



Reading Recovery™ Annual Report for the United Kingdom and Ireland: 2008-9

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Executive summary

Headlines

- The year 2008-09 saw around a 50% increase in size of the Reading Recovery implementation in England and a sustained, though smaller increase in Ireland
- Literacy levels at entry were slightly lower than in previous years
- Almost 81% or sixteen out of every 20 children were lifted from being non-readers to age appropriate levels of literacy
- This was achieved in the same time scale as in previous years, less than 40 hours of teaching, and children made the same leap in progress with them moving from being non-readers and writers to age appropriate levels of literacy
- Attainment gaps narrowed between boys and girls; poor children and their more affluent peers, and most ethnic minority groups and the majority
- Almost half the cohort of teachers reported were in training, and many teacher leaders were new in the field, which may have had an effect on outcomes

Evaluation questions

- 1. How many children were involved in Reading Recovery and which children were they?
- 2. What were the programme outcomes for Reading Recovery children?
- 3. What were the literacy levels of children in the Reading Recovery programme?
- 4. What progress did children make after Reading Recovery?
- 5. Where were Reading Recovery children placed in a register of Special Educational Need at the beginning of their programme, and following their programme?
- 6. What were the results of National Assessments for Reading Recovery children?
- 7. What was the efficiency of the Reading Recovery implementation?

1: How many children were involved in Reading Recovery and which children were they?

Almost twelve thousand children were served by Reading Recovery in 2008-09 taught by more than one and a half thousand teachers. This was over half as many children again as in 2008. Over two thirds of the cohort were in England, and one in five in the Republic of Ireland. The rapid expansion in England is evident in the very high proportion of the teacher cohort who were in training during the year, over 75%. The number of children served in England had increased by almost 50% compared with 2008, due to the expansion of the funded Every Child a Reader (ECaR) project. The Republic of Ireland also saw a large proportional increase in the number of children served, by 34% over 2007-08, continuing the rapid expansion there. In Northern Ireland only 13 children were served, as funding difficulties continue. Wales also experienced funding difficulties but managed to serve 170 children, a one fifth decline on the previous year.

Two out of three children (68%) identified for Reading Recovery were in the first year of formal schooling (after reception/foundation stage) and of those in their second year, around half had started their series of lessons in the previous year.

Boys continue to be over represented among the lowest attaining children identified for Reading Recovery (60% of the cohort) as are poor children and bilingual learners. Half of the cohort (50%) came from economically disadvantaged homes, a very high proportion compared with the distribution of such children in the general population (18%).

Just under one in four (24%) were learning English as an additional language a further small increase on the previous year. The proportion of the cohort from ethnic minority backgrounds increased from 30% to 33%.

Although the proportion of children at particularly high risk of educational difficulties (e.g. looked after children) remained small overall at 6%, there were almost 700 children in all, compared with fewer than 500 in the previous year.

2: What were the programme outcomes for Reading Recovery children?

Children achieved the goals of the programme, progressing from being the lowest attaining children to age appropriate levels of literacy, in a relatively short time, on average just under 20 weeks or 78 lessons, representing on average less than 40 hours of teaching.

Children who did not achieve accelerated learning were given around two weeks longer, but that constituted only an average of four more lessons. These children missed substantially more lessons, which could be a contributing factor to them not achieving accelerated progress. It is a matter of concern if any child is referred after a very short series of lessons but this is rare, only 35 children were referred after fewer than 10 weeks.

Almost seventeen out of every twenty children who completed Reading Recovery achieved accelerated learning in 2008-09, reaching independent levels of literacy within the required time. Given that these were the lowest attaining children, with high levels of disadvantage, and that criteria for success in Reading Recovery are very demanding (see section 3) this is a tremendous achievement and testament to the efforts of both teachers and children. This is consistent with the high outcomes achieved since the introduction of Reading Recovery and first annual monitoring in 1993-94, although slightly lower than in 2007 and 2008. It is likely that the slight drop is accounted for by the high proportion of teachers in the cohort who were in training during the year, as well as the high number of new teacher leaders.

The achievement gap that was evident in the disproportionate numbers of boys and the over-representation of poor children among the least able had been considerably narrowed at the end of their Reading Recovery programme. The gap for poor children was almost closed, with 80% attaining age appropriate levels of literacy, alongside 82% of their more advantaged peers. Although girls still did slightly better than boys, nevertheless four out of five boys were successful. Children whose first language was not English were very slightly more successful than their English first language peers (82% and 80% discontinued respectively).

Overall, children from ethnic minority groups achieved the same level of success as those from any white background, with 80% achieving age appropriate levels of literacy. There was variation between ethnic groups, but even those who struggled most, such as the

mixed race white and black Caribbean children, saw more than four out of five achieving age appropriate literacy levels.

Sixty eight of the 90 looked after children (76%) who had completed their series of lessons by the end of the year achieved accelerated learning, as did 67 out of 78 asylum seeker or refugee children (86%). Three out of four traveller children who completed the programme within the year achieved accelerated progress.

The timing of the intervention between the first and second years of formal schooling had little effect on outcome, as did the interruption caused by the summer break for programmes which began in the summer term and were carried across into the new school year.

3: What were the literacy levels of children in the Reading Recovery programme?

Children who were identified for Reading Recovery had made very little progress in literacy prior to the intervention compared to normal readers and writers of their age. On the British Abilities Scales measure of reading age they averaged four years 10 months, the lowest possible reading age score on that measure, effectively non-readers after one or even two full years of formal literacy teaching.

Entry level attainment scores of children identified for Reading Recovery provide some insight into changes in classroom practices. In recent years, there has been an increase in letter identification and HRSIW scores, but decreases in both book level and concepts about print scores. This indicates that shifts in teaching practices have caused pupil experience using books to decline.

Once children started Reading Recovery, they made considerable progress on all measures with those children who achieved accelerated progress (81% of completed programmes) achieving an average reading age of six years 10 months. This represented a gain of 24 months during the four or five months of their series of lessons, more than four times the normal rate of progress. They gained on average 16 text levels.

Children who did not make accelerated progress (19% of completed programmes) nevertheless made progress, achieving an average reading age of five years 10 months, a gain of 12 months, which is two to three times the normal rate of progress. They progressed on average eight text levels and so could no longer be considered non-readers.

4: What progress did children make after Reading Recovery?

In the six months following the end of their series of lessons, without further individual teaching, children who had achieved the goals of Reading Recovery (81% of completed programmes) not only maintained the gains they had made during their series of lessons, but continued to make steady progress, gaining six months in reading age in six months. These were children who, prior to Reading Recovery, had made very little progress in literacy but the evidence suggests that they had acquired independent strategies for

learning more about reading and writing.

Children who had not achieved the accelerated progress which is the goal of the intervention also made further progress in the six months following the end of their individual lessons, and indeed continued to make progress at the same rate as children without literacy problems. So, although still behind their peers, the evidence suggests that these children had also begun to develop strategies for independent literacy learning.

5: Where were Reading Recovery children placed in a register of Special Educational Need at the beginning of their programme, and following their programme?

Following Reading Recovery over 1600 children, or 21% of the cohort, who had been identified as having SEN could be removed from the register of special educational needs. This was a substantial increase on the previous year (400). The numbers of children at each level of SEN was reduced. Those children who had not made expected progress in Reading Recovery (172) could be more clearly identified as requiring formal assessment at an early stage in their learning. This suggests that a successful Reading Recovery implementation can reduce substantially the numbers of children registered as having Special Educational Needs, and efficiently identify those in need of specialist support.

6: What were the results of National Assessments for Reading Recovery children (UK only)?

More than two out of three children who received Reading Recovery attained level two or above in National Assessments for reading (68%). This included children who did not achieve the goals of the programme, and those who received Reading Recovery in Year two and were still part way through their series of Reading Recovery lessons when National Assessments took place. More than half (55%) attained level two or above in writing.

Children who achieved the goals of Reading Recovery had an even greater likelihood of success in National Assessments, with 17 out of 20 (81%) reaching level two or above in reading and 13 out of 20 (66%) in writing.

7: What was the efficiency of the Reading Recovery implementation?

Almost half (45%) of teachers in the cohort were in training during the data year 2008-09 and were still learning how to make Reading Recovery work with the children featured in this report. This compares with two in five in 2008 and two in six in 2007. Conversely only one in 10 teachers (13%) had been teaching in Reading Recovery for some considerable time, compared with one in five in 2008 and one in four in 2007. This reflects regional increases in opportunities for training, driven by expansion in the Republic of Ireland and by ECaR in England, and represents a shift towards a less experienced teacher cohort.

As might be expected, experienced teachers were able to solve the problems of a higher proportion of children, compared with those learning how to teach in Reading Recovery for

the first time and they were able to do so more quickly. In 2008-09 there was an increased proportion of new and relatively inexperienced teachers in the cohort, and also of new and relatively inexperienced teacher leaders, a factor which may have contributed to the lower rate of programmes reaching discontinuing levels in 2009 compared with previous years.

Teachers in training were able to safeguard their teaching time a little more than experienced teachers, missing on average three fewer lessons, potentially saving the equivalent of half a week on each child's programme. However, the number of lessons missed by experienced teachers did reduce to 14, compared with 18 in 2008.

Teachers' other duties impacted upon their ability to provide daily lessons. Those whose only responsibility was Reading Recovery, often part time teachers, provided the most consistent daily lessons. Those with senior posts, including headteachers/ principals and their deputies (listed Other), were the most likely to be drawn away from daily teaching. Those who combined class teaching and Reading Recovery also suffered frequent interruptions, potentially adding three weeks to each child's programme.

Introduction

Reading Recovery[™] is a short-term intervention for children who have the lowest achievement in literacy learning in their first years at school. Children are taught individually by a specially trained teacher for 30 minutes each day for an average of 12-20 weeks. The goal is for children to develop effective reading and writing strategies in order to work within an average range of classroom performance.

Reading Recovery is an early intervention. Proficient readers and writers develop early. There is strong evidence that school failure leads to lack of self-esteem, diminished confidence, school dropout, and other negative outcomes. It is, therefore, necessary to direct educational policy and funding to the prevention of reading failure. Reading Recovery has a strong track record of preventing literacy failure for many children through early intervention.

The key to the successful implementation of Reading Recovery is in the model of training. Three levels of professional staffing provide a stable training structure: university based trainers who train and support teacher leaders/ teacher leaders; local level teacher leaders/ teacher leaders working at authority or district level, who train and support teachers; and school-based teachers who work with the hardest-to-teach children.

The initial Reading Recovery teacher training course is part-time, for one academic year, during which the teacher works with low attaining children in their school. Teachers become sensitive observers of children's reading and writing behaviours and develop skill in making moment-by-moment analyses that inform teaching decisions.

