Upper Primary Reading

Beyond the Basics: Effective Reading Programmes for Upper Primary Pupils

Robert E Slavin **Johns Hopkins University and University of York**
Cynthia Lake **Johns Hopkins University**
Alan Cheung **Johns Hopkins University**
Susan Davies **Success for All Foundation**

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Best Evidence Encyclopaedia
Empowering educators with evidence

During Key Stage 2 children go through a critical transformation as readers. By the age of 7 most are able to decode, recognise key sight words, comprehend simple texts, and read with some degree of fluency. However, the tasks that lay ahead of them are qualitatively different from those they have navigated so far. They must consolidate and extend their basic skills, become fluent, confident readers, build a vocabulary of words and concepts, and most importantly be able to strategically comprehend increasingly sophisticated text. Indeed, this has been described as a transition from "learning to read" to "reading to learn".

Furthermore, in recent years reading in the upper primary years has taken on particular centrality because of the growing importance of test-based accountability. Indeed, Key Stage 2 assessments in reading and maths in Year 6 (age 11) are the main indicators of primary school success.

This review summarises research on reading programmes for upper primary-age pupils. We looked at *all* available evidence on programmes designed to improve upper primary reading achievement, in order to establish what we know works for pupils aged 7-11. 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 programmes which focus on daily teaching practices improved pupil achievement, with particularly positive results for co-operative learning programmes and structured, phonetic curricula combined with specific teaching methods. Also, the approaches that were effective provided extensive professional development. In contrast, studies of reading textbooks and of computer-assisted instruction found small effects on reading outcomes.

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

Instructional Process Programmes (IP)
(Changing the way the teacher teaches, eg co-operative learning)

Studies of programmes that provide extensive professional development to help teachers use well-specified teaching methods had relatively positive effects overall. Mean weighted effect size across 33 studies: +0.21. Particularly positive effects were found for co-operative learning (ES=+0.21 in 10 studies).

Information and Communication Technology (ICT)
(Programmes based on ICT)

Our review showed that ICT also made little difference in reading outcomes. Average effect size across 31 studies: +0.06.

Reading Curricula (Curr)
(Textbooks)

Reading curricula made little difference in reading outcomes. Average effect size across 14 studies: +0.06.

*Overall, 80 studies met the inclusion criteria, of which 25 used random assignment to treatments. Effect sizes (proportion of a standard deviation by which experimental groups exceeded control groups) 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 then 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 prospective studies (i.e., not post hoc), one of which is a large (n=250) randomised or randomised 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 500 pupils. To qualify for this category, effect sizes from the randomised studies must have a weighted mean effect size of at least +0.20.
⬡	**Moderate Evidence of Effectiveness:** At least two randomised or matched prospective studies, with a collective sample size of 500 pupils, and a weighted mean effect size of at least +0.20.
⬡	**Limited Evidence of Effectiveness: Strong Evidence of Modest Effects:** Studies would have met 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 insufficient in number or sample size to meet the criteria for "Moderate Evidence of Effectiveness".
⬡	**Insufficient Evidence of Effectiveness:** One or more qualifying studies did not meet the criteria for "Limited Evidence of Effectiveness".
N	**No Qualifying Studies:** No studies met inclusion standards

Strong Evidence of Effectiveness

None

Moderate Evidence of Effectiveness

Rating	Programme	Type	Description	Contact / Website
⬡	Cooperative Integrated Reading and Composition (CIRC) CIRC is now disseminated as *Literacy Wings*	IP	Literacy Wings is aimed at years 2-6. A range of literature is supported by structured teaching materials, including detailed daily lesson plans.	www.successforall.org.uk/ (Product training provided)
⬡	Cross Age Peer Tutoring + Strategy	IP	Belgian Programme in which children receive effective one-to-one	E-mail: Hilde.Vankeer@ugent.be

Rating	Programme	Type	Description	Contact / Website
	Instruction		tutoring from older pupils as well as instruction in metacognitive strategies.	
	Same-Age Peer Tutoring + Strategy Instruction	IP	A Belgian programme in which children participate in reciprocal peer tutoring activities and also receive metacognitive strategy instruction.	E-mail: Hilde.Vankeer@ugent.be

Limited Evidence of Effectiveness: Strong Evidence of Modest Effects

Rating	Programme	Type	Description	Contact / Website
	Open Court Reading	Curr	A basal text book series that uses phonetic readers in early years, a focus on direct instruction of specific skills throughout the programme, scripted teachers' manuals, teacher training, and follow-up.	US website: www.sraonline.com/oc_home.html

