

One to one tuition

High impact for moderate cost based on moderate evidence

One to one tuition involves a teacher, teaching assistant or other adult giving a pupil intensive individual support.

Implementation cost



Evidence strength



Impact (months)



Subject breakdown

maths: 19
reading: 107
science: 1
toolkit: 125

School phase breakdown

primary: 107
secondary: 11
toolkit: 125

Technical Appendix

The criteria used to judge the inclusion of studies in the Toolkit are:

- The population sampled involved early years and school age learners from 3-18 learning in their first language.
- The intervention or approach being tested was educational in nature, including named or clearly defined programmes and recognisable approaches classifiable according to the Toolkit strand definitions (e.g. peer tutoring or small group teaching). The intervention or approach is undertaken in a normal educational setting or environment for the learners involved, such as a nursery or school or a typical setting (e.g. an outdoor field centre or museum).
- A valid comparison was made between those receiving the educational intervention or approach and those not receiving it.
- Outcomes include the assessment of educational or cognitive achievement which reports quantitative results from testing of attainment or learning outcomes, such as by standardised tests or other appropriate curriculum assessments or school examinations or appropriate cognitive measures.
- The study design provided a quantitative estimate of the impact of the intervention or approach on the educational attainment of the sample, calculated or estimated in the form of an effect size (standardised mean difference) based on a counterfactual comparison.

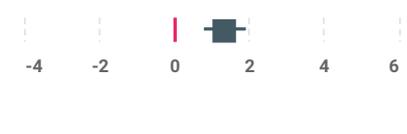
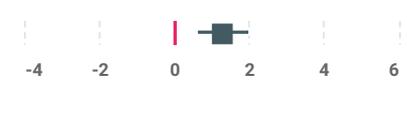
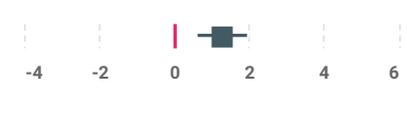
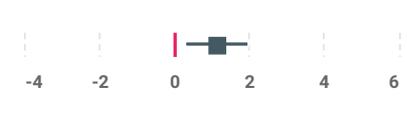
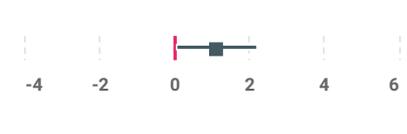
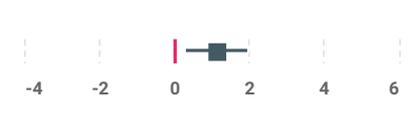
Standardised mean differences and confidence intervals for the most appropriate estimates of the impact of the intervention or approach for the Toolkit were extracted from each included study, along with other study variables. These effect sizes were further synthesised into a single pooled effect using a random effects meta-analysis adopting a restricted maximum likelihood (REML) estimation methods. For the full details of the methodology see the [Protocol and Analysis Plan \(https://educationendowmentfoundation.org.uk/public/files/Toolkit/EEF_Evidence_Database_Protocol_and_Analysis_Plan_June2019.pdf\)](https://educationendowmentfoundation.org.uk/public/files/Toolkit/EEF_Evidence_Database_Protocol_and_Analysis_Plan_June2019.pdf).

