

RTI Resource Guide

Classroom Programs/Kits

Resource	Type	Research Base	Target Area(s)	Grades
Road to the Code	Manual of 44 lessons includes detailed scripted instructions and reproducible hands-on activities.	<p>As of July 2007, no studies of Road to the Code were found that fell within the scope of the Beginning Reading review protocol and met WWC evidence standards. Therefore, the WWC is unable to draw any research based conclusions about the effectiveness or ineffectiveness of Road to the Code to improve outcomes in this area.</p> <p>According to Florida Center for Reading Research, the Road to the Code activities reflect research showing that phonemic awareness training linked with sound-symbol correspondence training plays an important role in beginning reading and spelling acquisition.</p>	Phonemic awareness, beginning phonics	K-1
Road to Reading	Manual features 6 levels of instruction covering K-2 skills, to be used for grades 1-5 intervention. Includes a CD with all necessary supplementary materials (printable books, hands-on activities, assessments, etc.).	The program publisher cites a list of research studies in best practices in reading instruction for struggling readers that are consistent with the approaches utilized in this program. The author of the program has also conducted research studies on the effects of this program.	Phonics: letter names, beginning sounds, word families, vowel power, sounding out words, blends and digraphs, long vowel patterns, complex patterns, sight words, syllable sense, word endings and prefixes and suffixes	1-5

Reading Recovery	Short-term intervention providing 1:1 tutoring to first grade students struggling in reading & writing. Tutoring is delivered by RR-trained teachers in daily 30 minute pull-out sessions over the course of 12–20 weeks.	<p>July 2013 WWC: Positive effects on General Reading Achievement; Potentially Positive on Alphabetics, Fluency, & Comprehension for Beginning Readers.</p> <p>An April 2016 study increases the effectiveness rating for Comprehension to Positive.</p>	Phonemic awareness, phonics, fluency, comprehension	1
Reading Street (Scott Foresman)	Core reading program	EdReports findings indicate that K-6 materials do not consistently meet expectations for alignment to CCSS-ELA. Visit www.edreports.org/ela/reading-street-common-core/index.html for complete reports by grade level.	Phonological awareness, phonics, vocabulary, comprehension, writing	K-6
Sidewalks (Scott Foresman)	Intensive small-group reading intervention program	A 2007-08 independent study designed to meet WWC guidelines confirmed that My Sidewalks helped struggling elementary readers achieve significant learning gains, enhancing reading fluency, vocabulary and comprehension, when compared to a control group. Third graders in the study exceeded average yearly reading achievement growth.	Aligns to Scott Foresman Reading Street but can be used as intervention with any core reading program. Focuses on deep meaning of vocabulary and concepts.	1-5

		My Sidewalks is also built upon the foundational research of Scott Foresman Early Reading Intervention (Project Optimize). This research-based program validated components of intervention strategies for Kindergarten students with identified disabilities or those at risk. These findings were incorporated into the development of My Sidewalks.		
Leveled Literacy Intervention (LLI) (Heinemann)	Short-term supplementary small-group reading intervention program	Sept. 2017 WWC: No discernible effects for Alphabetics; Positive effects for Reading Achievement; Potentially Positive on Fluency for beginning readers.	Explicit instruction in phonological awareness, phonics, fluency, vocabulary, reading comp, oral language & writing	K-12
Sonday System	Systematic multisensory reading intervention program based on Orton-Gillingham methodology	As of July 2007, no studies of Sonday System were found that fell within the scope of the Beginning Reading review protocol and met WWC evidence standards. Therefore, the WWC is unable to draw any research based conclusions about the effectiveness or ineffectiveness of Sonday System to improve outcomes in this area.	Phonemic awareness, phonics, fluency, vocabulary, comprehension	System 1: Beginning reader to end of grade 2 System 2: Grades 3-8
Wilson Reading System	Multisensory tier 3 reading & writing intervention program offering a curriculum for explicitly teaching decoding & encoding skills	July 2007 WWC: Potentially Positive effects for Alphabetics; No discernible effects for Comprehension or Fluency. July 2010 WWC: No studies of WRS that fall within the scope of the Students with Learning Disabilities review protocol meet WWC evidence standards. Therefore, WWC is unable to draw any	Phonemic awareness, phonics, sight words, spelling, fluency, vocab, oral language, comprehension	2-12

