Reading Recovery or Synthetic Phonics?

A review of two studies about helping young children who struggle to learn to read

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This review looks at the evidence provided by the government in England for its promotion and financial support for Reading Recovery (RR), but not synthetic phonics, for helping children who struggle to learn to read. It concludes that some of the claims made in England for Reading Recovery are not credible, and that continuing synthetic phonics beyond sixteen weeks for all children, combined with extra practice for poor readers, may be more effective.

Focus and Rationale

In 2007 the government distributed ‘Letters and Sounds’ (Department for Education and Science, 2007), a new programme for the initial teaching of reading, to every state primary school in England. In the same year the Department for Children, Schools and Families (DCSF) announced that ‘Reading Recovery’, a programme for poor readers, was to be rolled out nationally for six year olds with significant literacy difficulties (DCSF, 2007). In Letters and Sounds children are taught synthetic phonics (SP), as recommended in the Independent Review of Early Reading (Rose, 2006), beginning with the sounds of letters and the skill of blending sounds to pronounce words before reading books. In RR a problem solving approach is used, beginning with whole books and introducing sounds and blending as one of a number of reading strategies (Bodman, 2007).

Is what is best for young children with literacy difficulties different from what is best for the initial teaching of reading? I spent many years teaching children to read words in the RR way, before new knowledge and experience led me to the conclusion that SP is best for all. In this review I look for evidence supporting the contrary view that RR is best for helping poor readers.

Selecting the Articles

In Schools Research News (DCSF, 2008), the government refers to ‘Comparison of Literacy Progress of Young Children in London Schools: a Reading Recovery Follow up Study’ (Burroughs-Lange, 2007). Given the specific focus of this review, it was an obvious choice.

My other choice was ‘Underachieving Children’, Chapter 8 of ‘The Effects of Synthetic Phonics Teaching on Reading and Spelling Attainment, a Seven Year Longitudinal Study’ (Johnston and Watson, 2005). Letters and Sounds is based on the principles of SP, as

recommended in the Rose review (Rose, 2006, p. 20). The Rose review was influenced by Johnston and Watson's study (Rose, 2006, pp 97, 99). This connection makes it relevant.

Both studies are recent, compare the progress of poor readers with a larger population, involve young children, and use standardised tests and other quantitative data as evidence.

However, as I examined the literature, I had several questions that were not answered in these texts, but were in a previous study, 'Evaluation of RR in London Schools: Every Child A Reader 2005-2006' (Burroughs-Lange, 2007), and the whole study that included the chapter by Johnston and Watson, so I have referred to these often.

Comparison of Literacy Progress of Young Children in London Schools: a Reading Recovery Follow up Study (Burroughs-Lange, 2007)

Interpretation and Claims

This study focuses on the progress of low-achieving children after RR [pp. 2, 3], which involves one-to-one tuition for around 18 weeks in Y1 (5-6 year olds) (Douëtil, 2006, p. 6). The aims of the study are to provide evidence that the effect of RR is sustained after completion, and that RR intervention with low achieving children has an impact on the literacy levels of other children in the same class [p. 10]. For this review, I have focussed on the first aim.

Y1 teachers from 42 schools each identified the eight children in their classes whose literacy learning was of most concern (Burroughs-Lange, 2006, p. 7). This study reports the progress of 218 of these children, including 77 who received RR [p. 38]. The children attended London schools in a socially deprived area where about 40% of children received free school meals (Burroughs-Lange, 2007, p. 15), compared with the national average of 15.9% (LACA, 2007, p. 2).

The study uses data from standardised tests, the RR diagnostic profile and the government Statutory Assessment Tests to assess children's progress at the end of Y2 (6-7 year olds), between one and two years after completion of RR. The progress of low achieving children, who received RR tuition in the first year, is compared with that of those who did not.

Burroughs-Lange claims [p. 44] that this study

1. 'demonstrated ... the sustainability of the significant gains made by the lowest achieving children who received Reading Recovery as 6 year olds'
2. 'provides strong evidence that schools could enable almost every child to read and write appropriately for their age, if those who were failing were given access to expert teaching in Reading Recovery'
3. provides 'ample evidence ... that without RR, children with low literacy understanding do not catch up to age appropriate levels during Key Stage 1'.