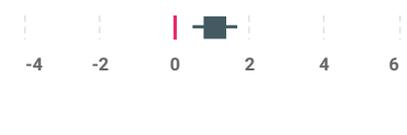
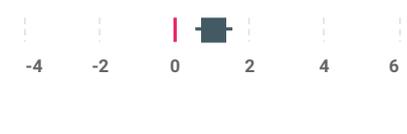
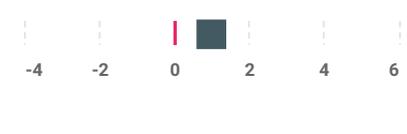
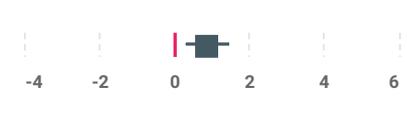
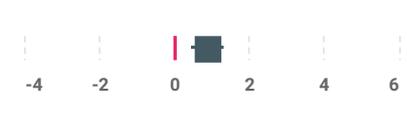
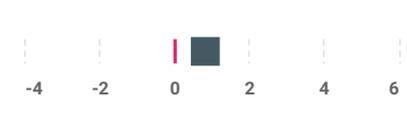
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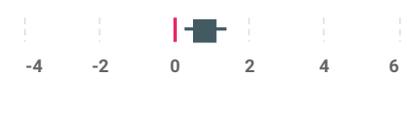
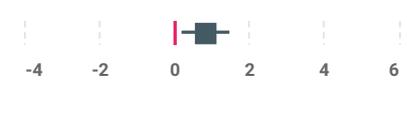
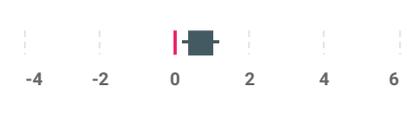
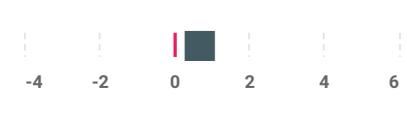
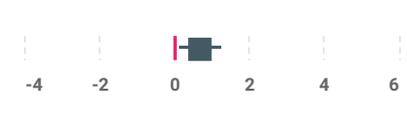
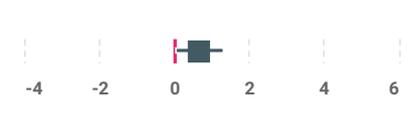
The forest plot below is a graphical representation of the results of all included studies in this Toolkit strand. It shows the effect size and confidence interval of each study, and whether the particular intervention in that study was more or less effective than standard practice or other alternative interventions that the study looked at.

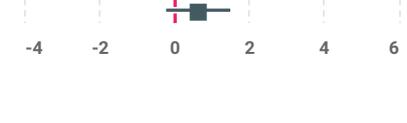
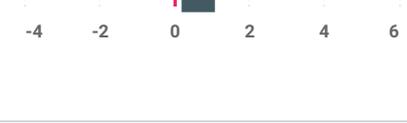
Studies that show an effect size result on the right-hand side of the red vertical red indicate that the particular intervention studied was more effective than standard practice. Studies that show an effect size on the left-hand side of the red vertical indicate that the particular intervention studied was less effective than standard practice.

Author	Title	Effect Size	Effect Size (Graph)
Mokhtari (2015)	Assessing the Promise of a Supplemental Reading Intervention for At-Risk First Grade Students in a Public School Setting <i>(International Electronic Journal of Elementary Education)</i>	Effect Size: 3.467 LCI: 2.023 UCI: 4.912 Weight: 0.266 Standard error: 0.737	
Compton (1992)	The Reading Connection: A leadership initiative designed to change the delivery of educational services to at-risk children <i>(NA)</i>	Effect Size: 1.962 LCI: 1.743 UCI: 2.18 Weight: 0.986 Standard error: 0.111	
Burroughs-Lange (2007)	Literacy Progress of Young Children from Poor Urban Settings: A Reading Recovery Comparison Study <i>(Literacy Teaching and Learning)</i>	Effect Size: 1.779 LCI: 1.468 UCI: 2.09 Weight: 0.926 Standard error: 0.159	
Bingham (2010) 1:1	Systematic and Engaging Early Literacy: Examining the Effects of Paraeducator Implemented Early Literacy Instruction <i>(Communication Disorders Quarterly)</i>	Effect Size: 1.547 LCI: 0.97 UCI: 2.124 Weight: 0.715 Standard error: 0.294	
Vadasy (2002) Ph	Timing and Intensity of Tutoring: A Closer Look at the Conditions for Effective Early Literacy Tutoring <i>(Learning Disabilities Research & Practice)</i>	Effect Size: 1.445 LCI: 0.611 UCI: 2.28 Weight: 0.53 Standard error: 0.426	
Saul (1975) 1:1	Project S.T.E.P.: Seniors Tutor for Educational Progress. Annual Evaluation Report, July 1974 - June 1975. <i>(NA)</i>	Effect Size: 1.363 LCI: 0.459 UCI: 2.268 Weight: 0.487 Standard error: 0.462	