Following the initial year of training, teachers continue to participate in ongoing professional development sessions. They continue to teach for their colleagues and to discuss their professional decision making. Continuing professional development sessions provide collaborative opportunities for teachers to remain responsive to individual children, to question the effectiveness of their practices, to get help from peers on particularly hard-to-teach children, and to consider how new knowledge in the field may influence their practice.

Reading Recovery is not an isolated phenomenon in schools. It has a carefully designed plan for implementation into existing systems. The success of any intervention such as Reading Recovery is influenced by the quality of the decisions made about implementation.

Replication studies document outcomes for all children served in Reading Recovery. Consistent outcomes have been shown for children across the UK and Republic of Ireland. A large majority of children with completed programmes have been successful in reaching age appropriate levels of literacy performance. There is also evidence that the effects of Reading Recovery are long lasting.

This report represents an examination of Reading Recovery pupil outcomes for UK and Ireland. The report accounts for all children served by Reading Recovery within the site during the 2008-9 school year. In addition, attention is given to implementation factors that

may be supporting or hindering the success of the intervention within the site. This report responds to a need to be accountable for all educational programmes available to children within the authority or district.

The information was collected as a part of the European Centre for Reading Recovery Annual Monitoring procedure. Further information about Reading Recovery is available from the Reading Recovery national trainer/coordinator team at http://readingrecovery.ioe.ac.uk or by emailing readingrecovery.ioe.ac.uk or by emailing readingrecovery.ioe.ac.uk.

Question 1: How many children were involved in Reading Recovery and which children were they?

Almost twelve thousand children were served by Reading Recovery in 2008-09 (Table 1.1) taught by more than one and a half thousand teachers. This was over half as many children again as in 2008. Over two thirds of the cohort were in England, and one in five in the Republic of Ireland.

The rapid expansion in England is evident in the very high proportion of the teacher cohort who were in training during the year, over 75%. The number of children served in England had increased by almost 50% compared with 2008, due to the expansion of the funded Every Child a Reader (ECaR) project (Table 1.2).

The Republic of Ireland also saw a large proportional increase in the number of children served, by 34% over 2007-08, continuing the rapid expansion there. In Northern Ireland only 13 children were served, as funding difficulties continue. Wales also experienced funding difficulties but managed to serve 170 children, a one fifth decline on the previous year.

Table 1.1 Size of the Reading Recovery implementation across the regions of the UK and Ireland in 2008-9.

	Children served	All teachers	Teachers in training	% of teachers in training
Entire implementation	11969	1519	682	45
England •	9610	1184	577	49
Northern Ireland	13	2		
Republic of Ireland	2176	312	99	32
Wales	170	21	6	29

Table 1.2 Number of children served by Reading Recovery across the regions of the UK and Ireland 2004-5 to 2008-9.

	2008-9	2007-8	2006-7	2005-6	2004-5
Entire implementation	11969	7738	5341	4767	5372
England	9610	5276	2893	1796	1719
Northern Ireland	13	625	1023	1603	2707
Republic of Ireland	2176	1628	1062	784	512
Wales	170	202	275	251	289

Reading Recovery is designed to meet the needs of the lowest attaining children in literacy. The expertise of the Reading Recovery teacher can also be utilised to support lighter touch interventions for children with less complex literacy difficulties. Table 1.3 shows the number of children supported by the Reading Recovery teacher through Reading Recovery or other interventions.

Table 1.3. Number of children served, UK and Ireland, 2008-9.

Programme/Intervention name	Number of children served
Reading Recovery	11969
Special	6
Better Reading Partnership	2248
Fischer Family Trust	417
Talking Partners	151
Early literacy support	346
Other	397
Total	15534

Year group

Children are normally identified and selected for Reading Recovery between the ages of five years nine months and six years three months, after a full year of formal tuition at school. Local conditions, e.g. admission policies or national assessments, may influence the targeting of resources towards the first or second year (after reception) and account is taken of date of birth to ensure that summer born children are not excluded.

Gender

Children are selected for Reading Recovery based on literacy levels. Nationally, a slightly higher proportion is selected of boys than girls for Reading Recovery. This suggests that factors which affect boys' literacy, causing them to be more likely to get into difficulties, emerge early and continue to exist in spite of improvements in literacy teaching in schools.

Ethnicity

Children selected for Reading Recovery are the lowest attaining in their year group. Concerns have been expressed nationally about underachievement of children in some ethnic groups and how to address them. Where possible data on children's ethnicity, based on the UK national census, has been gathered to inform these concerns.

First language

Approximately 5% of the entire primary school population speaks English as an additional language. Among Reading Recovery children this statistic varies considerably from place to place and the extent of their control of English language is also very variable.

Free school meals

Although a crude measure, entitlement to free school meals offers an indicator of economic deprivation. Research has shown persistent links between economic deprivation and literacy difficulties. In the general population, approximately 18% of children are entitled to free school meals.

Special cohort group

Certain groups of children have been shown to be vulnerable to academic underachievement, including children of travellers, children of asylum seekers or refugees, and 'looked after' children (or children in the care of the local authorities).

Two out of three children (68%) identified for Reading Recovery were in the first year of formal schooling (after reception/foundation stage) and of those in their second year, around half had started their series of lessons in the previous year (Table 1.4).

Boys continue to be over represented among the lowest attaining children identified for Reading Recovery (60% of the cohort) as are poor children and bilingual learners. Half of the cohort (50%) came from economically disadvantaged homes, a very high proportion compared with the distribution of such children in the general population (18%).

Just under one in four (24%) were learning English as an additional language a further small increase on the previous year. The proportion of the cohort from ethnic minority backgrounds increased from 30% to 33%.

Although the proportion of children at particularly high risk of educational difficulties (e.g. looked after children) remained small overall at 6%, there were almost 700 children in all, compared with fewer than 500 in the previous year.

Table 1.4. Characteristics of children participating in Reading Recovery at entry to the programme: By programme completion, UK and Ireland, 2008-9.

Description	All Progr	ammes	Completed Progra	ammes
•	Number	Percent (%)	Number	Percent (%)
Year Group				
Age 5-6	8170	68.3	4166	54.4
Age 6-7	3710	31	3424	44.7
Age 7-8	78	0.7	70	0.9
Programme Started				
This year	9988	83.4	5871	76.6
Last year	1891	15.8	1776	23.2
Not known	90	0.8	17	0.2
Gender				
Boys	7154	59.8	4580	59.8
Girls	4807	40.2	3080	40.2
Not known	8	0.1	4	0.1
Ethnicity				
Eastern European	425	3.6	245	3.2
Any Other White background	7647	63.9	4943	64.5
White and Black Caribbean	247	2.1	139	1.8
White and Black African	78	0.7	53	0.7
White and Asian	79	0.7	43	0.6
Any Other Mixed background	178	1.5	118	1.5
Indian	205	1.7	143	1.9
Pakistani	757	6.3	452	5.9
Bangladeshi	442	3.7	301	3.9
Any Other Asian background	191	1.6	126	1.6
Caribbean	305	2.5	185	2.4
African	608	5.1	403	5.3
Any Other Black background	180	1.5	107	1.4
Chinese	27	0.2	17	0.2
Other	237	2	160	2.1
Not Appropriate/Unknown	363	3	229	3
First Language				
English	9087	75.9	5842	76.2
Not English	2875	24	1821	23.8
Not known	7	0.1	1	C
Free School Meals				
Entitled	6062	50.6	3854	50.3
Not Entitled	5475	45.7	3527	46
Not Appropriate/Unknown	432	3.6	283	3.7
Special Cohort Group				
No	11094	92.7	7115	92.8
'Looked after' child	143	1.2	90	1.2
Traveller child	214	1.8	124	1.6
Asylum seeker or refugee child	113	0.9	78	1
Other special group	218	1.8	142	1.9
Not Appropriate/Unknown	187	1.6	115	1.5

NOTE: "All Programmes" includes every child served by Reading Recovery in 2008-9. "Completed Programmes" are only those children whose programmes were actually completed during 2008-9.

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Table 1.5. Reading Recovery implementation information, UK and Ireland, 2008-9.						
Number of authorities/districts served:	141					
Number of schools served:	1433					
Number of teacher leaders:						
Trained:	61					
In-Training:	23					
Number of teachers:						
Trained:	837					
In-Training:	682					

Reading Recovery is now widespread across the UK and Ireland, serving as it does around 140 authorities/ districts and just under 1500 schools.

Question 2: What were the programme outcomes for Reading Recovery children?

Length of programmes

Reading Recovery is a short term intervention, and there is an imperative for teachers to work briskly. There is no prescribed length to children's programmes; teachers tend to take a little longer to achieve their goals during the year of training and children who start with very little in place may take longer to get under way.

Children achieved the goals of the programme, of progressing from being the lowest attaining children to age appropriate levels of literacy, in a relatively short time, on average just under 20 weeks or 78 lessons, representing on average less than 40 hours of teaching.

Children who did not achieve accelerated learning were given around two weeks longer, but that constituted only an average of four more lessons. These children missed substantially more lessons, which could be a contributing factor to them not achieving accelerated progress.

It is a matter of concern if any child is referred after a very short series of lessons but this is rare, only 35 children were referred after fewer than 10 weeks.

Table 2.1. Weeks and lessons of children completing Reading Recovery programmes: By programme outcome, UK and Ireland, 2008-9.

Outcome/Time	Total pupils	Mean	SD	Minimum	Maximum
Accelerated progress (discontinued)					
Weeks	6119	19.5	5.1	4	35
Lessons	6116	78.1	20.8	12	160
Lost lessons	6112	19.5	12.9	-21	123
Progress (referred)					
Weeks	1409	21.3	4.7	5	35
Lessons	1407	81.9	20.5	15	153
Lost lessons	1405	24.5	14	-7	95

NOTE: "Lost lessons" is the difference between the ideal number of lessons (total weeks × 5 lessons per week) and the actual number of lessons.

NOTE: This table excludes children taught by teacher leaders

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Outcomes

There were five possible outcomes for children who received Reading Recovery.

- 1. Accelerated Progress (Discontinued): These children have made sufficient progress in literacy learning, within the time available, to catch up with the average band for their class, and have been judged to be likely to continue learning at the same rate as their peers, without the need for further special support.
- 2. Progress (Referred): The children have made progress, but have not reached the average band in literacy and will continue to need additional support.
- 3. Ongoing: These children started the programme late in the school year, and have not yet completed it, but will do so in the new school year.
- 4. Left: These children left the school part way through their programme.
- 5. Incomplete: These children were part way through their series of lessons when the programme had to be suspended, e.g., because of withdrawal of funding.

