



Effective programmes for struggling readers

A Best-Evidence Synthesis

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Best Evidence Encyclopaedia
Empowering educators with evidence

The importance of getting children off to a good start in reading cannot be overstated. Success in primary school is virtually synonymous with success in reading, and those children who lack these skills as they move to secondary education will face problems in every subject as a result. But which primary reading approaches have been proven to help struggling readers to succeed?

This review summarises research on six types of programmes for struggling readers. We looked at *all* available evidence on programmes designed to improve the reading achievement of primary school children having difficulty in learning to read, in order to establish what we know works. We examined all studies of relevant reading programmes from all countries, as long as a report was available in English.* (NB Most studies took place in the US). We were then able to assess and compare the effectiveness of these programmes. Descriptions and ratings for all the programmes are listed further down this summary.

The results of the review show that although small-group tutoring can be effective, one-to-one tutoring provides most effective results. Furthermore, an emphasis on phonics greatly improves outcomes. IT programmes have little impact on reading.

The full report (which this review summarises) is available at www.bestevidence.org.uk

One-to-One Tutoring by Teachers (TT)

(Such as Reading Recovery)

The review showed that one-to-one tutoring by teachers works, and that teachers are more effective as tutors than paraprofessionals or volunteers.

Effect size = +0.38 in 19 studies

Reading Recovery: Effect size = +0.23 in 8 studies

Other programs: Effect size = +0.60 in 11 studies

One-to-One Tutoring by Paraprofessionals and volunteers (T-PV)

(Such as Sound Partners, SMART, and Book Buddies)

However, the review also showed that the effects seen for paraprofessional and volunteer tutors using structured and intensive programmes were positive, and pose a real challenge to the idea that only qualified teachers can be effective tutors.

Effect size = +0.24 in 18 studies

Paraprofessionals: Effect size = +0.38 in 11 studies

Volunteers: Effect size = +0.16 in 7 studies

Small Group Tutorials (SGT)

(Such as Corrective Reading, Quick Reads, Voyager Passport, and Empower Reading)

Small Group Tutorials are the most common form of supplementary instruction for struggling readers. However, the studies of SGT that were included in this review (because they met the inclusion criteria) were not 'run-of-the-mill', but named programmes with extensive training, materials, and a strong emphasis on phonics.

Effect size = +0.38 in 11 studies.



Classroom Teaching Process Approaches (CTP)

The results for classroom teaching process programmes were very positive for pupils who had the lowest performance levels in their classes. The effect size was similar to the findings for one-to-one phonetic tutoring.

Effect size = +0.56 in 16 studies

Cooperative Learning: Effect size = +0.58 in 8 studies

Classroom Teaching Process Programmes with Tutoring (CTP + TT)

The effect size for the lowest achievers in Success for All was similar to the effect size for phonetic tutoring programmes. NB. Success for All was the only programme in this section.

Effect size = +0.52 in 9 studies.

Teaching Technology (IT)





IT had minimal impacts on the achievement of struggling readers.

Effect size = +0.09 in 14 studies.

*Overall, 96 experimental-control comparisons met the inclusion criteria, of which 39 used random assignment to treatments, and five used randomised quasi-experiments. Effect sizes (experimental-control differences as a proportion of a standard deviation) were averaged across studies, weighting by study sample size.

Programme Ratings

Listed below are currently available programmes, grouped by strength of effectiveness. Within each group programmes available in the UK are listed first (and shaded), followed by the remainder in alphabetical order. The "Type" for each programme corresponds to the categories above (eg IP = Instructional Process Strategies).

Key to Programme Ratings	
	Strong Evidence of Effectiveness: At least two studies, one of which is a randomized or randomized quasi-experimental study, or multiple smaller studies, with a sample size-weighted effect size of at least +0.20, and a collective sample size across all studies of at least 250 students. To qualify for this category, effect sizes from the randomized studies must have a weighted mean effect size of at least +0.20.
	Moderate Evidence of Effectiveness: At least two matched prospective studies, with a collective sample size of 250 pupils, and a weighted mean effect size of at least +0.20.
	Limited Evidence of Effectiveness: Strong Evidence of Modest Effects: Studies meet the criteria for "moderate evidence of effectiveness" except that the weighted mean effect size is +0.10 to +0.19.
	Limited Evidence of Effectiveness: Weak Evidence with Notable Effects: A weighted mean effect size of at least +0.20 based on one or more qualifying studies of any 12 qualifying design insufficient in number or sample size to meet the criteria for "Moderate Evidence of Effectiveness."