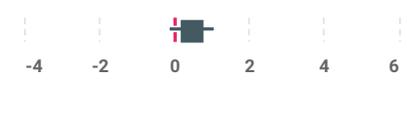
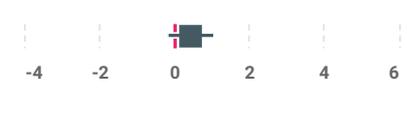
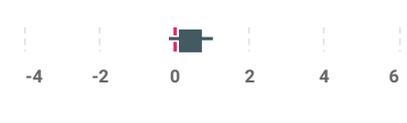
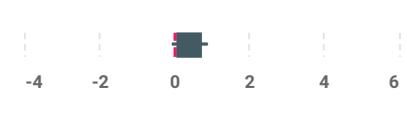
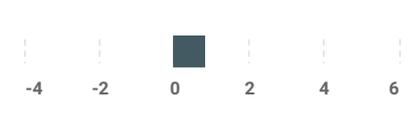
Author	Title	Effect Size	Effect Size (Graph)
Center (1995)	An evaluation of reading recovery (<i>Reading Research Quarterly</i>)	Effect Size: 1.361 LCI: 0.747 UCI: 1.975 Weight: 0.686 Standard error: 0.313	
Meier (2001)	Book buddies in the Bronx: Testing a model for America Reads. (<i>Journal of Education for Students Placed at Risk</i>)	Effect Size: 1.332 LCI: 0.748 UCI: 1.916 Weight: 0.709 Standard error: 0.298	
Nielson (1991)	Effects of parent and volunteer tutoring on reading achievement of third grade at-risk students (<i>NA</i>)	Effect Size: 1.284 LCI: 0.586 UCI: 1.983 Weight: 0.622 Standard error: 0.356	
Lane (2009)	Identifying Essential Instructional Components of Literacy Tutoring for Struggling Beginning Readers (<i>Literacy Research and Instruction</i>)	Effect Size: 1.263 LCI: 0.579 UCI: 1.948 Weight: 0.632 Standard error: 0.349	
Brown (2005)	Intervention after grade 1: Serving increased numbers of struggling readers effectively (<i>Journal of Literacy Research</i>)	Effect Size: 1.18 LCI: 0.715 UCI: 1.645 Weight: 0.806 Standard error: 0.237	
Gray (2007)	Added Value or a Familiar Face?: The Impact of Learning Support Assistants on Young Readers (<i>Journal of Early Childhood Research</i>)	Effect Size: 1.15 LCI: 0.651 UCI: 1.649 Weight: 0.778 Standard error: 0.254	
Vernon-Feagans (2009) 1_1	The Targeted Reading Intervention (TRI): A Classroom Teacher Tier 2 Intervention to Help Struggling Readers in Early Elementary School (<i>Society for Research on Educational Effectiveness</i>)	Effect Size: 1.118 LCI: 0.275 UCI: 1.961 Weight: 0.524 Standard error: 0.43	
Knapp (1998)	A reading apprenticeship for delayed primary readers (<i>Literacy Research and Instruction</i>)	Effect Size: 1.117 LCI: 0.04 UCI: 2.193 Weight: 0.398 Standard error: 0.549	
Vadasy (2007)	Effectiveness of paraeducator-supplemented individual instruction: Beyond basic decoding skills (<i>Journal of Learning Disabilities</i>)	Effect Size: 1.11 LCI: 0.267 UCI: 1.953 Weight: 0.524 Standard error: 0.43	