Evaluation of Claims

1. Of the tests used, only BAS, WRaPS (Word Reading and Phonics Skills) and 'writing vocabulary' (a non-reading element of the RR profile) were used at both the start and end of the study. BAS shows gains for children who received RR, from a mean RA of 4.9 years at the beginning of Y1 to 6.6 years at the end of Y1, described correctly by Burroughs as a significant gain. At the end of Y2, the mean BAS RA of these children was 7.8 years, just over a year more than in the previous school year, indicating that overall in Y2 the children had sustained the gains made in Y1. The WRaPS result is similar [p.38]. Douëtil (2007) quotes eight studies, which I have not reviewed, to support the claim that children who receive RR tuition maintain initial gains beyond Y2. However, in this recent study there is no data for subsequent years. Claim 1 is credible only if qualified by the words 'until the end of Y2'.

2. At the end of Y2 average chronological age is 7.3 years, so it is justifiable to describe a RA of 7.8 years as appropriate for age and, although this RA is the mean, Burroughs-Lange's claim is not for every child. Moreover, it is credible that progress was due to RR tuition. However, as all the children in this study were less than 8 years old, there is no evidence that schools could enable older children to read appropriately for their age if given access to RR. Burroughs-Lange assumes that if progress is sustained to a RA of around 8 years, it will continue, but strategies learned to achieve this level may not be effective for reading more advanced text, so Claim 2 is not credible.

3. Children who received RR tuition in Y1 are compared with children who did not [p. 38]. These children were provided with alternative support or none (Burroughs-Lange, 2006, pp. 22, 23). In this study, interventions involving alternative teaching methods are simply included in the category 'with no RR' for comparison [p. 31]. However, the preceding study (Burroughs-Lange, 2006) does show BAS and WRAPS results at the end of Y1 for seven other 'alternative forms of support' and these results are poor compared with RR results. Nevertheless, as they are small-scale and the author tells us little about their content or implementation, it is not a credible comparison, nor are there data for Y2. It remains plausible that children with low literacy understanding *do* catch up to age appropriate levels with alternative interventions, and so Claim 3 is not credible.

Burroughs-Lange is responsible for implementation of RR in the UK, Ireland and Europe (University of London, 2008) and Douëtil is National Coordinator for RR (Department for Education and Science, 2007), so they are not unbiased researchers.

‘Underachieving Children’, Chapter 8 of ‘The Effects of Synthetic Phonics Teaching on Reading and Spelling Attainment, a Seven Year Longitudinal Study’

Interpretation and Claims

This study focuses on underachieving children as part of a larger study of the effectiveness of SP for teaching reading and spelling [pp. 8, 9]. The aim of the larger study was to follow for 7 years the progress of children who had initially been taught SP [p. 12]. The section I have reviewed examines the numbers, difficulties and progress of poor readers and how they were helped.

It includes, over five years, between 13 and 28 children whose literacy skills were judged to be more than a year behind their chronological age. A case study follows over six years the progress of one child, AF, described as globally poor with language [p. 44]. The children attended schools in Clackmannanshire in Scotland, a socially deprived area compared with Scotland as a whole (Scottish Neighbourhood Statistics, 2008).

The larger study used data from three standardised tests (for word reading, spelling and reading comprehension) to identify ‘underachieving’ children at yearly intervals over five years from the end of Primary 2 (P2, age 6-7) to the end of Primary 7 (P7, age 11-12). The ‘underachieving group’ included children whose reading ages (RA), according to the tests, were more than a year behind their chronological ages, excluding children who were not available for all the tests [p. 41]. AF’s progress is reported in more detail, from P1 to P7.

These children came from the population of the main SP study, which began with an experiment comparing three groups at the start of P1, two using analytic phonics and one SP. With analytic phonics, as with RR, children are introduced to books and whole words before phonics teaching begins [p. 10]. After sixteen weeks the SP group was judged to be doing so much better than the other groups, that all the groups switched to SP, completing the programme by the end of P1 [p. 12]. Thus, the underachieving group had completed the programme a year before P2 assessment, but there was no longer a control group that had not been taught SP.

The authors claim that

1. after the SP programme ‘the level of underachievement was modest’,
2. ‘some children improved with extra help’,
3. ‘one child with severe learning difficulties was able to read well above the level expected for his age and level of verbal ability’; moreover, improvement followed interventions involving SP principles of teaching letter-sound correspondences and the skill of blending. [pp 63-65].