Limited Evidence of Effectiveness: Weak Evidence with Notable Effects

Rating	Programme	Type	Description	Contact / Website
	Lightspan	ICT	Supplementary integrated learning system. Also provides computer assisted programmes for home use.	UK website: www.platolearning.co.uk (Product training available)
	My Reading Coach	ICT	Software designed to help primary school-age children learn to read. It focuses on phonics, word structure, vocabulary, and comprehension. The software is used for one lesson daily.	www.myreadingcoach.co.uk
	Quick Reads	Curr	A supplementary programme designed to increase fluency, build	Website: www.quickreads.org Available to purchase from: sheila.crowe@pearson.com

Rating	Programme	Type	Description	Contact / Website
			vocabulary and background knowledge, and improve comprehension.	
⬡	Carbo Reading Styles	IP	Strategy where teaching is adapted to suit pupils' diverse reading styles. Teachers learn to identify and accommodate reading style strengths using the *Reading Style Inventory* and emphasis is placed on the use of: coloured overlays to reduce visual dyslexia; specially recorded, high-interest reading materials that increase reading fluency and comprehension; modelling reading methods (neurological impress, echo reading, recordings, choral reading); tactile and kinesthetic skill work; and reading methods that match a student's Reading Style strengths.	US website: www.nrsi.com US contact: readingstyle@nrsi.com
⬡	Exemplary Center for Reading and Instruction (ECRI)	IP	A professional development programme that emphasizes individualised instruction, positive reinforcement, and constant assessment of children's mastery levels.	E-mail: ereid@xmission.com Website: www.ecri.cc
⬡	Fast ForWord	ICT	Computerised programme designed to strengthen memory, attention, and mental processing.	Website: www.scilearn.com/

Rating	Programme	Type	Description	Contact / Website
⬡	Literature-Based Program	IP	A reading approach that supplements traditional basal textbooks with extensive literature in many genres, independent reading and writing periods, directed reading/listening thinking activities, read-aloud sessions, and classroom literacy centres.	E-mail: lmorro@rutgers.edu
⬡	OpenBook to Literacy	ICT	A software programme that uses a combination of voice, text, pictures, video, and graphics to teach reading in a self-paced individualised format, as a supplement to classroom instruction.	E-mail: Sales@openbooksoftware.com Website: www.openbooklearning.com
⬡	PALS	IP	Structured pair learning strategy in which children take turns as teachers and pupils to learn a structured sequence of literacy skills. These include phonemic awareness, phonics, sound blending, passage reading, and story re-telling.	US website: www.kc.vanderbilt.edu/pals/
⬡	Reader's Theater	IP	A co-operative learning method designed to enhance pupils' reading by having them read the scripts of plays.	Complete contact form at: scholastic.custhelp.com Website: www.teacher.scholastic.com/products/instructor/readerstheater.htm
⬡	Reciprocal Teaching	IP	An instructional strategy in which pupils work in small groups to help one another generate their own questions about a text they are reading, summarise parts of the text, clarify word meanings and	E-mail: annemari@umich.edu

Rating	Programme	Type	Description	Contact / Website
			confusing text passages, and predict what might come next.	
⬡	Strategy Instruction (Belgian Model)	IP	Belgian strategy instruction programme that focuses cognitive and metacognitive skills such as summarisation, graphic organizers, and prediction to help pupils comprehend text.	E-mail: Hilde.Vankeer@ugent.be
⬡	Student Success Skills	IP	Small-group counselling intervention, in which counsellors emphasize achievement in academic, social, and self-management skills. Techniques used include role play, art, music, drama, and goal-setting strategies.	E-mail: sssaec@aol.com Website: www.studentsuccessskills.com/
	Thinking Maps	IP	A programme that teaches pupils to use graphic organizers to help them understand concepts.	E-mail: office@thinkingmaps.com Website: www.thinkingmaps.com

Other Ratings

Insufficient Evidence
Accelerated Reader (ICT)
CCC (ICT)
Classworks (ICT)
ECRI (IP)
Elements of Reading: Comprehension (Curr)
Elements of Reading: Fluency (Curr)
Elements of Reading: Vocabulary (Curr)
Failure Free Reading (IP)
Fast ForWord (ICT)
Fluency Formula (Curr)
Harcourt (Curr)
Houghton Mifflin (Curr)
Jacob's Ladder (Curr)
Jostens (ICT)
Kaplan SpellRead (Curr & IP)
Reading Together (IP)

Responsive Classroom (IP)
Rigby (Curr)
Reading Street (Curr)
Success in Reading and Writing (IP)
WICAT (ICT)
Wilson Reading (Curr + IP)

N   No Qualifying Studies

UK programmes lacking qualifying studies:

Can Do Cubes, Can Do Education www.candocubes.com/synthetic-phonics.php
Collins Primary Literacy, Collins www.collinseducation.com/Primary
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
EasyTech www.learnpath.com
Easyread, Oxford Learning www.easyreadsystem.com
Fun with Phonics, BBC Active www.bbcactivefunwithphonics.com
Rigby Star, Heinemann www.rigbystar.co.uk
Kar2ouche www.kar2ouche.com
KnowledgeBox http://uk.knowledgebox.com/standard.html
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
Lexia Early, Foundation and Quick Reading Test, Lexia www.readingsoftware.com
Literacy World , Heinemann www.heinemann.co.uk/Primary/Primary.aspx
Longman, various titles reading.ilongman.com
Nessy Learning Programme, Net Educational Systems
www.nessy.com/nessylearningprogramme
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
Shannon's Game www.resourcekt.co.uk
Tell a Tale 2 www.4mation.co.uk
Young Writers Workshop CD-Romwww.granada-learning.com
If you use programmes which are not listed here, please let us know

Non-UK:
100 Book Challenge
ABD's of Reading
Academy of Reading
Accelerated Literacy Learning
Achieve 3000
AfterSchool KidzLit
Alphabetic Phonics
Barton Reading & Spelling System
Be a Better Reader
Breakthrough to Literacy
Caught Reading

Charlesbridge Reading Fluency
Compass Learning (current version)
Comprehension Plus
Comprehension Upgrade
Concept-Oriented Reading Instruction (CORI)
CRISS / Project CRISS
Cross-Aged Literacy Program
Destination Reading
Direct Instruction
Disciplinary Literacy
Discover Intensive Phonics for Yourself
Dolch® Reading Program
Early Success
Earobics
Edmark Reading Program
Electronic Bookshelf
Essential Learning Systems
Fast Track Reading
First Steps
Fluency First
Fluent Reader
FOCUS Reading and Language Program
Fundations
Funnix Reading Programs
Glass-Analysis method
Great Leaps
Headsprout Early Reading
Hooked on Phonics
Horizons
HOSTS
The Imagination Station
Imagine It!
IndiVisual Reading
Intensive Reading Strategies Instruction (IRSI) Model
Intensive Supplemental Reading
Invitations to Literacy
Irlen Method
Junior Great Books
Kaleidoscope
Kaplan SpellRead
KidBiz3000 and TeenBiz 3000
Knowledge Box
K-W-L strategy
LANGUAGE!
Language Essentials for Teachers of Reading and Spelling
Language First!
Language for Thinking
LeapTrack Assessment &Instruction System
Learning to Read
Learning Experience Approach
Learning Upgrade
Lexia
Like to Read
Lindamood-Bell

LiPS
LitART
The Literacy Center
Literacy Seminar
Macmillan/McGraw-Hill Treasures
Making Connections
McGraw-Hill Reading
McRAT
Merit Software
Open Book Anywhere
Open Book to Literacy
Open Book Anywhere
Orchard
Orton-Gillingham Approach
Pathways
Phonetics First-Focus on Sounds
Phonics First Foundations
Phonics and Friends
Phonics for Reading
Phono-Graphix
PLATO
Project Read
Putting Reading First in Your Classroom
Questioning the Author
QuickReads
Quicktionary Reading Pen II
Rave-O
REACH
READ 180
ReadAbout
Read Naturally
Read Now
READ RIGHT
Read, Write & Type!
Reading Apprenticeship
Reading in the Content Areas
Reading Horizons
Reading Mastery
Reading to Learn
Reading Plus
Reading Success
Reading Triumphs
Reading Upgrade
Reciprocal Teaching
REWARDS
Rosetta Stone Literacy
Saxon Phonics
Scaffolded Reading Experience
Seeing Stars
SIM-Stategic Instruction Model
Six Minute Solution
Slingerland
Smart Way Reading and Spelling
Soar to Success

Soliloquy Reading Assistant
Sound Sheets
Spalding Method
S.P.I.R.E. and Sounds Sensible
Spell Read P.A.T.
SRA Reading
START-IN
STEPS (Sequential Teaching of Explicit Phonics and Spelling)
Strategic Literacy Initiative
SuccessMaker
Sunshine
TeachFirst
Teaching Reading Essentials
Text Mapping Strategy
Text Talk
Thinking Works
Transactional Strategies Instruction
Tune in to Reading
Visualizing and Verbalizing
Vocabulary Improvement Program
Voices Reading
Voyager TimeWarp Plus
Voyager Passport
Waterford Early Reading System
Wisconsin Design for Reading Skills Development (WDRSD)
Wright Group LiteracyWriteToLearn
Write to Learn

Review Methods

An exhaustive search considered more than 2000 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 assessments of the reading content being taught in all classes. Almost all are standardised tests, or state assessments.
- The review placed particular emphasis on studies in which schools, teachers, or students were assigned at random to experimental or control groups.

The Full Report

- The full report, from which this summary was taken, was produced by Robert E. Slavin, Johns Hopkins University/University of York, Cynthia Lake, Johns Hopkins University, Alan Cheung, Johns Hopkins University, and Susan Davis, Success for All Foundation. The report is currently submitted for publication. An updated version of the full report is available at www.bestevidence.org.uk.