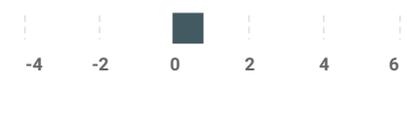
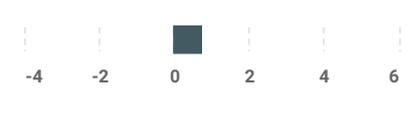
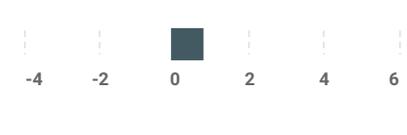
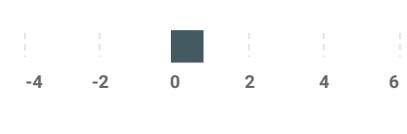
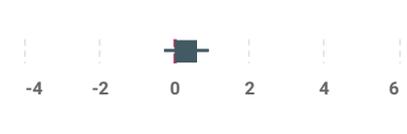
Author	Title	Effect Size	Effect Size (Graph)
Escamilla (1997)	Descubriendo la Lectura: An early intervention literacy program in Spanish (<i>Literacy, teaching and learning</i>)	Effect Size: 1.065 LCI: 0.444 UCI: 1.686 Weight: 0.68 Standard error: 0.317	
Torgesen (1997)	Prevention and remediation of severe reading disabilities: Keeping the end in mind (<i>Scientific studies of reading</i>)	Effect Size: 1.038 LCI: 0.518 UCI: 1.558 Weight: 0.761 Standard error: 0.265	
Bøg (2019)	A multi-sensory tutoring program for students at-risk of reading difficulties: Evidence from a randomized field experiment (<i>NA</i>)	Effect Size: 0.963 LCI: 0.631 UCI: 1.295 Weight: 0.911 Standard error: 0.169	
Vadasy (2006)	Code-oriented instruction for kindergarten students at risk for reading difficulties: A randomized field trial with paraeducator implementers (<i>Journal of Educational Psychology</i>)	Effect Size: 0.952 LCI: 0.446 UCI: 1.459 Weight: 0.772 Standard error: 0.258	
Nelson (2005)	An Investigation of the Effects of a Prereading Intervention on the Early Literacy Skills of Children At Risk of Emotional Disturbance and Reading Problems: (<i>Journal of Emotional and Behavioral Disorders</i>)	Effect Size: 0.929 LCI: 0.237 UCI: 1.621 Weight: 0.627 Standard error: 0.353	
Benner (2004)	An investigation of the effects of an intensive early literacy support program on the phonological processing skills of kindergarten children at-risk of emotional and behavioral disorders. (<i>NA</i>)	Effect Size: 0.916 LCI: 0.225 UCI: 1.606 Weight: 0.628 Standard error: 0.352	
Vadasy (2000)	Effects of tutoring in phonological and early reading skills on students at risk for reading disabilities (<i>Journal of Learning Disabilities</i>)	Effect Size: 0.865 LCI: 0.258 UCI: 1.472 Weight: 0.692 Standard error: 0.31	
Woo (2005)	America Reads: The effects of a federal work-study tutoring program on literacy achievement and attitudes of teachers, tutors, and children (<i>NA</i>)	Effect Size: 0.863 LCI: 0.403 UCI: 1.322 Weight: 0.81 Standard error: 0.234	
Moody (1971) 1:1	The effect of class size on the learning of mathematics: A parametric study. (<i>Journal of Research in Mathematics</i>)	Effect Size: 0.829 LCI: 0.46 UCI: 1.197 Weight: 0.883 Standard error: 0.188	

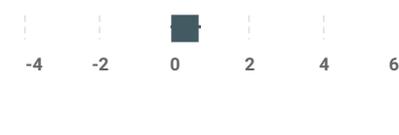
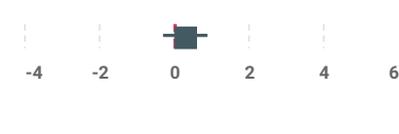
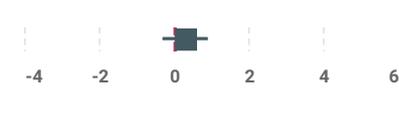
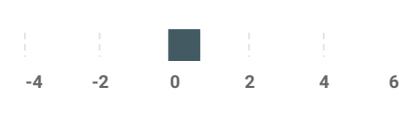
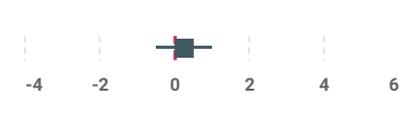
Author	Title	Effect Size	Effect Size (Graph)
LaFave (1995)	Impact of Reading Recovery on phonemic awareness (<i>NA</i>)	Effect Size: 0.823 LCI: 0.197 UCI: 1.45 Weight: 0.676 Standard error: 0.32	
Santa (1999)	An assessment of Early Steps: A program for early intervention of reading problems (<i>Reading Research Quarterly</i>)	Effect Size: 0.814 LCI: 0.228 UCI: 1.399 Weight: 0.708 Standard error: 0.299	
Vadasy (2005)	Relative effectiveness of reading practice or word-level instruction in supplemental tutoring: How text matters. (<i>Journal of Learning Disabilities</i>)	Effect Size: 0.813 LCI: 0.148 UCI: 1.478 Weight: 0.647 Standard error: 0.339	
Morris (2000)	Early Steps: Replicating the effects of a first-grade reading intervention program (<i>Journal of Educational Psychology</i>)	Effect Size: 0.812 LCI: 0.372 UCI: 1.253 Weight: 0.826 Standard error: 0.225	
Blachman (2004)	Effects of intensive reading remediation for second and third graders and a 1-year follow-up (<i>Journal of Educational Psychology</i>)	Effect Size: 0.741 LCI: 0.251 UCI: 1.23 Weight: 0.785 Standard error: 0.25	
Morris (1990)	Helping low readers in grades 2 and 3: An after-school volunteer tutoring program (<i>The Elementary School Journal</i>)	Effect Size: 0.682 LCI: 0.161 UCI: 1.204 Weight: 0.76 Standard error: 0.266	
Quay (2001)	Children's achievement and personal and social development in a first-year Reading Recovery program with teachers in training (<i>Literacy, Teaching and Learning</i>)	Effect Size: 0.68 LCI: 0.369 UCI: 0.992 Weight: 0.926 Standard error: 0.159	
Pullen (2004)	Effects of a volunteer tutoring model on the early literacy development of struggling first grade students (<i>Literacy Research and Instruction</i>)	Effect Size: 0.67 LCI: 0.082 UCI: 1.258 Weight: 0.706 Standard error: 0.3	
Dorval (1978) 1:1	Field evaluation of a tutorial reading program emphasizing phoneme identification skills (<i>The Reading Teacher</i>)	Effect Size: 0.658 LCI: 0.02 UCI: 1.296 Weight: 0.667 Standard error: 0.326	