⬡	Insufficient Evidence of Effectiveness: Qualifying studies do not meet the criteria for “limited evidence of effectiveness.”
N	No Qualifying Studies: No studies meet inclusion standards.

Strong Evidence of Effectiveness

Rating	Programme	Type	Description	Contact / Website
⬡	Success for All	CTP + TT	Provides extensive training and materials focused on co-operative learning, phonics, and a rapid pace of instruction. Also provides tutoring to struggling children, mostly age 6/7.	www.successforall.org.uk/ (Product training provided)
⬡	Reading Recovery	TT	Provides the lowest achieving readers (lowest 20%) in year 2 With supplemental tutoring in addition to their normal reading classes.	Website: www.readingrecovery.ioe.ac.uk/ Contact: readrec@ioe.ac.uk
⬡	Quick Reads	SG	A supplementary programme designed to increase fluency, build vocabulary and background knowledge, and improve comprehension.	Website: www.quickreads.org Available to purchase from: sheila.crowe@pearson.com
⬡	Reading Intervention	TT	Programme for children with the most significant literacy difficulties and who are in the beginning stages of learning to read and	Contact: crl@psych.york.ac.uk Information about the programme in Cumbria: www.cumbria.gov.uk/childrensservices/reading/default.asp



Rating	Programme	Type	Description	Contact / Website
			write. Children who take part in the programme will usually have had previous support in school. The programme is individually tailored, and delivered by intensively trained teachers and teaching assistants. Currently available only in Cumbria and Rochdale. North Yorkshire has also developed a small group version of the intervention. (Nb. This programme was known as Reading with Phonology during development).	
	Direct Instruction/ Corrective Reading	CTP, SGT	A highly structured, phonetic approach to reading instruction that emphasizes phonics, a step-by-step teaching approach, and direct teaching of comprehension skills, as well as extensive professional development and follow-up.	US website: www.nifdi.org Contact: info@nifdi.org
	Peer Assisted Learning Strategies	CTP	A technique in which children work in pairs,	US website: www.kc.vanderbilt.edu/pals/ Contact: pals@vanderbilt.edu




Rating	Programme	Type	Description	Contact / Website
	(PALS)		taking turns as teacher and learner, to learn a structured sequence of literacy skills, such as phonemic awareness, phonics, sound blending, passage reading, and story re-telling.	
●	Targeted Reading Intervention	TT	A one-to-one tutoring model in which classroom teachers work individually with struggling readers in Years 1 and 2 for 15 minutes a day. The 1-1 sessions focus on re-reading for fluency (2 min.), word work (6 min.), and guided oral reading (7 min.).	Contact: lynnevf@email.unc.edu
●	One-to-One Teacher Tutoring with Phonics Emphasis	TT	Programmes: 1) Auditory Discrimination in Depth (TT) 2) Early Steps/Howard Street Tutoring (TT) 3) Intensive Reading 4) Reading Rescue (TT)	1) US website: www.lindamoodbell.com/programs/lips.html 2) Contact: morrisrd@appstate.edu 3) Contact: blachman@syr.edu 4) US website: www.literacytrust.org/rrprogram/index.htm
●	One-to-One Paraprofessional/Volunteer Tutoring with Phonics Emphasis	T-P/V	Programmes: 1) Sound Partners (TPara) 2) The Reading Connection (T-Para) 3) SMART (T-	1) Contact: partners@wri-edu.org 2) US website: www.thereadingconnection.org 3) US website: www.getsmartoregon.org 4) US website: www.literacytrust.org/rrprogram/index.htm




Rating	Programme	Type	Description	Contact / Website
			Para) 4) Reading Rescue (TPara) 5) Howard Street Tutoring (T-Para) 6) Book Buddies (TVolunteer)	5) Contact: morrisrd@appstate.edu 6) Contact: mai@virginia.edu (adaptable for use in any country)


