

Reading Recovery

Review: September 2017

Note on provider involvement: This provider has agreed to EIF's terms of reference, and the assessment has been conducted and published with the full cooperation of the programme provider.

Reading Recovery is a school-based literacy programme for children aged 5 and 6 with reading difficulties.

The intervention is targeted – pupils with the lowest literacy attainment scores and showing evidence of a lack of skills, knowledge and experience that means they cannot benefit from group and class teaching are selected for Reading Recovery after three to six terms in school.

It involves a series of daily, 30-minute one-to-one lessons with a specially trained teacher. Each lesson is adapted to the unique needs of the child, starting with what he or she already knows.

Evidence
rating: **3+**

Cost rating: **3**

EIF Programme Assessment

Reading Recovery has evidence of a **short-term positive impact** on child outcomes from at least one rigorous evaluation.

Evidence
rating: **3+**

What does the evidence rating mean?

Level 3 indicates **evidence of efficacy**. This means the programme can be described as evidence-based: it has evidence from at least one rigorously conducted RCT or QED demonstrating a statistically significant positive impact on at least one child outcome.

This programme does not receive a rating of 4 as it has not yet replicated its results in another rigorously conducted study, where at least one study indicates long-term impacts, and at least one uses measures independent of study participants.

What does the plus mean?

The plus rating indicates that this programme has evidence from at least one level 3 study, along with evidence from other studies rated 2 or better.

Cost rating

A rating of **3** indicates that a programme has a **medium cost** to set up and deliver, compared with other interventions reviewed by EIF. This is equivalent to an estimated unit cost of **£500–£999**.

Cost rating: **3**

Child outcomes

According to the best available evidence for this programme's impact, it can achieve the following positive outcomes for children:

Enhancing school achievement & employment

Improved reading ability

Based on study 1

6.07-point improvement on the Observation Survey of Early Literacy (Ohio Word Test)

Improvement index: **+42**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 92% and worse outcomes than 8% of their peers, if they had received the intervention.

Immediately after the intervention

Based on study 2

3.57-point improvement on the Iowa Test of Basic Skills (Reading Words Scale)

Improvement index: **+17**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 67% and worse outcomes than 33% of their peers, if they had received the intervention.

Immediately after the intervention

Based on study 3

Improved concepts about print

Based on study 1

2.67-point improvement on the Observation Survey of Early Literacy (Concepts about Print task)

Improvement index: **+36**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 86% and worse outcomes than 14% of their peers, if they had received the intervention.

Immediately after the intervention

Improved writing vocabulary

Based on study 1

11.03-point improvement on the Observation Survey of Early Literacy (Writing Vocabulary Task)

Improvement index: **+32**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 82% and worse outcomes than 18% of their peers, if they had received the intervention.

Immediately after the intervention

Improved hearing and recording sounds in words

Based on study 1

5.89-point improvement on the Observation Survey of Early Literacy (Hearing and Records Sounds in Words task)

Improvement index: **+36**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 86% and worse outcomes than 14% of their peers, if they had received the intervention.

Immediately after the intervention

Improved text reading level

Based on study 1

7.65-point improvement on the Observation Survey of Early Literacy (Text Level Task)

Improvement index: **+48**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 98% and worse outcomes than 2% of their peers, if they had received the intervention.

Immediately after the intervention

Improved early literacy

Based on study 2

43.49-point improvement on the Observation Survey of Early Literacy

Improvement index: **+31**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 81% and worse outcomes than 19% of their peers, if they had received the intervention.

Immediately after the intervention

Based on study 3

Improved reading comprehension

Based on study 2

3.9-point improvement on the Iowa Test of Basic Skills (Comprehension Scale)

Improvement index: **+17**

This means we would expect the average participant in the comparison group who did not receive the intervention (ie, someone for whom 50% of their peers have better outcomes and 50% have worse outcomes), to improve to the point where they would have better outcomes than 67% and worse outcomes than 33% of their peers, if they had received the intervention.