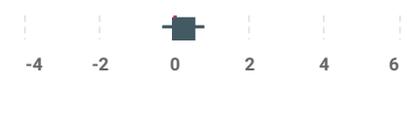
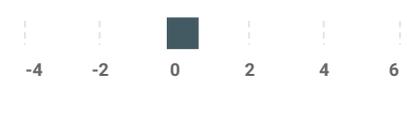
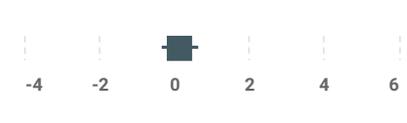
Author	Title	Effect Size	Effect Size (Graph)
Weeks (1992)	A study of the implementation of Reading Recovery in Scarborough: 1990-1991 (NA)	Effect Size: 0.636 LCI: -0.001 UCI: 1.273 Weight: 0.668 Standard error: 0.325	
Butler (1991) 1:1	Reading program—remedial, integrated, and innovative (Annals of Dyslexia)	Effect Size: 0.627 LCI: -0.009 UCI: 1.264 Weight: 0.669 Standard error: 0.325	
Vadasy (2006) 1_2	Paraeducator-Supplemented Instruction in Structural Analysis With Text Reading Practice for Second and Third Graders at Risk for Reading Problems: (Remedial and Special Education)	Effect Size: 0.619 LCI: -0.262 UCI: 1.5 Weight: 0.501 Standard error: 0.45	
Hatcher (1994)	Ameliorating Early Reading Failure by Integrating the Teaching of Reading and Phonological Skills: The Phonological Linkage Hypothesis (Child Development)	Effect Size: 0.605 LCI: 0.1 UCI: 1.111 Weight: 0.772 Standard error: 0.258	
Consortium (2013)	Evaluation of the i3 Scale-up of Reading Recovery Year One Report, 2011-2012 (NA)	Effect Size: 0.605 LCI: 0.469 UCI: 0.741 Weight: 1.026 Standard error: 0.07	
Fuchs (2010)	The effects of strategic counting instruction, with and without deliberate practice, on number combination skill among students with mathematics difficulties (Learning and Individual Differences)	Effect Size: 0.602 LCI: 0.255 UCI: 0.948 Weight: 0.9 Standard error: 0.177	
Hagin (1978)	Scanning, Diagnosis, and Intervention in the Prevention of Reading Disabilities: II. TEACH: Learning Tasks for the Prevention of Learning Disabilities (Journal of learning disabilities)	Effect Size: 0.6 LCI: 0.247 UCI: 0.953 Weight: 0.895 Standard error: 0.18	
Jason (1994)	Academic Follow-Up Data on Two Cohorts of High-Risk Transfer Students (NA)	Effect Size: 0.591 LCI: 0.202 UCI: 0.98 Weight: 0.867 Standard error: 0.198	
Ehri (2007) 1:1	Reading Rescue: An effective tutoring intervention model for language-minority students who are struggling readers in first grade (American Educational Research Journal)	Effect Size: 0.583 LCI: 0.236 UCI: 0.929 Weight: 0.9 Standard error: 0.177	