Evaluation

1. At the end of P2, 2.2% of children were more than a year behind their chronological age for word reading according to the British Ability Scales (BAS) word reading test [p. 41]; in P7 the figure was 11.9% [p.44]. Schools in the UK do not usually publish results of standardised reading tests, so it is difficult to compare the level of underachievement in this study with underachievement generally. However, in 2007, according to teacher assessment and national tests, 16% of English 7 year olds (National Literacy Trust, 2008) and 16% of 11 year olds (DfES, 2007), failed to reach the expected level for reading. This suggests that the level of underachievement in this study is modest as claimed.

2. The authors knew of only a few children who definitely received extra help [p.69]. With the exception of AF, there is too little information reported about their progress to confirm Claim 2.

3. Because of poor language development, AF began P1 when he was nearly 6, a year older than usual [p. 44]. At this stage he could not read any words in the BAS test, nor did he make any progress for two terms in an analytic phonics group. No result is recorded for the end of P1, immediately after the SP programme. However, by the end of P2 he had made 8 months progress. Progress was sustained in P3, slower in P4 and P6, but faster in P5 and P7 following intervention programmes [pp. 45-63]. The interventions concentrated on letter-sound correspondences and the skill of blending, according to SP principles [pp. 54-60]; so it is plausible that periods of faster progress were due to SP [p. 64]. By the end of P7, AF's RA was 13.2 years, 9 months above his chronological age. This is impressive, and justifies Claim 3.

Johnston is a professor of psychology at Hull University (University of Hull, 2008) and Watson is a member of the school of psychology research staff at St Andrews University (University of St Andrews, 2008). Johnston and Watson were already convinced of the value of phonics teaching before this study began (see Johnston et al., 1995). However, I found no evidence that they held preconceptions about whether SP is better than other phonics teaching methods.

Synthesis

Poor literacy has serious implications (Burroughs-Lange, 2007), and prevention at an early stage is the underlying goal of both studies, but their methods are different. In one, early SP for all children was followed by extra SP for underachieving children. In the other, after about a year at school, children judged as low achievers were given one-to-one tuition in RR.

The authors appear to make contradictory claims – that only RR can help poor readers or that only SP can. But they word their claims carefully. Although the RR study does not support Burroughs-Lange's claims, they are not contradicted by the SP study. Burroughs-Lange claims that 'schools could enable almost every child to learn to read ... appropriately for their age if those who were failing were given access to expert teaching in Reading Recovery'. Next she claims that 'without RR, children with low literacy understanding do not catch up ... during Key Stage 1' (Burroughs-Lange, 2007, p. 44). She does not claim that RR is the only intervention that will ever work, only that it does work and that it is the only intervention that works in Key Stage 1. Johnston and Watson do not claim that SP is the only method that helps poor readers, only that fewer children underachieved following SP instruction and some of them improved with extra help.

Theoretical Positions

The basis for my review is that there is a fundamental difference between the principles of SP and RR, but the DCSF implies that they are complementary (Every Child a Reader, 2008) and so does RR (Bodman, 2007). The following is evidence that the methods *are* contradictory.

Bodman describes a RR lesson, which 'links the teaching actions to the ideas of synthetic phonics': *After* reading a book, a child learns about the letter 'p'. Next he observes his teacher reading the word 'can' 'whilst demonstrating a left to right hand sweep'. Then he builds 'can' with magnetic letters and reads it himself (Bodman, 2007). With SP 'children are not told the pronunciation of a new word'. They learn letter sounds and how to blend the sounds to read words independently, *before* reading books [SP study, pp. 10,11]. Government guidance for phonics (DCSF, 2008) states that children should 'have opportunities to read texts ... that are within the reach of their phonic knowledge and skills'. It is clear in this RR lesson that the child was asked to read a text *before* acquiring the phonic knowledge and skills involved.

Douëtil (2004, p. 8) writes, 'Children in Reading Recovery are taught how to treat new words as puzzles to be solved'. This emphasis on problem solving is related to constructivist ideas and the teacher's role is to encourage children to discover how to read for themselves. SP, on the other hand, involves direct instruction. Elliot (2007, p.81) states, 'The key to the relationship between .... discovery or discussion methods and instruction ... lies in the pedagogical aim.' If the aim is for children to learn to read words, is discovery or instruction more effective?