Almost seventeen out of every twenty children who completed Reading Recovery achieved accelerated learning in 2008-09, reaching independent levels of literacy within the required time (Table 2.2). Given that these were the lowest attaining children, with high levels of disadvantage, and that criteria for success in Reading Recovery are very demanding (see section 3) this is a tremendous achievement and testament to the efforts of both teachers and children. This is consistent with the high outcomes achieved since the introduction of Reading Recovery and first annual monitoring in 1993-94 (Fig 1), although slightly lower than in 2007 and 2008 (Fig 1). It is likely that the slight drop is accounted for by the high proportion of teachers in the cohort who were in training during the year, as well as the high number of new teacher leaders.

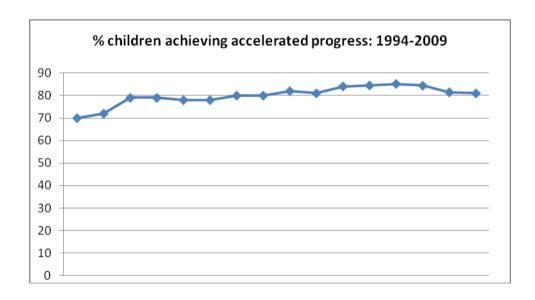
Table 2.2. Programme outcomes for children receiving Reading Recovery: By programme completion, UK and Ireland, 2008-9.

Outcome	All Pro	grammes	Completed Programmes			
	Number	Percent (%)	Number	Percent (%)		
Accelerated progress (discontinued)	6210	51.9	6210	81		
Progress (referred)	1454	12.1	1454	19		
Ongoing	3665	30.6				
Incomplete	344	2.9				
Left	279	2.3				
Not known	17	0.1				

NOTE: "All Programmes" includes every child entering Reading Recovery in 2008-9. "Completed Programmes" are only those children whose programmes were actually completed during 2008-9.

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Fig 1. Proportion of children with completed programmes achieving accelerated progress, since national monitoring began, UK and Republic of Ireland, 1994 - 2009.



The achievement gap that was evident in the disproportionate numbers of boys and the over-representation of poor children among the least able had been considerably narrowed at the end of their Reading Recovery programme (Table 2.3). The gap for poor children was almost closed, with 80% attaining age appropriate levels of literacy, alongside 82% of their more advantaged peers. Although girls still did slightly better than boys, nevertheless four out of five boys were successful. Children whose first language was not

English were very slightly more successful than their English first language peers (82% and 80% discontinued respectively).

Overall, children from ethnic minority groups achieved the same level of success as those from any white background, with 80% achieving age appropriate levels of literacy. There was variation between ethnic groups, but even those who struggled most, such as the mixed race white and black Caribbean children, saw more than four out of five achieving age appropriate literacy levels.

Sixty eight of the 90 looked after children (76%) who had completed their series of lessons by the end of the year achieved accelerated learning, as did 67 out of 78 asylum seeker or refugee children (86%). Three out of four traveller children who completed the programme within the year achieved accelerated progress.

The timing of the intervention between the first and second years of formal schooling had little effect on outcome, as did the interruption caused by the summer break for programmes which began in the summer term and were carried across into the new school year.

Disaggregated outcomes

Table 2.3. Characteristics of children completing Reading Recovery programmes: By programme outcome, UK and Ireland, 2008-9.

Characteristic	Accelerated P	rogress (Discontinued)	Made Progress (Referred)			
	Number	Percent (%)	Number Percent (%)			
Year Group						
Age 5-6	3415	82	751	18		
Age 6-7	2729	79.7	695	20.3		
Age 7-8	62	88.6	8	11.4		
Programme Started						
This year	4838	82.4	1033	17.6		
Last year	1367	77	409	23		
Not known	5	29.4	12	70.6		
Gender						
Boys	3625	79.1	955	20.9		
Girls	2583	83.9	497	16.1		
Not known	2	50	2	50		
Ethnicity						
Eastern European	206	84.1	39	15.9		
Any Other White background	3972	80.4	971	19.6		
White and Black Caribbean	104	74.8	35	25.2		
White and Black African	45	84.9	8	15.1		
White and Asian	36	83.7	7	16.3		
Any Other Mixed background	94	79.7	24	20.3		
Indian	123	86	20	14		
Pakistani	356	78.8	96	21.2		
Bangladeshi	254	84.4	47	15.6		
Any Other Asian background	114	90.5	12	9.5		
Caribbean	148	80	37	20		
African	347	86.1	56	13.9		
Any Other Black background	94	87.9	13	12.1		
Chinese	15	88.2	2	11.8		
Other	123	76.9	37	23.1		
Not Appropriate/Unknown	179	78.2	50	21.8		
First Language						
English	4708	80.6	1134	19.4		
Not English	1501	82.4	320	17.6		
Not known	1	100	0	0		
Free School Meals						
Entitled	3295	80.1	819	19.9		
Not Entitled	2898	82.2	629	17.8		
Not Appropriate/Unknown	17	73.9	6	26.1		
Special Cohort Group						
No	5774	81.2	1341	18.8		
'Looked after' child	68	75.6	22	24.4		
Traveller child	93	75	31	25		
Asylum seeker or refugee child	67	85.9	11	14.1		
Other special group	113	79.6	29	20.4		
Not Appropriate/Unknown	95	82.6	20	17.4		

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Question 3: What were the literacy levels of children in the Reading Recovery programme?

Children selected for Reading Recovery are the lowest achieving in their class on six measures of early literacy which together comprise the Observation Survey (Clay, 2002). These measures are Book Level (captured by running record of text reading), Letter Identification, Concepts about Print, Word Reading Test, Writing Vocabulary and Hearing and Recording Sounds in Words. In addition, the British Abilities Scale Word Reading assessment is administered to provide an external standardised assessment. The programme is discontinued when children are judged to have an efficient reading and writing process in place and to be operating within the average band for their class and age. Children who do not achieve the accelerated progress required for the programme to be discontinued are referred back to the school for longer-term support.

Average scores at entry and exit

Table 3.1. Scores on *Observation Survey* tasks of children with completed Reading Recovery programmes: At entry to and exit from the programme, UK and Ireland, 2008-9.

Assessment	Total	Book Level		Lette Identifica		Concep about P		Word Test		Writir Vocabu	5	HRSI	W F	BAS Reading Age
Point	Pupils	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean
Entry	7662	1.1	1.7	40.4	12.3	11	4	6.5	5.5	9.4	8.6	18.7	10.3	4:10
At discontinuing (accelerated progress)	6209	17.4	2.5	52.3	5	19.9	2.9	21.4	2.6	42.9	16.4	34.9	3.8	6:10
At referral (progress)	1443	9.3	3.9	47.6	8.8	15.9	3.9	15	5.8	23.6	13.4	28	8.4	5:10
All completed programmes	7652	15.9	4.2	51.4	6.2	19.1	3.5	20.2	4.3	39.3	17.6	33.6	5.7	6:7

NOTE: "HRSIW" is the Hearing and Recording Sounds in Words task.

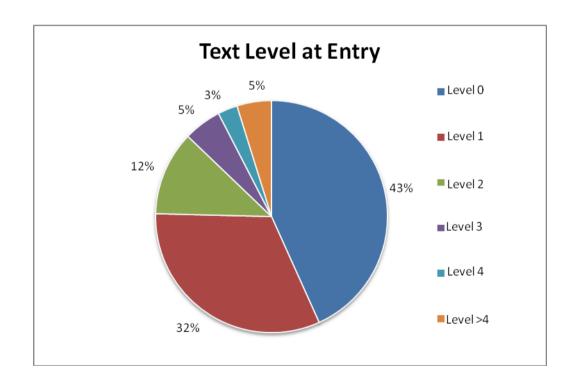
Children who were identified for Reading Recovery had made very little progress in literacy prior to the intervention (Table 3.1) compared to normal readers and writers of their age. On the British Abilities Scales measure of reading age they averaged four years 10 months, the lowest possible reading age score on that measure, effectively non-readers after one or even two full years of formal literacy teaching.

Table 3.2 Changes in average attainment in literacy prior to Reading Recovery, in sample years across the implementation.

Year	Number		k level - 26)		r Ident. - 54)	_	CAP (0 - 24)		Word test (0 - 15)		iting cab. max)	Rece So	ring & ording unds - 37)
		avg	SD	avg	SD	avg	SD	avg	SD	avg	SD	avg	SD
1994	4694	1.2	1.6	29	15.6	10.1	3.7	1.9	2.4*	5.5	5.4	9.5	8.5
1997	5303	1.4	1.8	34.8	14.4	11.4	3.7	3.6	3.1†	8.2	7.6	13.0	9.5
2000	4989	1.5	2	38.4	13.2	12.5	3.7	4.8	3.5‡	10.3	9.1	15.5	9.9
2003	5008	1.6	2.1	40.3	12.3	12.7	3.7	5.3	3.6‡	11.7	10	17.5	10.2
2007	3671	1.5	2.1	40.2	13.2	11.9	4	7	5.9‡	10.8	10.2	17.9	10.3
2008	5127	1.3	2	39.8	12.8	11.3	4.1	6.5	5.7‡	9.9	9.4	17.8	10.4
2009	7662	1.1	1.7	40.4	12.3	11	4	6.5	5.7‡	9.4	8.6	18.7	10.3

Using Clay (1993, 2002) An Observation Survey Of Early Literacy Achievement

Entry level attainment scores of children identified for Reading Recovery provide some insight into changes in classroom practices. Table 3.2 shows that there has been an increase in letter identification and HRSIW scores, but decreases in both book level and concepts about print scores. This indicates that shifts in teaching practices have caused pupil experience using books to decline.



^{*} Using Clay word reading

[†] Using Canberra word reading

[‡] Using Duncan word reading

Once children started Reading Recovery, they made considerable progress on all measures (Table 3.1) with those children who achieved accelerated progress (81% of completed programmes) achieving an average reading age of six years 10 months. This represented a gain of 24 months during the four or five months of their series of lessons, more than four times the normal rate of progress. They gained on average 16 text levels (see Appendix 1 for an example of a level 17 text).

Children who did not make accelerated progress (19% of completed programmes) nevertheless made progress, achieving an average reading age of five years 10 months, a gain of 12 months, which is two to three times the normal rate of progress. They progressed on average eight text levels (see Appendix A), and so could no longer be considered non-readers.

Question 4: What progress did children make after Reading Recovery?

After the completion of their programme, children are carefully monitored as they adjust to the withdrawal of daily intensive support. Some children may find their progress temporarily checked as they make this adjustment.

Accelerated progress (discontinued)

Table 4.1. Follow-up scores on *Observation Survey* tasks of children with discontinued Reading Recovery programmes: UK and Ireland, 2008-9.