Immediately after the intervention

Key programme characteristics

Who is it for?

The best available evidence for this programme relates to the following age-groups:

- Primary school

How is it delivered?

The best available evidence for this programme relates to implementation through these delivery models:

- Individual

Where is it delivered?

The best available evidence for this programme relates to its implementation in these settings:

- Primary school

The programme may also be delivered in these settings:

- Primary school

How is it targeted?

The best available evidence for this programme relates to its implementation as:

- Targeted indicated
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Where has it been implemented?

Australia, Canada, Denmark, Ireland, New Zealand, United Kingdom, United States

UK provision

This programme has been implemented in the UK.

UK evaluation

This programme's best evidence does not include evaluation conducted in the UK.

Spotlight sets

EIF includes this programme in the following Spotlight sets:

- programmes for children with recognised or possible special education needs
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About the programme

What happens during delivery?

How is it delivered?

- Reading Recovery is delivered to individual pupils by trained Reading Recovery teachers.
- Reading Recovery is delivered in daily sessions which continue for between 12 and 20 weeks (i.e. between 60 and 100 sessions) each of half an hour duration.

What happens during the intervention?

Reading Recovery begins with a diagnostic assessment of the child's reading strengths and needs.

Lessons are then tailored to the specific needs of individual children, typically including the following elements:

- Reading two or three books that the child can read easily, to develop fluency and independent control
- An assessment of the child's independent reading at instructional level to inform teaching decisions
- Letter and word work
- Composing and writing a message or story
- The written work is used as a cut-up story, linking writing to reading
- Introducing and reading a new book with new challenges for learning.

What are the implementation requirements?

Who can deliver it?

- The practitioner who delivers this programme is a Reading Recovery Teacher with QCF-6 level qualifications.

What are the training requirements?

- The Reading Recovery Teacher has 20 half day sessions of programme training over the course of a year. Booster training of practitioners is recommended (teachers who continue to teach Reading Recovery attend six half day sessions of continuing professional development to maintain their accreditation).
- Training is provided off site by accredited Teachers, Teacher Leaders and Trainers.

How are the practitioners supervised?

Practitioner supervision is provided through the following processes:

- It is recommended that practitioners are supervised by 1 host-agency supervisor (qualified to QCF-7/8 level), with one full time year of programme training to qualify as a Teacher Leader.
- It is recommended that practitioners are supervised by 1 programme developer supervisor (qualified to QCF-7/8 level).

What are the systems for maintaining fidelity?

Programme fidelity is maintained through the following processes:

- Training manual
- Other printed material
- Other online material
- Face-to-face training
- Fidelity monitoring
- Minimum international standards for implementation and use of the trademark via two international professional bodies – International Reading Recovery Trainer Organisation (IRRTO), and Marie Clay Trust in New Zealand.

Is there a licensing requirement?

There is no licence required to run this programme.

How does it work? (Theory of Change)

How does it work?

- The research base for Reading Recovery presents reading as a complex process. The need for reading recovery is based on international research that a minority of children (around 20%) will not respond to teaching that is effective for the majority, but can respond well if teaching is appropriately matched to their needs.
- Reading Recovery therefore provides children with a range of strategies for reading and writing through one-to-one tutoring sessions, tailored to the child's individual strengths and needs.
- Within 20 weeks of starting the programme, children are typically reading at age appropriate levels

Intended outcomes

Supporting children's mental health and wellbeing
Enhancing school achievement & employment

Contact details

The European Centre for Reading Recovery, International Literacy Centre, UCL Institute of Education
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<https://www.ucl.ac.uk/reading-recovery-europe/ilc>

About the evidence

Reading Recovery's most rigorous evidence comes from three RCTs which were conducted in the USA.

The first study is a rigorously conducted RCT; this study identified statistically significant positive impact on a number of child outcomes.

The second study is a rigorously conducted RCT; this study identified statistically significant positive impact on a number of child outcomes.