		<p>conclusions based on research about the effectiveness or ineffectiveness of WRS on students with learning disabilities.</p> <p>Florida Center for Reading Research indicates that content & instructional design of WRS is consistent with research on effective reading instructional practice.</p>		
GATE Read Naturally	Systematic beginning reading program that aims to improve fluency, accuracy, & comprehension	<p>March 2013 WWC: Potentially Positive effects on General Literacy Achievement for adolescent readers.</p> <p>July 2010 WWC: Potentially Positive effects on Writing; no discernible effects on fluency for students with learning disabilities</p>	Phonemic awareness & phonics	1-3
Rewards Intermediate (4-6)	Short-term intervention program delivered by a teacher	Numerous studies have validated its effectiveness. REWARDS is proven to improve students' abilities to decode large, multisyllabic words, yield significant increase in fluency, be effective with all struggling readers, whether they are English language learners, students with reading disabilities, or students who have simply fallen behind. It also has been shown to be successfully implemented by a wide variety of educators— teachers, paraprofessionals, and volunteers	Fluency, comprehension, vocabulary, decoding, phonics	MS students with reading level above grade 2.5
Number Worlds (McGraw Hill)	Teacher-led math intervention	Rigorous field testing shows students who began at a disadvantage surpassed	Math	PK-8

	program	the performance of those who began on level with their peers, with the help of Number Worlds. A longitudinal study, measuring the progress of three groups of children from the beginning of Kindergarten to the end of Grade 2, demonstrates the program's efficacy. Additional school case studies are reported on the website.		
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Web-based Interactive Games/Supplemental Practice

Resource	Type	Research Base	Target Area(s)	Grades
Earobics	Interactive software (no longer available)	Jan. 2009 WWC: Positive Effects for Alphabetics; Potentially Positive on Fluency for Beginning Readers	Phonemic awareness, auditory processing, phonics,	PK-3
Readagogo	Automated reading practice platform with short reading passages & accompanying multiple choice questions for practicing fluency & comprehension. Collects & displays student data by reading skill & standard.	None specified. The program does track student performance based on 50 reading comprehension skills as well as the Common Core Standards for both Literary & Informational texts.	Reading fluency & comprehension are practiced with short passages leveled by Lexile paired along with multiple choice questions. Audio reading & text highlighting supports are available.	1-8
IXL	Web-based personalized learning platform, also provides analytical tools to track student & class performance	Vendor promotes statewide research & case studies that have found IXL students to outperform others on state assessments. Has won multiple technology, parenting, & homeschooling awards since 2014.	Standards-aligned reading & math skills	K-12
Mangahigh	Web based games for Math (supplemental practice)	One of the largest Mangahigh reports involved 1,000 students at 10 secondary schools in Scotland using Mangahigh during a three-month	Numbers, algebra, geometry, measures, data, probability	All

		<p>period in 2010. An assessment was done by Learning and Teaching Scotland (LTS), a national body responsible for reviewing curriculum and guiding Scotland's education system. In a sampling of 260 students from six of the schools in the study, LTS found an improvement of 13 percent in test scores.</p>		
Yummy Math	<p>Web based games for Math (supplemental practice)</p>	<p>Engagement: Math activities capitalize on things students care about like sports, food, & movies. Activities aren't flashy, but if used in the right way they can make math relevant and fun.</p> <p>Pedagogy: Yummy Math attends to most topics from 3rd grade to high school. However, it's less about teaching content and more about giving kids the chance to actually use math in authentic ways.</p>	Relevant math problems	3-12
Accelerated Reader (Renaissance)	<p>Computerized supplemental reading software monitors students' independent reading practice using computerized quizzes</p>	<p>WWC: Mixed effects for comprehension; No discernible effects on Fluency</p>	Comprehension quizzes	K-8
Accelerated Math (Renaissance)	<p>Progress-monitoring software that monitors and</p>	<p>As of 2008, no studies of AM met WWC evidence standards, and three studies meet WWC evidence</p>	Math skills practice	K-12

	manages math skills practice	standards with reservations. Based on these 3 studies, WWC found no discernible effects on middle school math achievement.		
Castle Learning	Comprehensive instruction support platform for in-class, homework, review, and testing online & offline. Provides progress data.	No studies were found regarding the effectiveness of Castle Learning from other research sources other than teacher satisfaction articles and case studies.	Access to thousands of content related questions in English, Math, Science, Social Studies, Foreign Language, SAT & ACT prep, Physical and Health Education.	K-12
Coach Digital	Teacher-directed content for instruction, reinforcement & practice	Various case studies have shown Coach Digital to contribute to a significant increase in math achievement and ELA. http://www.triumphlearning.com/research.html	ELA, Mathematics, Science, Social Studies, Test Success, and Spanish ELL	K-12
Buzz Math	Web-based interactive math practice platform of 3000+ math problems. Flexibility to assign problems to students & groups. Provides interactive examples, detailed solutions & feedback to students as well as student & class progress reports to	None specified. Content aligned to Common Core State Standards.	Common Core Standard-aligned math topics	3-8

	teachers.			
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Computer-based Instruction