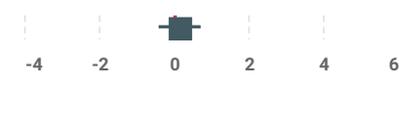
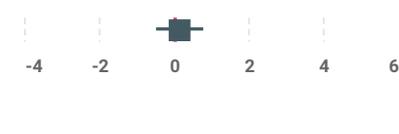
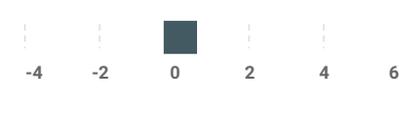
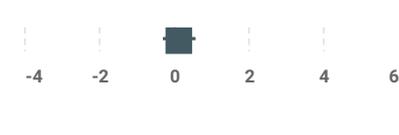
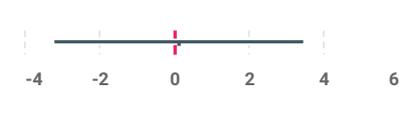
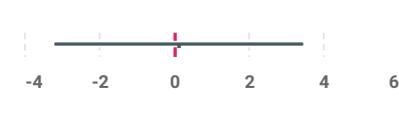
Author	Title	Effect Size	Effect Size (Graph)
Vernon-Feagans (2010)	The Targeted Reading Intervention: A Classroom Teacher Professional Development Program to Promote Effective Teaching for Struggling Readers in Kindergarten and First Grade <i>(Society for Research on Educational Effectiveness)</i>	Effect Size: 0.583 LCI: 0.228 UCI: 0.938 Weight: 0.893 Standard error: 0.181	
France (1993)	Parent-tutored Cued Spelling <i>(Support for Learning)</i>	Effect Size: 0.575 LCI: -0.187 UCI: 1.338 Weight: 0.577 Standard error: 0.389	
Vadasy (2011)	Efficacy of Supplemental Phonics-Based Instruction for Low-Skilled First Graders: How Language Minority Status and Pretest Characteristics Moderate Treatment Response <i>(Scientific Studies of Reading)</i>	Effect Size: 0.575 LCI: 0.282 UCI: 0.867 Weight: 0.939 Standard error: 0.149	
Mayfield (2000)	The effects of structured one-on-one tutoring in sight word recognition of first-grade students at-risk for reading failure <i>(NA)</i>	Effect Size: 0.57 LCI: 0.053 UCI: 1.087 Weight: 0.763 Standard error: 0.264	
Allor (2004)	The efficacy of an early literacy tutoring program implemented by college students <i>(Learning Disabilities Research & Practice)</i>	Effect Size: 0.53 LCI: 0.06 UCI: 1 Weight: 0.801 Standard error: 0.24	
O'Connor (2002)	Teaching reading to poor readers in the intermediate grades: A comparison of text difficulty <i>(Journal of Educational Psychology)</i>	Effect Size: 0.517 LCI: -0.11 UCI: 1.143 Weight: 0.676 Standard error: 0.32	
Vadasy (2006) 1_1	Paraeducator-Supplemented Instruction in Structural Analysis With Text Reading Practice for Second and Third Graders at Risk for Reading Problems: <i>(Remedial and Special Education)</i>	Effect Size: 0.501 LCI: -0.234 UCI: 1.236 Weight: 0.596 Standard error: 0.375	
McCarthy (1995)	Results of an early intervention program for first grade children at risk for reading disability <i>(Literacy Research and Instruction)</i>	Effect Size: 0.466 LCI: -0.18 UCI: 1.111 Weight: 0.662 Standard error: 0.329	
Sirinides (2018)	The Impacts of Reading Recovery at Scale: Results From the 4-Year i3 External Evaluation <i>(Educational Evaluation and Policy Analysis)</i>	Effect Size: 0.462 LCI: 0.415 UCI: 0.51 Weight: 1.05 Standard error: 0.024	