Assessment	Total	,				BAS Reading Age
Point	Pupils	Mean	SD	Mean	SD	Mean
At discontinuing	6156	17.4	2.5	43	16.5	6:10
3 month follow up	3140	19.1	3.1	49.5	19.1	7:1
6 month follow up	998	20.9	3.5	57.5	21.2	7:4

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

In the six months following the end of their series of lessons, without further individual teaching, children who had achieved the goals of Reading Recovery (81% of completed programmes) not only maintained the gains they had made during their series of lessons, but continued to make steady progress, gaining six months in reading age in six months (Table 4.1). These were children who, prior to Reading Recovery, had made very little progress in literacy but the evidence suggests that they had acquired independent strategies for learning more about reading and writing.

Progress (referred)

Table 4.2. Follow-up scores on *Observation Survey* tasks of children referred after Reading Recovery programmes: UK and Ireland, 2008-9.

Assessment	Total	Book Level		Writing Vocabu	BAS Reading Age	
Point	Pupils	Mean	SD	Mean	SD	Mean
At referral	1925	9.4	3.9	23.9	13.2	5:10
3 month follow up	1057	9.6	4.4	27.9	15.2	5:10
6 month follow up	655	11	5	32.9	15.7	6:4

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Children who had not achieved the accelerated progress which is the goal of the intervention also made further progress in the six months following the end of their individual lessons, and indeed continued to make progress at the same rate as children without literacy problems (Table 4.2). So, although still behind their peers, the evidence suggests that these children had also begun to develop strategies for independent literacy learning.

Question 5: Where were Reading Recovery children placed in a register of Special Educational Need at the beginning of their programme, and following their programme?

Children who are struggling to learn literacy may be allocated to registers of Special Educational Need, in a continuum according to the gravity of their need. The specific wording of the register may vary from site to site, so children were recorded as:

- Not on the SEN Register
- At the lowest level on the SEN register
- At mid level on the SEN register.
- Recommended for formal assessment.

The child's placement on a continuum of Special Educational Need was recorded at the beginning of the child's Reading Recovery programme, and again following the child's Reading Recovery programme, in order to determine whether the level of need had changed.

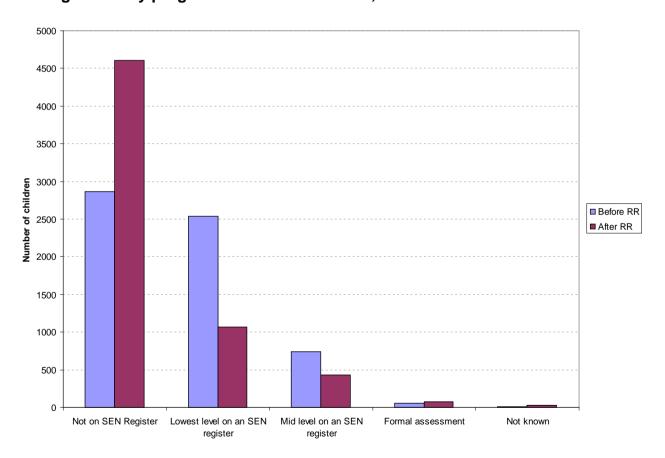
Following Reading Recovery over 1600 children, or 21% of the cohort, who had been identified as having SEN could be removed from the register of special educational needs (Table 5.1). This was a substantial increase on the previous year (400). The numbers of children at each level of SEN was reduced. Those children who had not made expected progress in Reading Recovery (172) could be more clearly identified as requiring formal assessment at an early stage in their learning. This suggests that a successful Reading Recovery implementation can reduce substantially the numbers of children registered as having Special Educational Needs, and efficiently identify those in need of specialist support (Fig 5.1)

Table 5.1. Statement of Special Educational Need of children with completed Reading Recovery programmes: UK and Ireland, 2008-9.

Assessment Total Point Pupils		Not on SEN Register		Lowest level on an SEN register		Mid level on an SEN register		Recommended for formal assessment		Not Known	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Programm	es										
Before RR	7664	3227	42.1	3182	41.5	1141	14.9	89	1.2	2 25	0.3
After RR	7664	4844	63.2	1597	20.8	902	11.8	261	3.4	4 60	0.8
Accelerated P	rogress										
Before RR	6210	2867	46.2	2534	40.8	743	12	57	0.9	9 9	0.1
After RR	6210	4607	74.2	1071	17.2	430	6.9	72	1.2	2 30	0.5
Progress (Ref	erred)										
Before RR	1454	360	24.8	648	44.6	398	27.4	32	2.2	2 16	1.1
After RR	1454	237	16.3	526	36.2	472	32.5	189	13	3 30	2.1

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Figure 5.1. Statement of Special Educational Need of children with completed Reading Recovery programmes: UK and Ireland, 2008-9.



Question 6: What were the results of National Assessments for Reading Recovery children (UK only)?

Children in England undergo continuing teacher assessment reading and writing during their time in Key Stage one. At the end of their second year of formal schooling (age seven) the assessments are collated and reported locally and nationally. The national prescribed target is level two. Children identified for Reading Recovery are the lowest achieving in their class, and would be predicted to reach Level 1or below without the intervention.

More than two out of three children who received Reading Recovery attained level two or above in National Assessments for reading (68% Table 6.1). This included children who did not achieve the goals of the programme, and those who received Reading Recovery in Year two and were still part way through their series of Reading Recovery lessons when National Assessments took place. More than half (55%) attained Level two or above in writing.

Table 6.1. Key Stage one Outcomes of National Assessment for Reading Recovery children: By programme outcome, UK only, 2008-9.

Programme Outcome/National Assessment Level		y Stage one eading	Key Stage one Writing	
	Number	Percent (%)	Number	Percent (%)
Accelerated progress (discontinued)				
Below level 1	3	0.1	38	1.2
1	591	19	1017	32.7
2c	979	31.5	1279	41.2
2b	1081	34.8	639	20.6
2a	365	11.7	116	3.7
3	89	2.9	17	0.5
All completed programmes				
Below level 1	84	2.1	210	5.2
1	1261	31.2	1629	40.3
2c	1108	27.4	1406	34.8
2b	1130	27.9	660	16.3
2a	372	9.2	118	2.9
3	89	2.2	17	0.4

NOTE: "All completed programmes" includes those children who made progress (referred) and made accelerated progress (discontinued).

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Question 7: What was the efficiency of the Reading Recovery implementation?

Experience

The course for Reading Recovery teachers is a year long, part time professional development, during which already experienced teachers gradually learn the complex techniques, fine grained observation and sound professional judgement required to accelerate the learning of the most difficult to teach children

Almost half (45%) of teachers in the cohort were in training during the data year 2008-09 and were still learning how to make Reading Recovery work with the children featured in this report (Table 7.1). This compares with two in five in 2008 and two in six in 2007. Conversely only one in 10 teachers (13%) had been teaching in Reading Recovery for some considerable time, compared with one in five in 2008 and one in four in 2007. This reflects regional increases in opportunities for training, driven by expansion in the Republic of Ireland and by ECaR in England, and represents a shift towards a less experienced teacher cohort.

Table 7.1. Experience of Reading Recovery teachers: UK and Ireland, 2008-9.

Years of experience	Number	Percent (%)	
In training this year	682	44.9	
2-3 years after training	518	34.1	
4-5 years after training	120	7.9	
More than five years	199	13.1	

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Outcomes

As might be expected, experienced teachers were able to solve the problems of a higher proportion of children, compared with those learning how to teach in Reading Recovery for the first time (Table 7.2) and they were able to do so more quickly. In 2008-09 there was an increased proportion of new and relatively inexperienced teachers in the cohort, and also of new and relatively inexperienced teacher leaders, a factor which may have contributed to the lower rate of programmes reaching discontinuing levels in 2009 compared with previous years.

Table 7.2. Pupils served and programme lengths: By teacher training status, UK and Ireland, 2008-9.

Teacher training status/	Pupil	s Served	Programme Length		
Programme outcome	Number	Percent (%)	Mean	SD	
Teachers in training					
Accelerated progress (discontinued)	2260	78.4	20.9	5.4	
Progress (referred)	623	21.6	22.7	4.9	
Experienced teachers					
Accelerated progress (discontinued)	3950	82.6	18.8	4.9	
Progress (referred)	831	17.4	20.6	4.7	

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Days worked and missed

Children selected for Reading Recovery are those finding it hardest to learn literacy, and the steady build of daily lessons is an essential factor in enabling these children to make the accelerated progress necessary for them to catch up with their faster learning peers.

Teachers in training were able to safeguard their teaching time a little more than experienced teachers (Table 7.3), missing on average three fewer lessons, potentially saving the equivalent of half a week on each child's programme. However, the number of lessons missed by experienced teachers did reduce to 14, compared with 18 in 2008.

Table 7.3. Days taught and days missed by Reading Recovery teachers: By training status, UK and Ireland, 2008-9.

	Total	Days taught		Days m	nissed
Training status	teachers	Mean	SD	Mean	SD
Teachers in training	682	169.2	29.6	11.1	15.5
Experienced teachers	837	166.3	32.4	13.9	20.5

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Teacher responsibilities

Reading Recovery trained teachers can be a valuable professional resource in schools, able to provide advice and guidance to colleagues for the support of children who do not receive Reading Recovery. Those who combine Reading Recovery with class teaching are often able to demonstrate the application of Reading Recovery principles in the classroom. However, the demands made upon a Reading Recovery teacher's time can interrupt daily lessons and undermine the effectiveness of the intervention. Part time teachers, on the other hand, whose sole responsibility is Reading Recovery, can risk being marginalised, and their potential contribution to wider school standards, can be lost.

Teachers' other duties impacted upon their ability to provide daily lessons (Table 7.4). Those whose only responsibility was Reading Recovery, often part time teachers, provided the most consistent daily lessons. Those with senior posts, including headteachers/ principals and their deputies (listed Other below), were the most likely to be drawn away from daily teaching. Those who combined class teaching and Reading Recovery also suffered frequent interruptions, potentially adding three weeks to each child's programme.

Table 7.4. Days taught and days missed by Reading Recovery teachers: By teacher role, UK and Ireland, 2008-9.

	Total	Days taught		Days missed	
Training role	teachers	Mean	SD	Mean	SD
Reading Recovery teacher only	379	172.6	29.3	8.2	12
Class teacher & Reading Recovery	200	169.6	28.1	15.1	14.1
Reading Recovery & support	733	165.8	28.9	13.2	17.9
Other	207	163.2	42.9	17	30.1

SOURCE: European Centre for Reading Recovery, Annual Data Collection: 2008-9

Appendix A: Progress in Reading Recovery

Typical text at Reading Recovery Level one

I am a cat.



Typical text at Reading Recovery Level eight

A green dragonfly came to sit on a tree down by the river.

Little Dinosaur looked at it. He liked to eat dragonflies.



Typical text at Reading Recovery Level 17

Toby stopped, and BJ jumped down to have a look at the car.