Moderate Evidence of Effectiveness

Rating	Programme	Type	Description	Contact / Website
	Cooperative Integrated Reading and Composition (CIRC) CIRC is now disseminated as <i>Literacy Wings</i>	CTP	A co-operative learning programme designed to help pupils develop metacognitive strategies for comprehending narrative and expository text.	www.successforall.org.uk/ (Product training provided)





Limited Evidence of Effectiveness: Strong Evidence of Modest Effects

Rating	Programme	Type	Description	Contact / Website
	Jostens/ Compass Learning	IT	Provides an extensive set of assessments which place pupils according to their current levels of performance. Exercises are then designed primarily to fill gaps in their skills.	US website: www.compasslearning.com





Limited Evidence of Effectiveness: Weak Evidence with Notable Effects

Rating	Programme	Type	Description	Contact / Website
	Early Intervention in Reading	SGT	Focuses on phonemic segmentation and blending, phonics instruction, story reading and re-reading, comprehension,	Website: www.earlyinterventioninreading.com_ Contact: ccritchley@comcast.net (Training is web-based, with monthly telephone contact for UK teachers)







Rating	Programme	Type	Description	Contact / Website
			and home reading. In addition to 15-20 minutes of small group teaching, pupils receive one-to-one or one-to-two tutoring from a paraprofessional 5-10 minutes daily.	
	Contextually-Based Vocabulary Instruction	CTP	A supplementary intervention in which pupils aged 8/9 and 10/11 receive instruction in multiple meanings of vocabulary words. The supplementary instruction takes place twice weekly for 20-30 minutes.	Available to purchase from: http://store.cambiumlearning.com Contact: rnelson8@unl.edu
	Lexia	IT	Consists of various activities that teach phonetic word-attack strategies to promote automaticity in word recognition. Pupils typically participate in 2 to 4 20-30-minute sessions a week.	Website: www.lexiauk.co.uk Contact: info@lexiauk.co.uk (Product training available)
	Reading Styles	CTP	An intervention in which children with learning disabilities are assessed on a reading style inventory and then given small group instruction matched to their favoured styles.	Available to purchase from: www.nrsi.com Contact: readingstyle@nrsi.com
	Edmark	T-PV	A highly-structured one-to-one tutoring programme designed to build a	Complete contact form at: hmlt.hmco.com/Contact.php






Rating	Programme	Type	Description	Contact / Website
			150-word vocabulary in beginning readers or children with learning difficulties.	
	Empower Reading	SGT	Designed to teach children word identification skills and decoding strategies and to promote their effective use of these strategies.	Contact: Project Co-ordinator, karen.steinbach@sickkids.ca
	Lindamood Phoneme Sequence Program	SGT	A one-to-one tutoring programme with a strong phonics focus that teaches children to notice how their mouths make various sounds and relates these to letters and sound blending.	US website: www.lindamoodbell.com/programs/lips.html
	Precision Teaching	CTP	A precision teaching approach designed to help disadvantaged children with learning difficulties learn to read.	No contact information currently available.
	Proactive Reading	SGT	Emphasises phonemic awareness, letter sounds, reading of decodable text, fluency, and comprehension of connected text. The teaching emphasises rapid instruction, frequent opportunities to respond, positive feedback, and	US website: www.texasreading.org/utcrcla/research/scale_up_proactive.asp Contact: tkurz@mail.utexas.edu







Rating	Programme	Type	Description	Contact / Website
			immediate error correction.	
	Programmed Tutorial Reading	T-PV	A programme in which paraprofessional tutors are given step-by-step procedures for a series of lessons that children proceed through at their own levels and rates. The curriculum focuses on word attack and comprehension skills.	No contact information available.
	Project Read	CTP	A phonetic approach to beginning reading instruction based on the Orton-Gillingham method, originally designed for tutoring dyslexic children.	Website: www.projectread.com Contact: languagecircle@projectread.com
	RAILS	CTP	Provides children aged 5-8 with an additional reading period each day, and provides teachers with extensive professional development focusing on explicit instruction in phonemic awareness, phonics, comprehension, and vocabulary.	Contact: RJS15@PSU.EDU
	Read Naturally	CTP	A small group supplementary programme that focuses on building	Website: www.readnaturally.com Contact: info@readnaturally.com