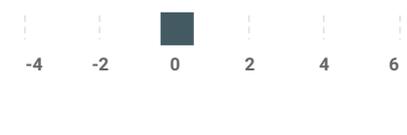
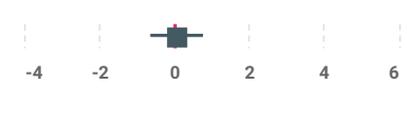
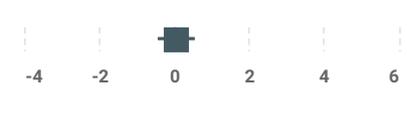
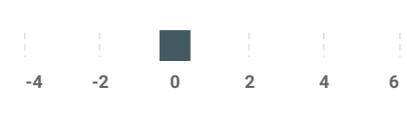
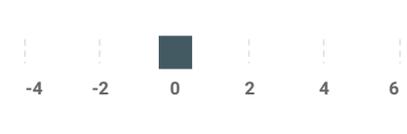
Author	Title	Effect Size	Effect Size (Graph)
Clarke (2017)	Reading Intervention for Poor Readers at the Transition to Secondary School (<i>Scientific Studies of Reading</i>)	Effect Size: 0.454 LCI: 0.117 UCI: 0.792 Weight: 0.907 Standard error: 0.172	
Rimm-Kaufman (1999) 1:1	The effectiveness of adult volunteer tutoring on reading among "at risk" first grade children. (<i>Reading Research and Instruction</i>)	Effect Size: 0.444 LCI: -0.169 UCI: 1.057 Weight: 0.687 Standard error: 0.313	
Lesta (2002)	An Intelligent Teaching Assistant System for Logic (<i>Intelligent Tutoring Systems</i>)	Effect Size: 0.431 LCI: 0.291 UCI: 0.571 Weight: 1.025 Standard error: 0.071	
McMaster (2005)	Responding to Nonresponders: An Experimental Field Trial of Identification and Intervention Methods: (<i>Exceptional Children</i>)	Effect Size: 0.423 LCI: -0.197 UCI: 1.043 Weight: 0.681 Standard error: 0.316	
Rimm-Kaufman (1998)	The effectiveness of adult volunteer tutoring on reading among "at risk" first grade children (<i>Literacy Research and Instruction</i>)	Effect Size: 0.422 LCI: -0.19 UCI: 1.034 Weight: 0.687 Standard error: 0.312	
Borman (2019)	A Multisite Randomized Controlled Trial of the Effectiveness of Descubriendo la Lectura (<i>American Educational Research Journal</i>)	Effect Size: 0.4 LCI: 0.047 UCI: 0.753 Weight: 0.895 Standard error: 0.18	
Juel (1996)	What makes literacy tutoring effective? (<i>Reading Research Quarterly</i>)	Effect Size: 0.392 LCI: -0.114 UCI: 0.899 Weight: 0.772 Standard error: 0.258	
Fuchs (2019)	Using Moderator Analysis to Identify the First-Grade Children Who Benefit More and Less From a Reading Comprehension Program: A Step Toward Aptitude-by-Treatment Interaction (<i>Exceptional Children</i>)	Effect Size: 0.37 LCI: 0.135 UCI: 0.605 Weight: 0.977 Standard error: 0.12	
Ritter (2000)	The academic impact of volunteer tutoring in urban public elementary schools: Results of an experimental design evaluation (<i>NA</i>)	Effect Size: 0.369 LCI: 0.151 UCI: 0.588 Weight: 0.986 Standard error: 0.111	

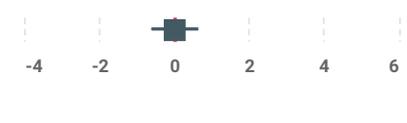
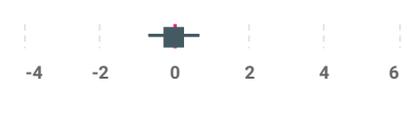
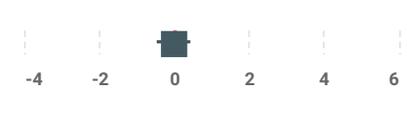
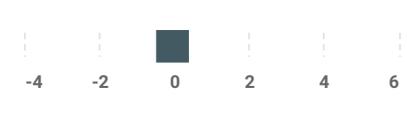
Author	Title	Effect Size	Effect Size (Graph)
Osborn (2007)	Effect of Tutoring on Reading Achievement for Students with Cognitive Disabilities, Specific Learning Disabilities, and Students Receiving Title I Services (<i>Education and Training in Developmental Disabilities</i>)	Effect Size: 0.36 LCI: 0.085 UCI: 0.635 Weight: 0.951 Standard error: 0.14	
Lord (2015)	Perry Beeches Coaching Programme: Evaluation report and executive summary (<i>NA</i>)	Effect Size: 0.36 LCI: 0.195 UCI: 0.525 Weight: 1.014 Standard error: 0.084	
Wang (2008) TA	Effects of targeted intervention on early literacy skills of at-risk students (<i>Journal of Research in Childhood Education</i>)	Effect Size: 0.349 LCI: -0.023 UCI: 0.721 Weight: 0.88 Standard error: 0.19	
May (2016)	Reading Recovery: An Evaluation of the Four-Year i3 Scale-Up (<i>CPRE Research Reports</i>)	Effect Size: 0.34 LCI: 0.292 UCI: 0.387 Weight: 1.05 Standard error: 0.024	
Hurry (2007)	Long-term outcomes of early reading intervention (<i>Journal of Research in Reading</i>)	Effect Size: 0.331 LCI: -0.045 UCI: 0.706 Weight: 0.878 Standard error: 0.192	
Fuchs (2013)	Effects of first-grade number knowledge tutoring with contrasting forms of practice (<i>Journal of Educational Psychology</i>)	Effect Size: 0.331 LCI: 0.133 UCI: 0.528 Weight: 0.998 Standard error: 0.101	
Sibieta (2016)	REACH: Evaluation report and executive summary (<i>NA</i>)	Effect Size: 0.33 LCI: 0.14 UCI: 0.52 Weight: 1.002 Standard error: 0.097	
Powell (2015)	The Influence of Mathematics Vocabulary Instruction Embedded Within Addition Tutoring for First-Grade Students with Mathematics Difficulty (<i>Learning Disability Quarterly</i>)	Effect Size: 0.316 LCI: -0.124 UCI: 0.757 Weight: 0.826 Standard error: 0.225	
Vadasy (1997)	The effectiveness of one-to-one tutoring by community tutors for at-risk beginning readers (<i>Learning Disability Quarterly</i>)	Effect Size: 0.303 LCI: -0.32 UCI: 0.927 Weight: 0.678 Standard error: 0.318	