The third study is a quasi-experimental study suggesting long-term impact; this study identified statistically significant positive impact on a number of child outcomes. The conclusions that can be drawn from this study are limited by methodological issues pertaining to the statistical matching used and whether all key variables were included, and relatedly the extent to which we can be reassured that the two groups are baseline equivalent across all relevant demographic and outcome variables.

Study 1

Citation: Schwartz (2005)

Design: RCT

Country: United States

Sample: 148 children, approximately 6 years old

Timing: Post-intervention

Child outcomes:

- Improved reading ability
 - Improved concepts about print
 - Improved writing vocabulary
 - Improved hearing and recording sounds in words
 - Improved text reading level
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Other outcomes:

- None measured
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Study rating: 3

Schwartz, R.M. (2005). Literacy Learning of At-Risk First-Grade Students in the Reading Recovery Early Intervention. *Journal of Educational Psychology*, 97 (2), 257-267.

Available at <http://psycnet.apa.org/record/2005-05100-010>

Study Design and Sample

The first study is a rigorously conducted RCT.

At-risk first-grade students were randomly assigned to receive the Reading Recovery intervention, either during the first round (intervention group: n = 37) or second round of the school year (control group: n = 37). The study was conducted in the USA, with a sample of first-grade children (intervention group: mean age = 77.4 months, SD = 4.3 months; control group: mean age = 76.4 months, SD = 3.8 months). 53% of the sample were male. 46% of the sample were White, 40% were African American-Black, 12% were Hispanic-Latino, and 2% were Asian. Information on participants' lunch subsidies were available for 107 of the 148 children recruited; of this group, 43% received free school lunches, 8% received reduced-price school lunches, and 49% did not receive lunch subsidies.

Measures

An Observation Survey of Early Literacy Achievement [OS] (Clay, 2013) was used to assess students at the beginning of the year, at the transition between service for the first- and second-round students, and at the end of the school year. All six subscales of the OS were used in this study, and the constructs measured included:

- Letter Identification (teacher report)
- Ohio Word Test (teacher report)
- Concepts About Print (teacher report)
- Writing Vocabulary (teacher report)
- Hearing and Recording Sounds in Words (teacher report)
- Text Reading Level (teacher report).

Findings

This study identified statistically significant positive impact on a number of child outcomes. This includes letter identification, reading ability, understanding of concepts of print, writing vocabulary, and the ability for hearing and writing.

Study 2

Citation: May et al. (2016)

Design: RCT

Country: United States

Sample: 9,784 first-grade students (between 6 and 7 years old)

Timing: Post-intervention

Child outcomes:

- Improved early literacy
 - Improved reading ability
 - Improved reading comprehension
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Other outcomes:

- None measured
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Study rating: 3

May, H., Sirinides, P., Gray, A., Goldsworthy. (2016). Reading Recovery: An evaluation of the four-year i3 scale up. Centre for Research in Education & Social Policy. University of Delaware.

Available at https://repository.upenn.edu/cpre_researchreports/81/

Study Design and Sample

The second study is a rigorously conducted RCT.

This study involved random assignment of children to a Reading Recovery group or a wait-list group.

This study was conducted in the USA with a sample of children. The sample included 4,892 first-grade students in the treatment group and 4,892 first-grade students in the control group. 58% of the sample were male. 12% of the sample were Black, 39% of the sample were White, 18% were Hispanic, and the remaining 25% were 'other'.

Measures

Reading ability was measured using the Iowa Test of Basic Skills measure (direct assessment).

Early literature achievement was measured using an Observation Survey of Early Literacy Achievement [OS] (Clay, 2013).

Findings

This study identified statistically significant positive impact on a number of child outcomes.

This includes:

- Iowa Test of Basic Skills Total Reading scores
- Iowa Test of Basic Skills Reading Words subscale scores
- Iowa Test of Basic Skills Comprehension subscale scores
- OS Total scores.