Rating	Programme	Type	Description	Contact / Website
			fluency among low achievers. Pupils start with a “cold read” of a story and then practice with audiotapes until they reach a fluency target.	
	Read, Write, and Type	SGT	A computer-assisted teaching programme used to create a small group teaching intervention, in which specially trained teachers (added to school staff) work with struggling Year 2 children in groups of 3.	Website: www.talkingfingers.com Contact: contact@talkingfingers.com
	Responsive Reading	SGT	A programme in which teachers alternate among children to provide intensive scaffolding at each child’s level. A daily lesson cycle consists of fluency building, assessment, letters and words, supported reading, and supported writing.	Contact: pmathes@smu.edu
	Same Age Tutoring	CTP	A dyadic reading approach in which children reading below age level are assigned to pairs with normal-progress reading partners.	Contact: Hilde.Vankeer@ugent.be



Rating	Programme	Type	Description	Contact / Website
	SHIP	SGT	A programme that provides 30 minutes of daily supplemental instruction to struggling readers in groups of 2-3, over a two-year period.	No contact information available.
	TEACH	TT	A one-to-one tutoring programme that focuses on identifying perceptual deficits (such as delayed acquisition of spatial and temporal orientation) using an instrument called SEARCH and then provides one-to-one tutoring focused not on reading instruction but on neurological skills.	No contact information available.
	Voyager Passport	SGT	A commercial small group programme for struggling readers that emphasizes phonics, phonemic awareness, comprehension, vocabulary, and fluency in daily 30-40-minute sessions.	Website: www.voyagerlearning.com/passport
	Wallach and Wallach	T-Para	An early phonetic approach for children struggling in the early years of primary school. Teaching	An early phonetic approach for children struggling in the early years of primary school. Teaching assistants use the programme for a half a hour each day.



Rating	Programme	Type	Description	Contact / Website
			assistants use the programme for a half a hour each day.	

Other Ratings



Insufficient Evidence
 Academy of Reading
 Destination Reading
 Experience Corps
 Failure-Free Reading
 Fast ForWord
 Gottshall Small Group Phonics
 Headsprout
 HOSTS
 New Heights
 Knowledgebox
 LeapTrack
 Plan focus
 Read 180
 Spell Read
 Targeted Intervention
 Waterford
 Wilson Reading

N No Qualifying Studies

UK programmes lacking qualifying studies:

Can Do Cubes, Can Do Education www.candocubes.com/synthetic-phonics.php
 Dandelion Readers, Phonic Books www.phonicbooks.co.uk
 Debbie Hepplewhite's Online Synthetic Phonics Programme, Phonics International
www.phonicsinternational.com
 Destination Literacy www.riverdeep-learning.co.uk
 Easyread, Oxford Learning www.easyreadsystem.com
 Fun with Phonics, BBC Active www.bbcactivefunwithphonics.com
 Jolly Phonics www.jollylearning.co.uk/
 Rigby Star, Heinemann www.rigbystar.co.uk
 Letterland, Letterland International www.letterland.com
 Letters and Sounds: Principles and practice of high quality phonics, National Literacy Strategy
www.standards.dcsf.gov.uk/clld
 Literacy World , Heinemann www.heinemann.co.uk/Primary/Primary.aspx
 POPAT: Programme of Phoneme Awareness Training www.popat.co.uk
 Reading Tree, OUP www.oxfordprimary.co.uk
 Read Write Inc, OUP www.oxfordprimary.co.uk
 Say Cheese! Early Years and Say Cheese Infants Contact:
jamie.bayliss@sherston.co.uk
If you use programmes which are not listed here, please let us know



Non-UK:

100 Book Challenge
A Comprehensive Curriculum for Early Student Success (ACCESS)
Academic Associates Learning Centers
Accelerated Reader
ALEKS®
ALPHabiTunes
Alpha-Phonics
Balanced Early Literacy Initiative
Barton Reading and Spelling System
Benchmark
BookMARK
Bradley Reading and Language Arts
Breakthrough to Literacy
Bridge
Bridge to Reading
Bring the Classics to Life
CIERA School Change Framework
Comprehensive Early Literacy Learning
Classwide Peer Tutoring©
Compensatory Language Experiences and Reading Program (CLEAR)
Core Knowledge
Cornerstone Literacy Initiative
Curious George Reading and Phonics
DaisyQuest
Davis Learning Strategies™
Discover Intensive Phonics for Yourself
Discovery World
Dominie
Dr. Cupp Readers® & Journal Writers
Early Success
Early to Read
Earobics®
Emerging Readers
Essential Skills
Evidence Based Literacy Instruction
Exemplary Center for Reading Instruction (ECRI)
Fast Track Action
Felipe's Sound Search
First grade Literacy Intervention Program (FLIP)
First Steps
Flippen Reading Connections™
Fluency Formula
FOCUS: A Reading and Language Program
Four Block Framework
Frontline Phonics
Foundations
Funnix



GOcabulary Program for Elementary Students
Goldman-Lynch Language Stimulation Program
Goldman-Lynch Sounds-in-Symbols
Great Leaps
Guided Discovery LOGO
Guided Reading
Harcourt Accelerated Reading Instruction
Higher Order Thinking Skills (HOTS)
Hooked on Phonics®
Huntington Phonics
IntelliTools Reading
Insights: Reading as Thinking
Invitations to Literacy
Irlen method
Jigsaw Classroom
Johnny Can Spell
Kaleidoscope
KidCentered learning
Knowledge Box
Ladders to Literacy
Language for Learning
Language for Thinking
Leap into Phonics
Letter People
Letterland
LinguiSystems
Literacy Collaborative
Literacy First
Little Books
Little Readers
LocuTour
Matchword
Merit Reading Software Program
Multicultural Reading and Thinking Program (McRAT)
My Reading Coach
New Century Integrated Instructional System
Next Steps
Onward to Excellence
Pacemaker
Pacific Literacy
Pause, Prompt, & Praise©
Peabody Language Development Kits
Performance Learning Systems
Phonemic Awareness in Young Children
Phonics for Reading
Phonics Q
Phono-Graphix
PM Plus Readers
Primary Phonics



Programmed Tutorial Reading
Project Child
Project FAST
Project LISTEN
Project PLUS
Rainbow Reading
Read Well
Reading Bridge
Reading Explorer's Pathfinders Tutoring Kit
Reading Intervention for Early Success
Reading Rods
Reading Step by Step
Reading Success from the Start
Reading Upgrade
Richards Read Systematic Language Program
Right Start to Reading
Road to the Code
ROAR Reading System
S.P.I.R.E.
SAIL (Second grade Acceleration to Literacy)
Saxon Phonics
Schoolwide Early Language and Literacy (SWELL)
Sing, Spell, Read, and Write (SSRW)
SkillsTutor
Soar to Success
Soliloquy
Sonday System
Sound Reading
Sounds and Symbols Early Reading Program
Spalding Writing Road to Reading
Starfall
Start Up Kit
Stepping Stones to Literacy
STEPS (Sequential teaching of Explicit Phonics and Spelling)
Stories and More
Story Comprehension to Go
Storyteller Guided Reading
Strategies the Work
Student Team Achievement Divisions (STAD)
Successmaker®
Sullivan Program
Super QAR
Teacher Vision®
Ticket to Read
Touchphonics
Tribes learning Communities®
Verticy Learning
Voices Reading
VoWac (Vowel Oriented Word Attack Course)



WiggleWorks
Wright Skills
Writing to Read

Review Methods

An exhaustive search considered hundreds of published and unpublished articles. It included those that met the following criteria:

An exhaustive search considered hundreds of published and unpublished articles. It included those that met the following criteria:

- Schools or classrooms using each programme had to be compared to randomly assigned or well-matched control groups.
- Study duration had to be at least 12 weeks.
- Outcome measures had to be assessment of the reading content being taught in all classes. Almost all are standardized tests or state assessments.
- The review placed particular emphasis on studies in which schools, teachers, or pupils were assigned at random to experimental or control groups.

The Full Report

- For the full report, which this review summarises, see Slavin, R.E., Lake, C., Davis, S., & Madden, N. *Effective programs for struggling readers: A best evidence synthesis*. Baltimore, MD: Johns Hopkins University, Center for Data-Driven Reform in Education. The full report is available at www.bestevidence.org.uk.