Evidence

The RR study involved at least 77 children and a control group. The numbers of children are confusing because they change several times, but this can be explained: some children moved away (Burroughs-Lange, 2007 p.39), while others were identified as suitable for RR tuition, but did not receive it because there were not enough places (Burroughs-Lange, 2007, p. 37). There is credible evidence that children who received RR in Y1 made good progress with reading and maintained that progress in Y2. Other claims for this study are not justified by the evidence given.

In the SP study, there was no control group for comparison. Johnston and Watson provide strong evidence that SP helped one child who had severe language difficulties to read well. One case study does not justify claims about the progress of all underachieving children, and no such claims are made. Nevertheless, it does provide a credible and impressive example of achievement that was probably due to SP.

The purpose of reading is to understand text, but word reading skills are a necessary prerequisite (Rose, 2006, p. 77), so, although both studies provide data about reading comprehension, I have concentrated on evidence of word reading skill.

It is interesting to compare children in the RR study at the beginning of Y1 before RR tuition, with children in the SP study in P1 after their first assessment following SP instruction, when they are about the same age (because Y1 and P1 are for a slightly different age range). I constructed the following chart by combining figures from the RR study (Burroughs, 2006, p. 7) and the SP study (Johnston and Watson, 2005, p. 18).

	RR study children beginning Y1		**SP study children after 16 weeks of instruction in P1**		
	schools to get RR	**schools not to get RR**	**Analytic Phonics**	**Analytic Phonics + Phonological Processing**	**SP**
approx av chron age	5.5	5.5	5.4	5.4	5.5
number	605	566	104	75	113
Mean RA BAS	no results available		5.4	5.4	6.0
Mean RA WRaPS	5.1 years	5.1 years	no results available		

Although the tests were different, and so a precise comparison is impossible, this shows that children in the SP group were significantly ahead of the others after only 16 weeks of SP instruction. This suggests that there will be less underachievement in future, following implementation of SP for the initial teaching of reading. SP programmes like Letters and Sounds continue beyond the first 16 weeks for all children and include further direct

instruction in the phonics AF did not know (Johnston and Watson, 2005, p. 51). It is plausible that results will be better still as a result.

Conclusions

Both studies rely on empirical evidence and involve quantitative research. I agree with Bassey (2007, p. 143) that, 'when the concern is to provide knowledge for policy makers, it is quantitative work in a positivist paradigm that is often appropriate'. However, when the results of research are contradictory, policy makers should be cautious. Kemmis (2007, p. 179) suggests that empirical research results in an interest in 'hierarchical bureaucratic control'. In this case I think that bureaucratic action, promoting both SP and RR, is confusing for practitioners and for children who find reading difficult. Moreover, such intervention in teaching methods may undermine the efforts of individual teachers to reflect on their practice (see Kemmis, 2007, pp. 168,169).

I found a plethora of contradictory literature about the value of RR, making it difficult to form a judgement. However, this review provides evidence that RR helps poor readers reach a reading age of about 8 years old, while SP for all children reduces the need for intervention. Evidence from this study for SP as an intervention is weaker, indicating a need for further investigation. It appears that continuing SP beyond sixteen weeks for all children, combined with extra practice for poor readers, may be more effective than RR.

References

Bassey, M (2007) 'On the kinds of research in educational settings' in Hammersley, M. (ed) *Educational Research and Evidence-based Practice*. Sage Publications Ltd., London, pp. 141-150

Bodman, S. (2007) 'Skilful teaching of phonics in Reading Recovery', *The Running Record, Issue 12*, pp. 3-5

Burroughs-Lange, S. (2007) *Comparison of Literacy Progress of Young Children in London Schools: A Reading Recovery Follow up Study* [online], University of London Institute of Education, Available from: http://www.everychildareader.org/pubs/London_eval_May_08.pdf (Accessed 5 August 2008)

Burroughs-Lange, S (2007) *Evaluation of Reading Recovery in London Schools: Every Child A Reader 2005-2006*, University of London

Department for Education and Skills (2007) *Department for Education and Skills Departmental Report 2007* [online], TSO (The Stationery Office) Available from: http://www.dcsf.gov.uk/aboutus/reports/pdfs/deptreport2007.pdf. (Accessed 2 August 2008), p. 47.