Study 3

Citation: D'Agostino, Lose, & Kelly, (2017)

Design: QED

Country: United States

Sample: 592 children, average of 6 years old (between 5 years 10 months and 7 years 7 months)

Timing: Post-intervention (mid-year 1st grade); approx 4-5 month follow-up (spring 1st grade); approx 2-year follow-up (3rd grade)

Child outcomes:

- Improved reading ability
 - Improved early literacy
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Other outcomes:

- None measured
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Study rating: 2

D'Agostino, J. V., Lose, M. K., & Kelly, R. H. (2017). Examining the Sustained Effects of Reading Recovery. *Journal of Education for Students Placed at Risk (JESPAR)*, 22(2), 116-127.

Available at <http://www.tandfonline.com/doi/abs/10.1080/10824669.2017.1286591>

Study Design and Sample

The third study is a quasi-experimental study, using an ELL indicator (English language learners), minority status, and Fall first-grade pretest OS Total scores to conduct propensity score matching.

The study was conducted in the USA. Participants were students aged between 5 and 7 years from schools in Michigan. The median age of students in the treatment group was 6 years, 4 months (range: 5 years, 10 months to 7 years, 7 months) and the median age of students in the control group was 6 years 6 months (range: 5 years, 10 months to 7 years, 6 months). Among those in the treatment group, there were 79% White, 13% African American, 5% Hispanic/Latino, 2% Asian, and 2% American Indian. About 8% of students were English Language Learners (ELL) and 27% were of minority status. Of the students in the control group, there were 74% White, 17% African American, 7% Hispanic/Latino, 1% Asian, and 1% American Indian. About 4% were ELL and 29% were of minority status.

Measures

Early literacy was measured using OS Total scores (achievement test). Reading and writing was measured using MEAP scores (Michigan Education Assessment Program) (achievement test). Data collection was undertaken at pre-test (autumn of first grade), post-test (mid-year of first grade), follow-up in the spring of first-grade (several months post-intervention), follow up in third grade (approx two years post-intervention) and in fourth grade (approx three years post-intervention).

Findings

This study identified statistically significant positive impact on a number of child outcomes. This includes:

- At post-test: improved early literacy (OS Total scores)
 - At Spring in first grade: improved early literacy (OS Total scores)
 - In third grade: Improved reading (MEAP).
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Other studies

The following studies were identified for this programme but did not count towards the programme's overall evidence rating. A programme receives the same rating as its most robust study or studies.

