Beyond the Basics: Effective Reading Programs for the Upper Elementary Grades

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What reading programs have been proven to help students in grades 2-5 to succeed? To find out, this review summarizes evidence on three types of programs designed to improve the reading achievement of students in grades 2-5:

- **Reading Curricula (Curr),** such as *Open Court, Harcourt, Reading Street* and other standard and alternative textbooks
- Computer-Assisted Instruction (CAI), such as *Jostens/Compass Learning* and *Accelerated Reader*.
- Instructional Process Programs (IP), such as cooperative learning and classroom management and motivation approaches, and cross-age tutoring.

General Findings

Overall, 80 experimental-control comparisons met the inclusion criteria, of which 25 used random assignment to treatments. Effect sizes (proportion of a standard deviation) were averaged across studies, weighting by sample size.

Reading Curricula (Curr). Studies of reading curricula found minimal effects of using particular textbooks. Overall weighted mean effect size across 16 studies: +0.06.

Computer Assisted Instruction (CAI). Studies of CAI also found minimal effects. Mean weighted effect size across 31 studies: +0.06.

Instructional Process Programs (IP). Studies of programs 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 cooperative learning (ES=+0.21 in 10 studies).

Program Ratings

Listed below are currently available programs, grouped by strength of effectiveness. Within each group, programs are listed alphabetically. The type for each program corresponds to the categories above (e.g., IP = Instructional Process Strategies).

Strong Evidence of Effectiveness

None

Moderate Evidence of Effectiveness

Rating	Program	Type	Description	Contact / Website
\(\)	Cooperative Integrated Reading and Composition (CIRC)	IP	A cooperative learning program designed to help students develop metacognitive strategies for comprehending narrative and expository text. CIRC is now disseminated as Reading Wings.	Email: sfainfo@successforall.org Website: www.successforall.org
-	Cross Age Peer Tutoring + Strategy Instruction	IP	Belgian Program in which children receive effective one-to-one tutoring from older students as well as instruction in metacognitive strategies.	E-mail: Hilde.Vankeer@ugent.be
<u> </u>	Same-Age Peer Tutoring + Strategy Instruction	IP	A Belgian program 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	Program	Type	Description	Contact / Website
	Open Court	Curr*	Basal textbook that	E-mail:
	Reading		uses scripted	mhls_ecommerce_custserv@mcgraw-
			phonics lessons.	hill.com
				Website:
				www.sraonline.com/oc_home.html

^{*}With additional time and training

Limited Evidence of Effectiveness: Weak Evidence with Notable Effects

Rating	Program	Type	Description	Contact / Website
<u>~</u>	Carbo Reading Styles	IP	An approach for adapting reading strategies to students' diverse	E-mail: readingstyle@nrsi.com Website: www.nrsi.com/our_research_carbo_r eading.html
<u>~</u>	Exemplary Center for Reading and Instruction (ECRI)	IP	learning styles. A professional development program that emphasizes individualized instruction, positive reinforcement, and constant assessment of children's mastery levels.	E-mail: ereid@xmission.com Website: www.ecri.cc
<u>~</u>	Fast ForWord	CAI	Computerized program designed to strengthen memory, attention, and mental processing.	Website: http://www.scilearn.com/

Rating	Program	Type	Description	Contact / Website
	Lightspan	CAI	A technology	E-mail: ar@plato.com
			application that	Website:
			provides parents	www.plato.com/Elementary-
			with Sony	Solutions.aspx
			Playstations and	
			digital video multi-	
			players linked to	
			their televisions, and	
			then uses linked	
			instructional	
			software in both	
			home and school.	
	Literature-	IP	A reading approach	E-mail: lmorro@rutgers.edu
	Based Program		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 centers.	
	My Reading	CAI	Reading software	E-mail: mail@mindplay.com
<u> </u>	Coach		that focuses on	Website: www.myreadingcoach.com
			phonics, word	
			structure,	
			vocabulary, and	
			comprehension.	