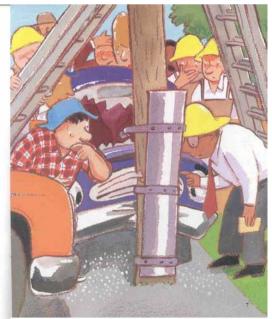
"Mm-mm," said BJ.

"The car must have been going very fast.

The pole is cracked and it could fall over."

"The power has been turned off," said the policewoman.

"I don't like the look of this job, Toby," said BJ, as he got back into the tow truck. "That pole could move when we pull the car away."





An end to literacy failure: Follow-up on the London comparison study

The costs of literacy failure

Every year in England 30,000 children go into secondary school unable to read or write. Most are from socially disadvantaged environments. The human and economic costs of poor literacy are high.

Researching the solution

A study at the University of London, Institute of Education, published in 2006, explored whether *every* child could be taught to read and write early in their school lives.

42 schools in 10 London boroughs took part. These schools were similar in size (average 355 on roll) and had similarly high levels of children entitled to free school meals (average 41%), and children learning English as an additional language (average 49%). All of the schools offered some children extra tuition as well as classroom literacy teaching. Reading Recovery (RR) operated in half of these schools.

The literacy progress of the lowest achieving 6 year olds and of their Year 1 classes was first compared at the beginning and end of the 2005-6 school year. In July 2007, when the children had reached the end of Year 2, the researchers again compared these children's literacy progress.

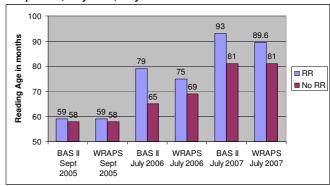
The lowest achieving children at the start of school Year 1 were assessed using a detailed diagnostic profile (Observation Survey of Early Literacy Achievement, Clay 2002) and a word reading test (British Ability Scales II). Their whole classes (1166 Year 1 children in all) were assessed on the Word Recognition and Phonic Skills test (WRAPS, Moseley 2003). Additionally in July 2007, 'Progress in English 7' was used - a broad measure of literacy skills suitable for transfer into Key Stage 2. National Curriculum Key Stage 1 assessment results were also collected for Reading and Writing.

Can gains from early intervention be sustained?

At the beginning of school Year 1 the 292 lowest achieving children were unable to read even the simplest texts, could only recognise a few letters and write about six words correctly. At the end of Year 1 most of these children had made very little progress, except for the group of children who received Reading Recovery. From similarly low starting points, children who received Reading Recovery, on average, gained 14 book levels, gained 20 months reading age and could write 45 words correctly. Aged around six and a half, they had now successfully caught up with their average peers.

The follow up study determined that, on average, at the end of school Year 2, the ex-RR children were still achieving at the level expected for their age, and the comparison children who had not accessed RR were still well below age related expectations. This is how progress in word reading and in phonic skills compares at the beginning and end of school Year 1, and at end of school Year 2.

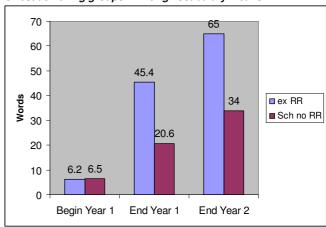
Word Reading (BAS II) and Phonic Skills (WRAPS), lowest groups at Sept 2005, July 2006, July 2007



Year 2 follow up July 2007- BAS 93 = 7yrs 9m WRAPS 89.6 = 7yrs 5.6m 81 = 6yrs 9m 81 = 6yrs 9m

In writing vocabulary assessment task at theend of Year 1 and the end of Year 2, the ex-RR children were still able to write twice as many words correctly as those in the comparison group.

Lowest achieving groups - Writing vocabulary means



In the broad measure of literacy (Progress in English 7) ex-RR children wereachieving within theirage band expectations, and 10 standard points ahead of comparison children. In the end of Key Stage 1 National Curriculum (NC) assessments 86% of ex-RR children achieved Level 2+ in reading, (2% ahead of the national average of 84%). In writing 83% ex-RR children achieved Level 2+ (3% ahead of the national figure of 80%).

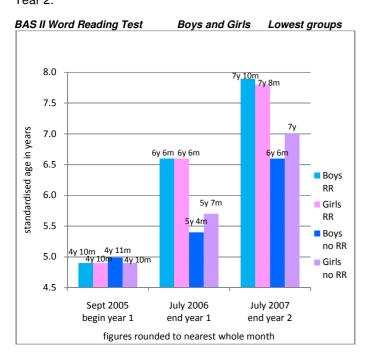
READING & WRITING Key Stage 1 NC assessments, 2007Lowest groups

NC Level	Compa	rison group	Children who re	Children who receivedRRin Year 1		
	Number	%	Number	%		
Reading						
W	13	9.6%				
Level 1	45	33.1%	10	13.5%		
Level 2	76	55.9%	64	86.5%		
Level 3	2	1.5%				
Writing						
W	20	14.8%	1	1.3%		
Level 1	37	27.4%	12	13.8%		
Level 2	77	57.0%	65	83.3%		
Level 3	1	0.7%				

These results show the effectiveness of the RR intervention, combined with good classroom teaching, in maintaining children's early gains and accelerated rate of learning.

The gender gap in literacy achievement

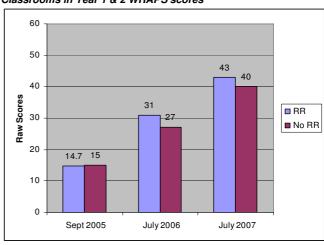
Comparisons showed boys and girls in the lowest achieving groups started Year 1 with equally low literacy skills, and boys and girls who received RR were doing equally well at the end of Year 1. At the end of Year 2 no significant difference was found between the sustained progress of ex-RR boys and girls. The literacy progress of those children had not received RR in Year 1 was much lower overall, and 3 month gap between boys and girls at the end of Year 1 had become a 6 month gap in reading achievement by the end of Year 2.



Whole class literacy progress

The Year 1 study reported an average 4 months higher overall achievement in literacyfor classrooms where the lowest achievers had access to RR. In the Year 2 follow up there was still a 3 months advantage in classes in schools with RR.

Classrooms in Year 1 & 2 WRAPS scores



This 2-year longitudinal study shows that a trained Reading Recovery teacher can provide accurate identification and detailed diagnosis of early literacy learning; can raise the achievements of the lowest groups of children; and impact on whole class progress.

This study of the level of impact on literacy achievement and its sustained effects provides strong evidence that schools could enable almost every child to read and write appropriately for their age, if those that were failing were given access to expert teaching in Reading Recovery at an early age.





The impact of Reading Recovery three years after intervention

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Abstract

Reading Recovery is part of the Every Child a Reader strategy to enable children to make a good start in reading. Reading Recovery is well known to have impressive effects in the shorter term, but less is known about its long-term effectiveness. The present study followed up at the end of Year 4: 120 comparison children, 73 children who had received Reading Recovery three years earlier, and 48 children in Reading Recovery schools who had not received Reading Recovery. The children who had received Reading Recovery were achieving an average National Curriculum level of 3b in reading, which indicates being on track for Level 4 at the end of KS2. The comparison children were on average Level 2a in reading, significantly below the Reading Recovery children. Reading Recovery children were significantly less likely than comparison children to be identified as having Special Educational Needs (SEN Code of Practice, 2008) at the end of Year 3. Case studies give a flavour of the children's experience of school at the end of Year 4. Early intervention was greatly appreciated by the children and parents of the Reading Recovery schools, and the lack of early intervention and its negative consequences were remarked upon by those not in Reading Recovery schools.

Background

One of the key tasks of schooling is to ensure that children become confident readers and writers, able to access the curriculum and to be prepared for the myriad of demands on their literacy skills in adult life. It is now widely accepted that children with reading difficulties should be offered early intervention, and this is supported by the evidence of its short-term effectiveness (e.g. Wasik & Slavin, 1993; Torgesen, 2000; National Reading Panel, 2000). Early intervention offers an opportunity to prevent a widening gap between poor readers and their peers as they move through school (Stanovich, 1986; Chall, 1983). Without action, poor readers read less than their peers (Allington, 1984; Biemiller, 1977-78; Clay, 1967; Juel, 1988), which in turn holds back their language development, their general knowledge and even their IQ.

The aim of Every Child a Reader (ECAR) is to target those with reading difficulties (mostly living in poverty) and make sure that they are as literate as their six-year-old peers. One measure being adopted to promote this aim is to make Reading Recovery widely available. Reading Recovery is an intensive one-to-one reading programme designed for children in their second year of schooling who are not making satisfactory progress in literacy even after high-quality classroom instruction. Evidence from the literature (Hurry & Sylva, 2007) and from a recent study conducted by Burroughs-Lange & Douëtil (2006) demonstrates the impressive effectiveness of Reading Recovery to raise reading levels for children with difficulties, both immediately post-intervention and at the end of Key Stage 1.

However, there is a shortage of information on the durability of the gains made during early interventions. This information is important in order to plan a strategy which ensures that children at risk of reading difficulties maximise their potential at the end of Key Stages 2, 3 and 4. The early developmental stages of literacy acquisition are critical in determining later success. However, other factors will also exert their influence on developing children, such as their cognitive and linguistic abilities, their behaviour and environmental factors relating to home and school. The purpose of the study reported here is to provide much-needed information on the longer-term effects of the early intervention, Reading Recovery, and to explore the experience of children with early reading difficulties as they move through primary school.

The current evaluation

The current evaluation started in 2005, with a sample of London 6-year-olds who had made a slow start in literacy. Children who had received Reading Recovery (N=87) were compared with similar children who attended London schools where Reading Recovery was not offered (N=147). The results of this evaluation have been reported as the children reached the end of Year 1 and Year 2 (Burroughs-Lange & Douëtil, 2006; ECAR, 2008). The children receiving Reading Recovery had made significantly greater progress than the comparison group at both follow-ups.

We now report on a further follow-up as the children reach the end of Year 4. We have used children's end of Year 4 National Curriculum Assessments to assess the longer-term impact of Reading Recovery on reading, writing and maths. In addition, we have conducted some mini case studies to give some insight into the broader range of issues implicated in the longer-term effectiveness of early literacy intervention.

Method

The design is a long-term evaluation comparing the literacy attainments of children who received Reading Recovery with children of similar literacy levels who did not. Children were assessed at the beginning of Year 1 (September 2005), selected children received Reading Recovery, all children were re-assessed at the end of Year 1 (July 2006), at the end of Year 2 (July 2007), and most recently, at the end of year 4 (June-July 2009). The present study reports on the children in the original study as they completed Year 4 (age 8 to 9 years), three years after the end of the intervention.