Resource	Type	Research Base	Target Area(s)	Grades
Khan Academy	Web based personalized learning platform that hosts math tutorial videos & supplementary practice exercises.	The website reports multiple research studies that have shown students that used Khan academy experienced math learning outcomes exceeding typical growth. www.khanacademy.org/about/impact	Math & other content areas	K-12
FASTT Math	Interactive Software Computer-based Instruction	Uses proven approach “expanding recall”	Fluency & autonomy of Math Facts	2nd grade and up
Fast ForWord (Scientific Learning)	Computer-based reading program	March 2013 WWC: Mixed effects for Alphabetics & Comprehension; No discernible effects on Fluency for beginning readers. Aug. 2010 WWC: No discernible effects on Alphabetics & General Literacy Achievement; Potentially Positive for Fluency & Comprehension for adolescent learners.	Cognitive skills including memory, attention, processing, sequencing. Language skills including listening accuracy, phonological awareness, & language structures.	K-10
Reading Assistant	Online reading tool/app that models fluent passage reading & records students’ oral reading, providing voice	One study examined effects on fluency in grades 2-5. Half of the classrooms in two schools used the software and found fluency gains significantly greater for students using the software.	Fluency & comprehension	1-12

	correction as needed. Integrates guided comprehension prompts & questions.			
Moby Max	Personalized learning platform	Moby Max's pedagogy and curriculum system incorporate the most effective practices for increasing student outcomes as identified by Professor John Hattie's research of over 800 meta-analyses: formative testing, accelerated curriculum, mastery learning, immediate feedback, direct instruction, parental involvement, writing programs and homework.	<u>Math</u> : Fact Fluency, Number Sense <u>Reading</u> : Alphabet, Phonics & Spelling, Sight Words, Foundational Reading, Literature Skills, Informational Reading Skills, Vocabulary, Grammar, Spelling Lists <u>Writing</u> : brainstorming, draft, revise, edit <u>Science</u> : Model building, inquiry-based learning, critical thinking skills, vocabulary <u>Social Studies</u> : Map skills, cause & effect, summarizing, drawing conclusions, fact vs opinion, categorize & classify, reading and creating graphs, charts & tables, citizenship skills	K-8
Zearn Math	Free online math curriculum. Includes fluency warm-ups, guided practice interactive video lessons, and independent practice activities with embedded formative assessments. Intended for small-group &	<p>In Fall 2017, received a top rating by EdReports.org, an independent nonprofit that delivers evidence-based reviews of instructional materials.</p> <p>Published a 2017 case study of gains achieved with Zearn Math for 2,000 students across 4 campuses at Milwaukee College Prep.</p>	Math fluency & skills	1-5

	individual instruction.			
I-Ready	Integrated Blending Learning Program (Diagnostic assessment, personalized online instruction, and teacher-led classroom instruction)	Curriculum Associates contracted with Educational Research Institute of America (ERIA) to study the effectiveness of i-Ready® and Ready® blended programs for math and reading. In summary, the i-Ready and Ready blended program proved very effective, with statistically significant gain scores from the Fall Diagnostic to the Spring Diagnostic. More importantly, average scale score gains for students using the blended program exceeded the average gains from students in the comparison group. Scale score gains for students in the blended program outpaced average growth by 126% in ELA and surpassed average growth by 65% in Math. Students participating in the blended program also showed meaningful improvements on individual state tests.	<p>ELA: Phonological awareness, Phonics, High-Frequency Words, Vocabulary, Comprehensive Literature and Informational Text</p> <p>Math: Number and Operations, Algebra and Algebraic Thinking, Measurement & Data, Geometry</p>	K-12 Diagnostic, K-8 Instruction
Rewordify.com	Free online software that replaces the dictionary for comprehension of difficult words	None found	Vocabulary Learning Sessions Progress Charts Save documents to build a Learning Library	
Schoology	Learning Management System (Instructional tools	No studies were found regarding the effectiveness of Schoology from sources other than teacher satisfaction articles/blogs. In the last	Curriculum, collaboration, communication, data analysis, personalized learning	K-12 and Higher Education

	for teachers, tracks student performance and engagement, built in PLC, allows for collaboration among students and communication, data analysis and personalized learning)	few years, a handful of studies have come out concluding that some programs show at least modest gains using blended learning techniques and tools which Schoology is a platform that can accommodate blended learning. http://blogs.edweek.org/edweek/DigitalEducation/2015/04/blended_learning_research_the.html		
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Websites with Free Downloadable Games, Flashcards, & Practice Activities