Rating	Program	Type	Description	Contact / Website
	OpenBook to	CAI	A software program	E-mail:
	Literacy		that uses a	Sales@openbooksoftware.com
			combination of	Website:
			voice, text, pictures,	www.openbooklearning.com
			video, and graphics	
			to teach reading in a	
			self-paced	
			individualized	
			format, as a	
			supplement to	
			classroom	
	DATE	TD.	instruction.	
$\overline{\triangle}$	PALS	IP	A technique in	E-mail: pals@vanderbilt.edu
_			which children work	Website: kc.vanderbilt.edu/pals
			in pairs, 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 retelling.	
$\overline{\Delta}$	QuickReads	Curr	A supplementary	E-mail: quickreads@textproject.org
<u> </u>			program designed to	Website: www.quickreads.org
			increase fluency,	
			build vocabulary and	
			background	
			knowledge, and	
			improve	
	7 1 .		comprehension.	
$\overline{\triangle}$	Reader's	IP	A cooperative	Complete contact form at:
_	Theater		learning method	http://scholastic.custhelp.com/cgi-
			designed to enhance	bin/scholastic.cfg/php/enduser/ask.ph
			students' reading by	p Website:
			having them read the	
			scripts of plays.	www.teacher.scholastic.com/products
		1		/instructor/readerstheater.htm

Rating	Program	Type	Description	Contact / Website
	Reciprocal	IP	An instructional	E-mail: annemari@umich.edu
	Teaching		strategy in which	
			students work in	
			small groups to help	
			one another generate	
			their own questions	
			about a text they are	
			reading, summarize	
			parts of the text,	
			clarify word	
			meanings and	
			confusing text	
			passages, and predict	
			what might come	
			next.	
<u>~</u>	Strategy	IP	Belgian strategy	E-mail: Hilde.Vankeer@ugent.be
<u> </u>	Instruction		instruction program	
	(Belgian		that focuses	
	Model)		cognitive and	
			metacognitive skills	
			such as	
			summarization,	
			graphic organizers,	
			and prediction to	
			help students	
			comprehend text.	
\bigcirc	Student	IP	A small group	E-mail: sssaec@aol.com
<u> </u>	Success Skills		counseling	Website:
			intervention in	www.studentsuccessskills.com/
			which counselors	
			use a structured	
			approach	
			emphasizing	
			achievement in	
			academic, social,	
			and self-	
			management skills.	

Rating	Program	Type	Description	Contact / Website
	Thinking Maps	IP	A program that	E-mail: office@thinkingmaps.com
			teaches students to	Website: www.thinkingmaps.com
			use graphic	
			organizers to help	
			them understand	
			concepts.	

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Insufficient Evidence of Effectivennes

Accelerated Reader

CCC

Classworks

Compass Reading

Conceptually-Based Strategy Instruction

Consistency Management Cooperative Discipline (CMCD)

Elements of Reading: Comprehension

Elements of Reading: Fluency Elements of Reading: Vocabulary

Failure Free Reading Fluency Formula

Foundations and Frameworks

Harcourt

Houghton Mifflin

Jacob's Ladder

Jostens/Compass Learning

Spell Read

Reading Together

Responsive Classroom

Rigby

Reading Street

Spell Read

Success in Reading and Writing

WICAT

Wilson Reading

N No Qualifying Studies

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

Comprehension Plus

Comprehension Upgrade

Concept-Oriented Reading Instruction (CORI)

CRISS / Project CRISS

Cross-Aged Literacy Program

Direct Instruction

Destination Reading

Disciplinary Literacy

Discover Intensive Phonics for Yourself

Dolch® Reading Program

Early Success

Earobics

Edmark Reading Program

Electronic Bookshelf

Essential Learning SystemsTM

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

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 Anywhere

Orchard

Orton-Gillingham Approach

PathwaysTM

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

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 to Learn

Reading Mastery

Reading Plus

Reading Success

Reading Triumphs

Reading Upgrade

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

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 Literacy

WriteToLearn

Review Methods

An exhaustive search considered more than 2000 published and unpublished articles. It included those that met the following criteria.

- Schools or classroom using each program 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 students were assigned at random to experimental or control groups.

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Program Ratings Basis

Programs were rated according to the overall strength of the evidence support in their effects on reading achievement. "Effect size" (ES) is the proportion of a standard deviation by which a treatment exceeds a control group. The categories are as follows:

- Strong Evidence of Effectiveness: At least two prospective studies (i.e., not post hoc), one of which is a large (n=250) 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 500 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 randomized or matched prospective studies, with a collective sample size of 500 students, 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 Effect: A weighted mean effect size of at least +0.20 based on one or more qualifying studies of any qualifying design insufficient in number or sample size to meet the criteria for "Moderate Evidence of Effectiveness."
- One or more qualifying studies not meeting the criteria for "Limited Evidence of Effectiveness."
- N No Qualifying studies: No studies met inclusion standards.

Full Report

Slavin, R.E., Lake, C., Cheung, A., & Davis, S. (2009, June). Beyond the basics: Effective reading programs for the upper elementary grades. Baltimore, MD: Johns Hopkins University, Center for Data-Driven Reform in Education.

http://www.bestevidence.org/reading/upper_elem/upper_elem_read.htm