The Sample

The London boroughs

The 10 London boroughs selected for the Reading Recovery and comparison samples are among the lowest achieving in England, with very high proportions of children entitled to free school meals. These school contexts have been shown to be among the hardest for raising the achievements of the very lowest groups. In 2005, five London boroughs had Reading Recovery provision in some of their schools. In most cases this was re-activated or extended to enable a half time Reading Recovery teacher to work in selected schools through funding from the Every Child a Reader pilot. The other five London boroughs were selected to form the comparison group because they were similar in population characteristics and KS1 achievement levels. Their involvement was sought because they were to be among Local Authorities (LAs) beginning to implement Reading Recovery in 2006-07 when they would have access to Reading Recovery teacher training.

In the five LAs with Reading Recovery, on average 8.2% of children were achieving **below** the competency of a 7- to 8-year-old (Level 3) at the end of KS2, when they were 11, with a range from 6.6% to 9.5%. The five LAs with no schools with Reading Recovery averaged 8% of children **below** Level 3, with a range of 7.2% to 9.8%. This shows that the authorities were well matched in terms of overall levels of underachievement at the end of primary schooling. Both groups included some schools with much higher numbers achieving below that level. These were the schools that were recruited for the study.

The Schools

Across five London boroughs, 21 infant and primary schools were identified which in 2005-06 had a Reading Recovery teacher providing literacy intervention in Year 1. Across five London boroughs where no schools had any Reading Recovery teaching, 21 schools were nominated by the LA as of most concern for high numbers of children with poor performance in literacy. An earlier report (Burroughs-Lange & Douëtil, 2006)

documents that schools were similar in terms of: uptake of free school meals; number of children with English as an additional language; school size; and attainment of year 1 children in September 2005. In these 42 schools the eight children considered lowest in literacy, and their Year 1 classes, formed the sample for this evaluation.

The Children

The previous Reception teachers and current Year 1 class teachers and school records were consulted to identify the eight children in each class whose progress in literacy learning was of most concern.

Assessment tools were selected to measure a range of early literacy skills in reading, writing and phonic skills. The standard Reading Recovery diagnostic profile (An Observation Survey of Early Literacy Achievement, Clay 2002 (Denton et al., 2006)) and the British Abilities Scales (BAS) Word Reading Test II (BAS; Elliott, Smith & McCulloch,1996) were used to assess the 8 lowest-achieving children in Year 1 (292 children; 145 in 21 RR schools, 147 in 21 comparison schools). This literacy profile assesses concepts about print; letter knowledge; known words in writing and phonic analysis for writing; continuous text reading in books; and word reading in isolation.

The Observation Survey (OS) and BAS word reading test were administered individually to each of the eight lowest-achieving children in a quiet space away from classroom distractions. It usually takes about half to three quarters of an hour to complete each child's assessment. All research assistants were Reading Recovery teachers previously trained in OS assessment procedures, including administering the BAS word reading test.

It was not possible to offer Reading Recovery to all the children in Reading Recovery schools. Of the 145 children in Reading Recovery schools, 87 received Reading Recovery, 58 did not. The selection of children to receive Reading Recovery is made by the teacher and teacher leader, informed by children's performance on the assessments and on age (older children are often taken first).

At first follow-up (July 2006), there was assessment data on 147 comparison children, 87 Reading Recovery children and 58 children in Reading Recovery schools not receiving intervention.

At second follow-up (July 2007), there were end-of-key-stage 1 National Curriculum Assessment data on 140 comparison children, 86 Reading Recovery children and 51 children in Reading Recovery schools not receiving intervention.

At third follow-up (June-July 2009), there were National Curriculum Assessment data on 241 children: 120 comparison, 73 Reading Recovery and 48 who were in Reading Recovery schools but not receiving intervention. By the end of Year 4, in addition to the original 42 schools, children were traced to a further 54 schools. However, 51 children were untraced, representing an attrition rate of 17%. There were similar attrition rates in each of the three groups: 18% in the comparison group, 16% in the Reading Recovery group and 17% in children in Reading Recovery schools who did not receive the

intervention. Comparison between traced and untraced children is presented in the Findings section below.

It should be noted that although the comparison children, both in Reading Recovery and non-Reading Recovery schools, did not receive Reading Recovery, as relatively weak readers it is likely that received a variety of additional help with literacy over the course of their schooling. Information on additional help has only been collected for case study children in the present study.

Measures of literacy

At baseline (September 2005), as reported above, children were assessed on the OS and the BAS word reading test. To enable analysis, a summary score has been calculated for the sub-tests of the OS (excluding Book Level) in the form of a z score, that is with an average score of 0 and a standard deviation of 1. Book Level (part of the OS) is reported separately. Children were also assessed on a word recognition and phonic skills measure (WRAPS, Moseley 2003).

At first follow-up (July 2006) children were re-assessed on the same assessments.

At second follow-up (July 2007), children were assessed on the BAS word reading test, the WRAPS and Progress in English 7 (Kispal, Hagues & Ruddock, 1994). In addition, Yr 2 end-of-key-stage 1 National Curriculum Assessments were collected for all the children through the National Pupil Database.

At third follow-up (June-July 2009), end of Year 4 teacher-assessed National Curriculum sublevels were collected for all children. These were informed by pupils' performance on the Year 4 Optional SATs tests which were used in 80 of the 82 schools contacted. Originally it had been intended to collect children's scores on the optional SATs. However, a number of problems were encountered. The SATs scores were not reported in a consistent form from all the schools: children below level 2 were typically not assessed on these assessment tasks, and some schools were unable to provide the results of their SATs tests. Especially in the schools that were not part of the original sample this threatened the completeness of the data set.

Unlike earlier measurement points, the third follow-up relied solely on National Curriculum Assessment data supplied by schools. To test the validity of these measures we explored the correlations between National Curriculum Assessments at end of Yr 2, the other literacy measurements taken at the same time, and their relationship with National Curriculum Assessments at the end of Yr 4. Only the comparison children not in RR schools were used for these analyses to avoid any contamination with intervention effects.

Table 1: Correlations (Spearman) between National Curriculum Assessments and other literacy measures: Non-RR comparison children only (N=112¹)

¹ Non-RR comparison children followed up at end Year 4 were used (N=120). There was missing data on on one or more measures at Year 2 for 8 of these children, leaving a sample of N=112).

			Y	ear 2	Ye	ear 4 NCA	\S	
		WRAPS	PiE7	NC read	NC write	reading	writing	math
	BAS wr	.887	.821	.833	.733	.704	.739	.482
	WRAPS		.847	.808.	.708	.607	.702	.447
Year 2	PiE7			.827	.763	.648	.659	.427
	NC read				.838	.740	.681	.554
	NC write					.602	.637	.522
Year 4	NC read						.763	.589
	NC write							.589

In Year 2, the reading measures of the BAS word reading and the Progress in English 7 were highly correlated with National Curriculum Assessment reading (r=.833 and .827 respectively). These correlations were very similar to the correlations between the reading measures themselves (r=.821). This supports the validity of the National Curriculum Assessment measures in the current context. Correlations between the BAS word reading test in Year 2 and National Curriculum Assessments in reading and writing in Year 4 were also fairly robust (r=.704 and .739 respectively), as were the correlations between the Progress in English test and National Curriculum Assessments in reading and writing in Year 4 (r=.648 and .659 respectively). This supports the Year 4 National Curriculum Assessments as providing valid measures of reading and writing. The levels (ranging from below Level 1 to Level 4a) have been converted to National Curriculum point score equivalents (Appendix 1) for all statistical analyses. The National Curriculum Assessments represent an ordinal level of measurement, but such measures are typically analysed using multiple regression, as this form of analysis is sufficiently robust to cope with such data where the sample size is over 200.

Background data were collected on each child at baseline, on: uptake of free school meals; English as an additional language; gender; age. Data on the children's Special Needs Status was collected from the Pupil Level Census for Spring 2008(the most recent available data)t.

The case studies

In order to explore the views of children, parents and teachers, and to gain further insight into the longer-term consequences of early literacy intervention, or the lack of it, mini-case studies were conducted in four of the original schools, two Reading Recovery, two non Reading Recovery. Schools were considered for selection where the majority of the sample children were still attending the school. The schools were reasonably well matched on intake (Table 2, school names are aliases).

Table 2: Case study schools

	% Free School	% English Additional	On roll
	Meals	Language	
Reading Recovery			
Agincourt	26	47	350

St Patrick's	40	50	300
Non Reading Recovery			
Bosworth	33	57	250
Nuthatch	42	39	300

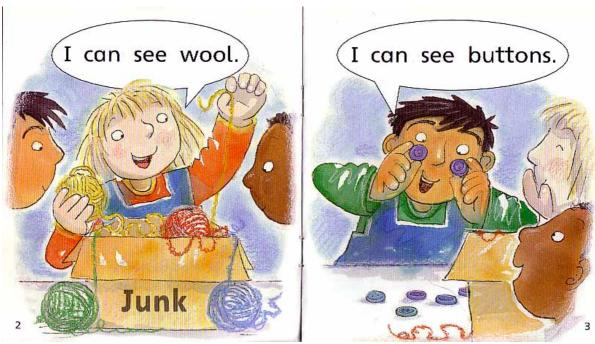
In each school researchers spoke to children from the original sample, their class teachers, the SENCo, the Reading Recovery teacher (where relevant) and parents (where possible). Fifteen children were interviewed in school (4 in each of the RR schools and in Bosworth, 3 in Nuthatch). Nine parents were interviewed on the telephone (4 and 3 in the RR schools respectively and 2 in Nuthatch). Other parents either did not agree to be interviewed or were not contactable.

Questions were asked about children's reading in the following areas: their enjoyment, confidence, reading in and out of school, their ability, any extra help with reading or other areas of the curriculum. Researchers also asked children to read from their reading book.

Findings

Baseline - Autumn 2005

As previously reported (Burroughs-Lange & Douëtil, 2006), the children in this study tended to be economically disadvantaged, with just over half taking free school meals, and to have English as an additional language (48%) (Table 3). The majority were effectively non-readers at baseline, 50% not scoring at all on the BAS word reading, and 81% either not reading or only able to read the most basic level books, such as the one illustrated below. They did have some skills in place, such as some letter knowledge, early concepts about print and so forth.