Resource	Type	Research Base	Target Area(s)	Grades
Florida Center for Reading Research fcrr.org/resources/index.html	Downloadable learning center activities & games to reinforce reading skills	<p>All activities were developed by teachers at FCRR through the center's applied research projects with the purpose of providing information that can be used to improve reading instruction to all students. Includes training videos.</p> <p>VPK Learning Center Activities: fcrr.org/resources/resources_vpk.html</p> <p>Student Center Activities: fcrr.org/resources/resources_sca.html</p>	Phonemic awareness, phonics, fluency, vocabulary, comprehension	PK-5
Sightwords.com	Free comprehensive sequence of teaching activities, techniques, & materials for beginning reading & math. Includes flashcards, games, teaching videos, lesson plans, assessment tools, & more!	The site reports to have drawn from the prominent research of Barbara Wilson (Wilson Reading); Samuel Orton, MD; Anna Gillingham (Orton-Gillingham); Grace Fernald; Beth Slingerland (multi-sensory approach); C. Wilson Anderson (International Dyslexia Association); and Siegfried Engelmann (Direct Instruction).	Phonemic awareness, sight words, counting, basic addition	PK-1

Formative Assessment Sites

Resource	Type	Research Base	Target Area(s)	Grades
Kahoot!	Web-based platform for assessment	Kahoot! is a culmination of research and knowledge by its CoFounders, Johan Brand and Jamie Brooker, which they gathered over the years in user-centred design, behaviour design and play, whilst working at their behaviour design company We Are Human in London. The technology platform itself was based on research conducted by Morten Versvik and his professor Alf Inge Wang for his Master's degree at the Norwegian University of Science and Technology (NTNU). Many different approaches were considered, tested and measured for impact on student engagement and learning value.	User-generated content	K-12
Socrative	Formative assessment tool Student Response System (SRS)	Results indicate that using student paced assessments method with Socrative enhanced students' performance. 53% of students improved their performance while 23% neither improved nor underperformed. Qualitative data showed students felt improvement in their learning experience. Overall results indicate positive impact using this technology in teaching and learning for engineering modules in higher education. USING SOCRATIVE TO	User-generated content	3-12

		ENHANCE IN-CLASS STUDENT ENGAGEMENT AND COLLABORATION International Journal on Integrating Technology in Education (IJITE) Vol.4, No.3, September 2015		
Quizzizz	Free formative assessment tool	None found	User-generated content	K-12
Quizlet	Flash card maker	None found	Flashcards on various topics' concepts and vocabulary	All

Benchmarking and Progress Monitoring Systems

Resource	Type	Research Base	Target Area(s)	Grades
STAR	Computer-adaptive assessment screening tool, Provides progress monitoring and management of students' personalized practice	According to the Center on Response to Intervention, STAR has convincing evidence for classification accuracy, reliability and validity in STAR math and reading. STAR early literacy has partially convincing evidence for classification accuracy and validity and convincing evidence for reliability.	<p>Star Reading: Reading Comprehension, Phonics and Word Recognition, Fluency Key Ideas & Details, Craft and Structure, Integration of knowledge & ideas, Vocabulary Acquisition</p> <p>Star Math: Measures 550 skills in the strands of Numeration Concepts, Computation Processes, Word Problems, Estimation, Data Analysis & Statistics, Geometry, Measurement & Algebra.</p>	K-12
AimsWeb/ AimsWeb Plus	Web-based data management and assessment system designed to screen, set goals, progress monitor, & manage student data to measure the effects of instruction	CBM, a form of Curriculum-Based Assessment (CBA), is the method of monitoring student progress through direct, continuous assessment of basic skills. Initially developed more than 20 years ago by Stanley Deno and others at the University of Minnesota Institute for Research on Learning Disabilities to develop a reliable and valid measurement system for evaluating basic skills growth, CBM is supported by 30 years of school-based research.	<p>Early Literacy & Reading measure skills such as letter naming, letter sound fluency, phoneme segmentation, oral reading fluency, comprehension, & more.</p> <p>Early Numeracy & Math assess areas such as number identification, counting, computation, and concept application.</p>	K-12