- Baenen, N., Bernhole, A., Dulaney, C., & Banks, K. (1997). Reading Recovery: Long-term progress after three cohorts. *Journal of Education for Students Placed at Risk*, 2(2), 161-181 - **This reference refers to a randomised control trial, conducted in the USA.**
- Burroughs-Lange, S., & Douetil, J. (2006). Evaluation of Reading Recovery in London Schools: Every Child A Reader, 2005-2006. Institute of Education, University of London.
- Burroughs-Lange, S., & Douetil, J. (2007). Literacy progress of young children from poor urban settings: A Reading Recovery comparison study. *Literacy Teaching and Learning*, 12(1), 19-46 - **This reference refers to a quasi-experimental design, conducted in the UK.**
- Center, Y., Wheldall, K., Freeman, L., Outhred, L., & McNaught, M. (1995). An evaluation of Reading Recovery. *Reading Research Quarterly*, 30(2), 240-263 - **This reference refers to a quasi-experimental design, conducted in Australia.**
- Chapman, J. W., Tunmer, W. E., & Prochnow, J. E. (2001). Does success in the Reading Recovery program depend on developing proficiency in phonological-processing skills? A longitudinal study in a whole language instructional context. *Scientific Studies of Reading*, 5(2), 141-176 - **This reference refers to a quasi-experimental design, conducted in New Zealand.**
- D'Agostino, J. V. & Murphy, J. A. (2004). A meta-analysis of Reading Recovery in United States schools. *Educational Evaluation and Policy Analysis*, 26(1), 23-38 - **This reference refers to a meta-analysis.**
- D'Agostino, J. V., & Harmey, S. J. (2016). An international meta-analysis of Reading Recovery. *Journal of Education for Students Placed at Risk (JESPAR)*, 21(1), 29-46 - **This reference refers to a meta-analysis.**
- Gapp, S. C., Zalud, G., & Pietrzak, D. (2009). End of Intervention Reading Recovery® decisions and subsequent achievement. *Reading Improvement*, 46(1), 9 - **This reference refers to a quasi-experimental design, conducted in the USA.**
- Hurry, J., & Sylva, K. (2007). Long-term outcomes of early reading intervention. *Journal of Research in Reading* 30(3), 227-2 - **This reference refers to a randomised control trial, conducted in the UK.**
- Hurry, J. (2012). The impact of Reading Recovery five years after intervention. report for the Every Child a Reader Trust, London: Institute of Education, University of London. http://www.ioe.ac.uk/about/documents/Hurry_London_follow_up_2012_Report_december_12.pdf - **This reference refers to a quasi-experimental design, conducted in the UK.**
- Iversen, S., Tunmer, W. E., & Chapman, J. W. (2005). The effects of varying group size on the Reading Recovery approach to preventive early intervention. *Journal of Learning Disabilities*, 38(5), 456-472 - **This reference refers to a quasi-experimental design, conducted in the USA.**
- Pinnell, G. S., DeFord, D. E., & Lyons, C. A. (1988). Reading Recovery: Early intervention for at-risk first graders (Educational Research Service Monograph). Arlington, VA: Educational Research Service. (ERIC Document Reproduction Service No. ED303790) - **This reference refers to a randomised control trial, conducted in the USA.**
- Pinnell, G. S., Lyons, C. A., Deford, D. E., Bryk, A. S., & Selzer, M. (1994). Comparing instructional models for the literacy education of high-risk first graders. *Reading Research Quarterly*, 29, 8-39. doi: 10.2307/747736 - **This reference refers to a randomised control trial, conducted in the USA.**
- Ruhe, V., & Paula, M. (2005). The Impact of Reading Recovery on Later Achievement in Reading and Writing. *ERS Spectrum*, 23(1), 20-30 - **This reference refers to a pre-post study, conducted in the USA.**
- Schmitt, M. C., & Gregory, A. E. (2005). The impact of an early literacy intervention: Where are the children now?. *Literacy, Teaching and Learning*, 10(1), 1 - **This reference refers to a randomised control trial, conducted in the USA.**

Guidebook

The EIF Guidebook provides information about early intervention programmes that have at least preliminary evidence of achieving positive outcomes for children. It provides information based on EIF's assessment of the strength of evidence for a programme's effectiveness, and on detail about programmes shared with us by those who design, run and deliver them.

The Guidebook serves an important starting point for commissioners to find out more about effective early interventions, and for programme providers to find out more about what good evidence of impact looks like and how it can be captured. As just one of our key resources for commissioners and practitioners, the Guidebook is an essential part of EIF's work to support the development of and investment in effective early intervention programmes.

Our assessment of the evidence for a programme's effectiveness can inform and support certain parts of a commissioning decision, but it is not a substitute for professional judgment. Evidence about what has worked in the past offers no guarantee that an approach will work in all circumstances. Crucially, the Guidebook is not a market comparison website: ratings and other information should not be interpreted as a specific recommendation, kite mark or endorsement for any programme.

[How to read the Guidebook](#)

[EIF evidence standards](#)

[About the EIF Guidebook](#)

EIF

The Early Intervention Foundation (EIF) is an independent charity and a member of the What Works network. We support the use of effective early intervention for children, young people and their families: identifying signals of risk, and responding with effective interventions to improve outcomes, reduce hardship and save the public money in the long term.

We work by generating evidence and knowledge of what works in our field, putting this information in the hands of commissioners, practitioners and policymakers, and supporting the adoption of the evidence in local areas and relevant sectors.

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