Page from a Level 1 book

Table 3: Baseline characteristics of sample children re-contacted in Y4, by group

	% Free	% English	% no	% at or	OS z-score	WRAPS
	School	Additional	score	below Bk	Mean (sd)	score
	Meals	Language	BAS wr	level 1		Mean (sd)
Comparison children (n=120)	63%	55%	57%	91%	030 (.95)	10.6 (5.9)
Reading Recovery children (n=73)	44%	47%	34%	72%	.137 (.88)	11.6 (6.3)
Comparison children in RR schools (n=48)	52%	35%	54%	69%	032 (1.25)	12.0 (10.2)
Total (N=241)	54% *	48%	50% **	81% ***	.0 20 (1)	11.2 (7.1)

At baseline there were significant demographic differences between the three groups of re-contacted children on uptake of free school meals (chi-square=6.84, 2, p<.05), a higher proportion of the comparison group taking free school meals. There were also significant group differences in baseline literacy, with the comparison children on average scoring lower on the BAS word reading test (chi-square=10.01, 2, p<.01) and Book Level (chi-square=10.92, 2, p<.01). However, both these measures are crude at baseline as half or more children do not score. On the more sensitive measures for children at this level, the OS and the WRAPS, there were no significant differences. For the OS, scores were standardised to a mean of 0, so positive scores show higher than average scores, negative scores lower than average scores. Any group differences were controlled for in the 2006 and 2007 analysis of the children's progress, and in the current

study.

The comparison children in the Reading Recovery schools were somewhat weaker than the Reading Recovery group on literacy at baseline, significantly so for the BAS word reading (chi-square=6.38, 1, p<.05).

Table 4: Comparison between traced and untraced children

Sample	N	% Free	% English	% no	% at or	OS Z	WRAPS
		School	Additional	score	below Bk	score	score
		Meals	Language	BAS wr	level 1	Mean (sd)	Mean (sd)
Comp. traced	120	63%	55%	57.5%	91.5%	01 (1)	10.7 (6.0)
Comp. untraced	27	50%	46%	46%	75%	0 (1.1)	13.4 (6.6)
•							
RR traced	73	44%	47%	34%	72%	.14 (0.9)	11.6 (6.3)
RR untraced	14	43%	57%	43%	92%	40 (.5)	8.6 (6.2)
Comp in RR	48	52%	35%	54.2%	69%	03 (1.2)	12 (10.2)
traced							
Comp in RR	10	40%	20%	70%	80%	.05 (1.3)	11.3 (8.0)
untraced							
Total traced	241	55%	48%	50%	80%	.02 (1)	11.2 (7.1)
Total untraced	51	46%	44%	50%	81%	10 (1)	11.7 (6.9)

Reassuringly, taking the sample as a whole, the children who were untraced did not differ significantly from those traced, either on demographic factors or literacy levels $(Table\ 4)^2$. Taking each group separately, on the whole traced and untraced were similar but for the comparison children in non Reading Recovery schools, the untraced group scored significantly higher at baseline than the traced group on Book Level (chi-square=6.007, 1, p<.05) and WRAPS (t=2.070, 145, p<.05).

Summer 2009 Follow-up

At the end of Year 4, comparison children in non Reading Recovery schools (N=120), comparison children in Reading Recovery schools (N=48), and Reading Recovery children (N=73) were compared. Table 5 presents the average levels for each of the groups. To provide more precision these are also expressed in National Curriculum point score equivalents, in the form of means and standard deviations. Group differences were tested for statistical significance using multiple regression, controlling for any group differences at baseline (OS score, BAS score, Book level, free school meals and English as an additional language).

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² Comparing total traced with total untraced: FSM chi-square=.236, 1, ns; EAL chi-square=.572, 1, ns; BAS chi-square=.978, 1, ns; Bk level chi-square=.908, 1, ns; OSZ t=.418, 291, ns; WRAPS t=.776, 291, ns

The Reading Recovery children were still doing significantly better in reading (β =.200, p<.001) and writing (β =.184, p<.002) than the other two groups. The differences between the Reading Recovery children and the comparison children in non Reading Recovery schools were the greatest (reading, β =.231, p<.001 and writing, β =.207, p<.001). The Reading Recovery children had reached an average of 3b in reading and 2a in writing, ahead of the comparison children in non Reading Recovery schools by just under half a National Curriculum level in reading and a third of a level in writing. The comparison children in Reading Recovery schools were in the middle. They were doing better than the comparison group in non Reading Recovery schools, though not significantly so. They were not doing as well as children who had received Reading Recovery, but again differences were not statistically significant when assessed using the same multiple regression models. This suggests that there may be some wash-over effect for children in Reading Recovery schools, even though they do not receive the intervention. There were no significant group differences in maths.

Table 5: Mean National Curriculum Assessments levels and point score equivalents at the end of Year 4, by group

Group	N		Reading	Writing	Maths
Comparison children	120	NC level	2a	2b	2a
		mean point score	18.21	16.43	18.39
		s.d.	5.20	4.55	4.49
Reading Recovery children	73	NC level mean point score s.d.	3b 20.14 4.27	2a 18.75 3.94	2a 18.92 3.44
Comparison children in Reading Recovery schools	48	NC level mean point score s.d.	3c 19.21 6.25	2a 18.75 3.94	2a 17.46 5.19

Special Educational needs status

At baseline, very few children in the study had statements of special educational need: 5.4% (N=8) of the comparison group, 11.5% (N=10) of the Reading Recovery group and 8.6% (N=5) of the comparison children in Reading Recovery schools. Between-group differences were not statistically significant. In the spring of 2008, when the children were at the end of Year 3 data was available through the Pupil Level Census on 267 of the original 293 children. Few children had a statement of special educational need, but quite a number were on stages one (school action) or two (school action plus) of the Special Needs Code of Practice (2008) (Table 6). Reading Recovery children were receiving significantly less special provision than children in the other two groups (chisquare=15.228, 6, p<.05)

Table 6: Special Educational Needs Status at the end of Year 3

Ν	No special	School	School	Statement
	provision	action	action plus	of SEN

Comparison children	134	48%	32%	19%	1.5%
		(n=64)	(n=43)	(n=25)	(n=1)
Reading Recovery	81	61%	26%	12%	1.2%
children		(n=49)	(n=21)	(n=10)	(n=1)
Comparison children	52	42%	21%	29%	7.7%
in RR schools		(n=22)	(n=11)	(n=15)	(n=4)

The Case Studies

Agincourt (Reading Recovery school)

Agincourt is a lovely school to visit, full of students' work, attractively displayed, with well-behaved and helpful pupils and a leafy environment created by the school. It's recent 'good with outstanding elements' OFSTED, and the steady improvement in KS2 SATs, reinforce the sense of an effective school. "From starting points that are well below expectations for their age, pupils reach standards that are slightly above average in English and science at the end of KS2" (OFSTED, 2009). Regarding Reading Recovery, one teacher commented that "Reading Recovery is an essential part of what's provided by the school". The pupils and parents we spoke to were unanimous in their appreciation of the programme. However, in the context of a pupil who had experienced a dip in Year 3 (Mark), his teacher commented: "We are aware the children with RR may need continued 1:1 support. RR.....boosts children because they've been tutored 1:1. At year 2 children emerge above average but they are average children and they don't come at a high enough priority to get intervention then."

Willy remembers his Reading Recovery sessions as 'helpful and fun', although also commented that 'you found out there were lots of boring books in the world'. His mother felt they made a 'huge difference' to his reading and writing. In Year 4 Willy is a good reader and his teacher comments that he has no problems in accessing the curriculum (National Curriculum Assessments 4b in reading, 3b in writing), no longer in need of any additional support. Willy is still not overly enthusiastic about reading but he reads every day in school and owns up to liking funny books such as Captain Underpants and Horrid Henry and sending silly text messages to his sister.

Freddy is ambivalent about reading, enjoying certain genres, such as fantasy and travel but disliking 'too many hard words'. He reads daily in school and every other day at home. He talks enthusiastically about a story he is writing on the computer with his Dad about coming from Nigeria to London. While his decoding and comprehension are improving, his teacher does not consider him to be at National Level (National Curriculum Assessments 3c in reading, 2b in writing) and, if we assume a level gain in the two years he has left in KS2, he should achieve a Level 4 in reading but not writing. Freddy is trilingual with some speech problems. The English he uses at home is quite basic. He is receiving additional help in school, principally to support his language development, but his teacher also has concerns that he may be dyspraxic.

Mark really enjoys reading, especially non-fiction because "it's more packed full of information...it teaches you things". Following a bit of a dip in Year 3, his teacher considers him to be a good reader with no need for further additional support in accessing the curriculum (National Curriculum Assessments 4b in reading, 3c in writing).

His mother comments that the Reading Recovery teacher "helped him a hell of a lot". She says: "Mark is a very confident reader, learning all the time. He likes to read to himself – information books, encyclopaedias, books he brings home from school. He reads if he can't sleep."

Mia does not speak English at home and has serious problems with the English language which limit her ability to understand what she is reading. Her language problems are likely to reflect underlying cognitive difficulties. She made many errors while reading. Although she can "sound it out", her inability to call upon vocabulary, understanding and syntax to help her meant that errors went uncorrected. Mia and her mother both report she likes reading, though her teacher is under the impression she is not a keen reader because of her decoding problems. Mia reads at home, but at school the teacher comments on difficulties with finding appropriate books. "Decoding is difficult with the language barrier. She is quite slow, but if she is given easier books she thinks they are babyish." Mia is not able to securely access the curriculum (National Curriculum Assessments 2a in reading, 2a in writing) and reads in a group daily with the Teaching Assistant (TA) who also helps her access the curriculum, e.g. helping with a maths problem.

St Patrick's (Reading Recovery school)

St Patrick's Roman Catholic Primary school provides a safe and effective environment for its pupils, with an overall 'good' in its OFSTED inspection 2008 and 'outstanding' for personal development and wellbeing. Pupils do well at the end of KS2, especially bearing in mind the high uptake of free school meals and pupils for whom English is an additional language: 85% achieving Level 4 in English. The school has a number of literacy systems in place: Renewed Primary Literacy Strategy (RPLS) one hour daily throughout school (some sessions 1½ hours for older children), plus additional Guided Reading. A "catch up programme" is provided for weaker readers in Years 2-6, delivered by trained TA's. Reading Recovery is still active. As in Agincourt, pupils and parents interviewed were uniformly very positive about Reading Recovery. The RR teacher and the deputy are concerned that RR "exists in an SEN withdrawal bubble and does not reach class teachers". They are planning for the RR teacher to take a more wholeschool role, disseminating RR ideas through the school and introducing levelled books in classrooms. Currently Year 4 children have free choice of books in the classroom. many of which would not be at instructional level. The RR teacher runs a homework club supporting older children, particularly those she knows well from RR whose families she also knows well.

Max is an enthusiastic and confident reader, though there are concerns about his ability. He reads widely at home, books, newspapers and comics. His teacher confirms that he loves to read and that his knowledge has improved. However, although he is about the 40% level for his class, with National Curriculum Assessments levels 2b in reading, 2a in writing, there is clearly some cause for concern. Max is not receiving extra help with reading but is on School Action Plus, mainly because of behavioural issues, but also because of problems with speech and language. He currently attends a group once a week to work on behaviour. He has received speech and language support, but the Deputy Head questions its quality as this is delivered by a TA who only went on a short

course. Max's mother is very concerned and believes that in terms of his speech and language problems there is lack of qualified support and feels he is not being followed up properly and not getting good continued support. She worries about his future.