Department for Children, Schools and Families (2008), *Core Criteria* [online], Available from: http://www.standards.dfes.gov.uk/phonics/programmes/core/ (Accessed 8 August 2008)

Department for Children, Schools and Families, *Every Child a Reader and national developments in the teaching of early reading* [online] Available from: http://www.standards.dcsf.gov.uk/primary/publications/literacy/pri_every_chld_rdr0003408/ (Accessed 8 August 2008)

Department for Education and Skills (2007) *Letters and Sounds: Principles and Practice of High Quality Phonics,* DfES Publications

Department for Children, Schools and Families (2007) *National Curriculum Assessments at Key Stage 2 in England, 2007* [online], Available from: http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000737/SFR24-2007.pdf (Accessed 8 August 2008)

Department for Children, Schools and Families (2008) *Schools Research News May 2008* [online], Available from: www.standards.dfes.gov.uk/research/2008maynewsletter.doc (Accessed 4 August 2008)

Department for Children, Schools and Families, *Standards Site* [online], Available from: http://www.standards.dfes.gov.uk/phonics/ (Accessed 4 August 2008)

Department of Psychology, *Prof. Rhona Johnston* [on-line], The University of Hull, Available from: http://psy.hull.ac.uk/Staff/r.s.johnston/ (accessed 5 August 2008)

Douëtil, J. (2007), *International research on long- and short-term outcomes of Reading Recovery, and comparisons with other programmes* [online] DfES. Available from http://www.standards.dfes.gov.uk/primary/publications/literacy/pri_every_chld_rdr0003408/pri_ecar_research03408.pdf (accessed 7 August 2008)

Douëtil, J. (2006), *Reading Recovery Annual Report for Every Child A Reader:2005-2006* [online], University of London. Available from: http://www.ioe.ac.uk/schools/ecpe/readingrecovery/pages/index_nat_report_ECAR_executive_0506.pdf (accessed 5 August 2008)

Douëtil, J. (2004) 'When Reading is no Pleasure', *The Running Record*, Issue 10, pp. 7,8

Elliot, J. (2007) 'Making evidence-based practice educational' in Hammersley, M. (ed) *Educational Research and Evidence-based Practice*. Sage Publications Ltd., London, pp. 66-88

Faculty of Children and Health [on-line], Institute of Education, University of London, Available from: http://ioewebserver.ioe.ac.uk/ioe/cms/get.asp?cid=4378&4378_0=4888 (Accessed 5 August 2008)

Johnston, R.S, Connelly, V. and Watson, J. (1995) 'The effects of phonics teaching on reading development', in Owen P. and Pumfrey P (eds) *Children learning to read: International Concerns* Vol 1, Falmer Press.

Johnston, R.S. and Watson, J. (2005) *The Effects of Synthetic Phonics Teaching on Reading and Spelling Attainment, a Seven Year Longitudinal Study,* Insight No. 17, A Scottish Government publication, on-line at http://www.scotland.gov.uk/Publications/2005/02/20688/52449

Kemmis, S (2007) 'Action research' in Hammersley, M. (ed) *Educational Research and Evidence-based Practice*. Sage Publications Ltd., London, pp. 167-180

LACA (2007), *National School Meals Survey*, *England, 2007* [on-line], Local Authorities Catering Association, Surrey. Available from: http://www.warrington.gov.uk/Images/LACASurvey2007_tcm31-20615.pdf (Accessed 5 August 2008)

National Literacy Trust (2008), *Children's and young people's literacy levels in England*, [online], Available from: http://www.literacytrust.org.uk/database/Stats/englandstats.html#KS1 (Accessed 4 August 2008)

Rose J. (2006) *Independent Review of Early Reading, Final Report*, DfES Publications, Nottingham

Scottish Government, *Scottish Neighbourhood Statistics*, [online], Available from: http://www.sns.gov.uk/Reports/Report.aspx?ReportId=3&MetaIndicatorCode=CS-incdeprived#Meta (Accessed 1 August 2008)
www.standards.dfes.gov.uk/research/2008maynewsletter.doc (Accessed 4 August 2008)

The University of St Andrews (2008) *Research Staff* [on-line], Available from: http://psy.st-andrews.ac.uk/people/researchers.shtml (accessed 5.8.08)