling.

This study is especially significant because it is the first time that analytic phonics programmes have been directly trialled against synthetic phonics.

E: Tower Hamlets – controlled study by Stuart (Institute of Education)

M. Stuart, "Getting ready for reading: early phoneme awareness and phonics teaching improves reading and spelling in inner-city second-language learners", *British Journal of Educational Psychology*, in press

This study involved 112 children, most of whom do not speak English at home. The experimental group used Jolly Phonics, and the controls used a 'big book' approach. The latter is a wholelanguage approach, but teachers were asked to use some of the word-level strategies in the National Literacy Strategy. The results are expected to confirm existing data on Jolly Phonics.

#### 2: Phono-graphix data

The Phono-graphix programme was introduced to Britain in June, 1998 under the sponsorship of John Clare of the *Daily Telegraph*. While different in presentation and detail from the Jolly Phonics programme, it shares an emphasis on teaching blending skills. Phono-graphix will be trialled in eight LEAs this spring. Existing data from the United States is as follows:

A: Orlando, Florida- clinical data (Published in the Orton Annals of Dyslexia, 1996)

This is a clinical study involving 87 children age 6 to 16 with reading or spelling disabilities. Children received 12 or fewer hours of clinical intervention, and parents were shown how to use Phono-graphix materials at home (for details of a similar programme involving training parents to use published remedial materials, see T. Burkard (1998) "Direct instruction of literacy skills in a comprehensive secondary school", *Dyslexia Review* 10:1).

On average, pupils at Orlando improved their scores on the Woodcock Word Identification Sub-Test by 14 points – almost a full standard deviation. Gains on other tests were also impressive. Since publication of this data, the Orlando clinic has taught a further 247 children whose average gain was one year eight months.

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### B: Millhopper Montessori School – school data (from C. McGuinness)

Results from this private school in Gainesville, Florida prove that children from more advantaged backgrounds can benefit from synthetic phonics. The children involve were aged six to ten, but were grouped by ability rather than age. Group sizes varied from four to nine, and they received 15 minutes of Phono-graphix instruction for four or five days per week. After eight months, gains on the WWIST averaged one year, five months. Pupils who were below average at pre-test gained even more: one year, seven months. Gains on sub-skill tests were even higher.

# C: Philipsburg Middle School – remedial programme data (from C. McGuinness)

A total of 53 pupils were taught in groups of four to six, for 40 minutes per day, five days a week. After an intervention of nine to twelve weeks, the average gain in standard score on the WWIST was 12. Since the completion of this study, the county has implemented Phono-graphix at the elementary level.

# D: Rock Lake Middle School – remedial programme data (from C. McGuinness)

Seventy-nine special needs pupils received Phono-graphix instruction for eight months, and achieved gains of one year eight months on the Gates-McInnity Comprehension Sub-test.

### **3: Best Practice Phonics Data**

(unpublished)

The pupils at Kobi Nazrul in Tower Hamlets (just off Whitechapel Road) are almost all Bengali, but the only native Sylheti-speaking teacher is the nursery teacher.

Much of the teaching is in the whole-language tradition. In the shared reading sessions, the pupils' attention is constantly directed at the meaning of the story; they are encouraged to predict what happens next, and to explore the character's intentions and contrast them with the author's intentions and their own knowledge. Building the children's English vocabulary is a high priority.

Headteacher Ruth Miskin can afford to do this because her pupils learn the fundamental mechanical skills of reading quite quickly. While her pupils are way ahead on reading accuracy scores, they are merely average in comprehension. Considering that native English-speaking children have a three to four year head start at understanding the *spoken* language, this is quite a remarkable result.

Reading tests administered externally to year 2 pupils in December, 1998 (N=29) showed that pupils were on average 20 months ahead in reading on the Burt Single-word reading test. The average reading accuracy standard score on the Neale Analysis was 113 – almost a full standard deviation ahead of norms. On this test, only one child was reading below age level.

Best Practice Phonics is published by Heineman, and it has recently been introduced in a number of schools. As of yet, we only have data for Kobi Nazrul, but there is every reason to believe that this programme will soon join Jolly Phonics at the top table.

### 4: Downham Montessori Data - school data

#### (unpublished)

Downham Montessori is a private day school which evolved from a nursery school. Some parents act as classroom assistants, so fees are within the means of parents with modest incomes. While the intakes include a number of dyslexic pupils, their ability is above average. Reading is taught in groups of about 15 pupils, selected by ability. Slow readers get additional help.

This school has been producing exceptional results for over ten years. Their original reading programme was based upon the *Step-by-Step* programme developed by Mona McNee, which is still used with the slower readers. *Step-by-Step* was among the first British programmes to utilise an uncompromising synthetic approach to phonics; it is notable for its use of games to reinforce early reading skills.

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Downham Market now use a variety of in-house materials, and a variety of published materials. June 1998 test results for pupils from four years eleven months to six years nine months (N=37) showed that on average they were 17.8 months ahead in reading (Salford Scale) and 15.4 months ahead in spelling (Schonell). All pupils, including dyslexics, are at least 6 months ahead on reading. One pupil was at norms for spelling, and one two months below. All the rest were well ahead.