Danny enjoys reading at home and school. His teacher considers that he is doing fine in class, can access the curriculum and is no longer in need of extra support (National Curriculum Assessments 3a in reading, 2a in writing). He does however benefit from the lunchtime homework club run by his old Reading Recovery teacher.

Michael wants to read but finds it hard and this takes away from his enjoyment. His class teacher also comments that Michael is motivated but is in the bottom 20% of the class for reading (National Curriculum Assessments level 2a in reading, 2b in writing). His lack of reading ability has an impact across the whole curriculum. He wants to read the same books as the other children so he takes them home. However, the Reading Recovery teacher feels that his mother tends to 'jump in too quickly' to read for him and is therefore not really supporting Michael's learning. He is on School Action, with general learning difficulties. In Year 3 Michael was in a group of 15 less able children for the literacy hour, with a teacher and a TA. It was hoped that this would enable children to receive greater individual support and allow tasks to be better differentiated. However, the teacher was newly qualified, and most of the children had both behaviour and learning difficulties. The group was not very successful and for the whole year Michael was not with his class group for literacy. In Year 4 he learns literacy with his class but receives a range of additional help. He works in group of 4 children twice a week for about an hour with a trained TA doing phonics, handwriting and preparation for comprehension work to be done with whole class. At lunchtime he attends a Springboard group and also has individual Maths catch-up once a week.

Bernardo is doing well in literacy, in the top 25% of the class (National Curriculum Assessments level 3c in reading, 3b in writing) and confidently accesses the whole curriculum. He enjoys reading books such as the Harry Potter and Narnia books and reading the Bible. His mother comments that Reading Recovery was very helpful, and he also benefited from working with a TA in Year 3. He is now a confident and able reader, reading most evenings before bed and enjoying school.

Nuthatch (Comparison school)

Nuthatch has a relatively disadvantaged intake which is also fairly mobile. In its last OFSTED it received a 'satisfactory' overall grade and only 67% of children achieved Level 4 in English at the end of KS2. In terms of literacy, at KS1 they concentrate on Sounds~Write, a programme of systematic daily phonics work and levelled phonic reading books. In KS2 less able children continue with phonics in small groups led by a well-trained TA. Children with SEN see a qualified teacher for individual and group support.

Andy finds reading boring, "a waste of time". His reading is very poor for his age (National Curriculum Assessments level 1a in reading, 2b in writing) and his teacher says that he has recently been diagnosed with severe dyslexia. He is embarrassed about his reading and tries to cover up some of his problems. His Special Needs teacher

comments: "He is an intelligent boy, his comprehension is good, but he is not interested in the phonic books he is reading with me and TAs. Trouble is, he can't manage other books without lots help." He is now on School Action Plus, with diagnoses of dyslexia and Autistic Spectrum Disorder. Mum thinks that if school had recognised his learning difficulties early on and put support strategies in place, he would not be so far behind with his reading. "He likes school but there was a phase when he didn't as the other children said he was behind. He misbehaves rather than let the other children know he can't do the work."

Dixon was identified with SEN in Nursery, with speech therapy needed for tongue protrusion and a lisp, two operations for glue ear, language problems, poor co-ordination and balance, gross and fine motor problems. He is on School Action Plus. At the end of year 4 his literacy is of concern (National Curriculum Assessments level 1b in reading, 1b in writing). He reads in a small group with the SEN teacher twice a week and always has TA support in class, 15 hours a week mostly one-to-one for him. However, Dixon's mother comments that "He didn't get much help before this year with reading and writing... There's definitely not enough reading being done in the school. If they got the reading and writing in the Infants instead of the rest of the curriculum they wouldn't have so many problems in the Juniors."

Luke is on School Action plus and is below Level 1 in both reading and writing. His mother also has severe difficulties with reading. He comments that "I am nearly good at it, but I don't get on OK in class. It is a bit hard so I look at pictures instead." His teacher says he finds all work daunting but "his confidence has come a long way and he will participate in class and does volunteer answers." His objective is to see himself as a reader. Luke works with the TA for 15 minutes, four times a week, mainly on reading but also on word and letter skills. He also works with the SEN teacher for 30 minutes twice weekly. In addition to Luke's learning difficulties he has challenging behaviour and the school reports problems in the family, with no structure or routines at home.

Bosworth (Comparison school)

Bosworth is a fairly small school with a high proportion of minority ethnic communities, high uptake of free school meals and children for whom English is an additional language well above the national average. There is also much temporary housing locally, so children come and go. SATs results for Y6 2008 were well below national averages, with 70% achieving Level 4 in literacy. The latest OFSTED was "satisfactory" overall. In literacy, the whole school took on the Read Write RML (Ruth Miskin) 4 years ago, and it replaced the literacy hour for 4 terms. It did bring reading scores up but it was felt that it limited vocabulary and the range of books children were reading. At Foundation and KS1 the school now uses Communication, Language and Literacy Development (CLLD) and adapted the materials from RML. In KS2 they use the Book Power approach (Centre for Literacy in Primary Education), a whole-book approach to develop reading, vocabulary and comprehension, and this is the focus for much of the work done in class. RML is used for individual "catch up", alongside materials from Sparkle Box.

Bergita enjoys reading and reads well in class and at home to her baby brother. She reads with obvious enjoyment and good comprehension. Her teacher considers her to be above the class average in reading and average in writing and maths (National Curriculum Assessments level 3a in reading, 2b in writing). In Year 3 she was given additional help, using RML, and her confidence grew during this time. Her class teacher comments that her confidence has improved further in Year 4 and is now able to access the curriculum securely.

Nemo likes reading and reads regularly at home and school. He reports that his reading has improved "and it came in handy when I was doing a test; I knew everything that had to be done." He received extra support in Year 2 on RML which he said helped him, and says that he no longer needs any extra help. He is in the middle of the class for reading and writing (National Curriculum Assessments 2b in reading, 2b in writing). He is in the top set for maths.

Zitar is on School Action and is withdrawn daily in a group of seven children for RML with a very experienced TA. Her reading (National Curriculum Assessments 2c) and writing (2b) are cause for concern at this stage, although not drastically below the class average, which is fairly low. Turkish is her home language and she still needs help with grammatical structures in English. Her class teacher feels that she is a bit of a daydreamer and lacks focus, though Zitar reports that she likes reading and is pleased to have moved onto chapter books.

Gulshan enjoys reading and feels quite confident. Her class teacher confirms that she is about average for the class (National Curriculum Assessments 2a in reading, 2b in writing) and she does not receive any extra help. Gulshan is on School Action, but mainly for behavioural/emotional reasons. She is very easily frustrated and annoyed.

Discussion and conclusions

A number of interesting points emerge from the case studies:

Reading Recovery was very strongly endorsed by the children and their parents and in at least one of the comparison schools the lack of systematic early intervention was identified by parents as heavily contributing to their children's difficulties in Year 4.

The children in the Reading Recovery schools were doing better on average than the children in the comparison schools, both the children in our sample and their classmates. There was considerable variation in attainment in the children interviewed, even within one school, with some doing very well and others struggling, but there was also considerable variation between schools, level 2a/b being considered average in Bosworth but cause for concern in another.

Children who were achieving a level 3 were usually confident readers, able to access the rest of the curriculum; those at level 2 or even 1 were finding school more difficult. Books that they could read they found boring and "babyish". They were reading less

than their more able peers, both in terms of volume and sophistication. Being a poor reader led to embarrassment, humiliation and even to depression, according to one mother. As yet, all the children still seemed fairly engaged with school, but conditions were developing where they might begin to feel alienated.

A number of the children had a range of problems which continued to exert an influence on their reading, suggesting that early intervention cannot be expected to prevent all later difficulties with reading. Children had general learning difficulties, speech and language problems, emotional and behaviour problems and difficulties at home, all of which impacted on their learning.

The complex relationship between special provision and the classroom was illustrated in a number of ways. In St Patrick's there was an issue with the use of graded texts. In Reading Recovery children were able to read books well-matched to their reading abilities. However, books were not levelled in Year 4 classrooms and this led to a number of children reading books that were either much too easy or much too hard. Also in St Patrick's children were withdrawn in a large group according to reading ability. Poor readers worked together with an inexperienced teacher whilst missing the literacy in class, a procedure likely to lead to widening gaps. In general, much of the additional support that poor readers received was from TAs, sometimes well-trained but not always. This is a familiar practice but not necessarily a very effective one. Note that the children in this study, who were all poor readers at age six, had often received a mix of extra help with literacy by the end of Year 4.

Consistent with the case studies, the quantitative comparisons showed that those who had received Reading Recovery were doing significantly better in reading and writing at the end of Year 4 than similar children who attended schools where Reading Recovery was not available. On average, Reading Recovery children were just under half a National Curriculum Assessment level ahead in reading and a third of a level in writing. The comparison children in Reading Recovery schools were in the middle, better than the children in non-Reading Recovery schools but not as good as the Reading Recovery group, suggesting that Reading Recovery has some whole school effect. There were no significant group differences in maths.

Children in the non Reading Recovery schools were significantly more likely to be on some level of the SEN Code of Practice at the end of Year 3 than children who had received Reading Recovery. This has both emotional implications for the child and their family but also financial implications for the school and the Local Authority.

Conclusions

These findings indicate that effects of Reading Recovery are still apparent at the end of Year 4. However, the case studies illustrate that some children with early reading difficulties have a range of other problems associated with general cognitive abilities, language, behaviour and home environment. We therefore cannot afford to be complacent. Weak readers in Year 4 were still on the whole well integrated in school but there were indications that they were beginning to feel alienated from learning.

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Appendix 1

National Strategy Sublevels: point score equivalents

(http://nationalstrategies.standards.dcsf.gov.uk/node/169521. Accessed 09/11/09)

Level	Point score
1c	7
Level 1	9
1b	9
1a	11
2c	13
Level 2	15
2b	15
2a	17
3c	19

Level	Point score
Level 3	21
3b	21
3a	23
4c	25
Level 4	27
4b	27
4a	29

Many schools are finding that by assessing pupils using National Curriculum sublevels on a regular basis, pupils who are making less than satisfactory progress are quickly identified and support for them can be given. A common way of dividing the National Curriculum levels is the use of an a, b, c indicator:

- a represents strong level;
- b represents sound level;
- c represents a weak level.

So a pupil would progress from 1a, into 2c, then 2b to 2a.

This table provides a handy reference to look up point score and level/sublevel equivalents.

Caution should be used with sublevels as the National Curriculum level was designed to indicate representative attainment at the end of a key stage, a sublevel only gives a indication of the certainty of this achievement but can be extremely useful in identifying progress and support requirements. For calculation purposes some schools have represented levels as decimalised values.