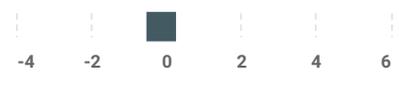
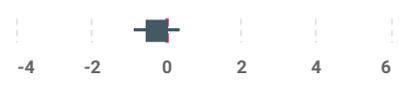
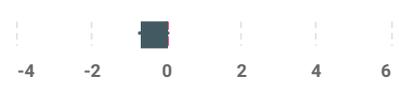
Author	Title	Effect Size	Effect Size (Graph)
Baker (2000)	When less may be more: A 2-year longitudinal evaluation of a volunteer tutoring program requiring minimal training (<i>Reading Research Quarterly</i>)	Effect Size: 0.284 LCI: -0.146 UCI: 0.714 Weight: 0.834 Standard error: 0.219	
Fuchs (2009) 1_2	Remediating Number Combination and Word Problem Deficits Among Students With Mathematics Difficulties: A Randomized Control Trial (<i>Journal of Educational Psychology</i>)	Effect Size: 0.28 LCI: -0.14 UCI: 0.7 Weight: 0.842 Standard error: 0.214	
Vernon-Feagans (2009) 1_2	The Targeted Reading Intervention (TRI): A Classroom Teacher Tier 2 Intervention to Help Struggling Readers in Early Elementary School (<i>NA</i>)	Effect Size: 0.28 LCI: 0.084 UCI: 0.476 Weight: 0.999 Standard error: 0.1	
Powell (2015)	The Effect of Tutoring With Nonstandard Equations for Students With Mathematics Difficulty. (<i>Journal of learning disabilities</i>)	Effect Size: 0.273 LCI: -0.345 UCI: 0.89 Weight: 0.683 Standard error: 0.315	
Young (2018)	Read Two Impress and the Neurological Impress Method: Effects on elementary students' reading fluency, comprehension, and attitude (<i>The Journal of Educational Research</i>)	Effect Size: 0.268 LCI: -0.363 UCI: 0.899 Weight: 0.673 Standard error: 0.322	
Markovitz (2014)	Impact Evaluation of the Minnesota Reading Corps K-3 Program Acknowledgements IMPACT EVALUATION OF THE MINNESOTA READING CORPS K-3 PROGRAM (<i>Corporation for National and Community Service</i>)	Effect Size: 0.255 LCI: 0.201 UCI: 0.309 Weight: 1.049 Standard error: 0.028	
Gorard (2014)	Switch-on Reading: Evaluation report and executive summary (<i>NA</i>)	Effect Size: 0.237 LCI: 0.013 UCI: 0.461 Weight: 0.983 Standard error: 0.114	
Cook (2001)	Every moment counts: Pairing struggling young readers with minimally trained tutors (<i>NA</i>)	Effect Size: 0.236 LCI: -0.538 UCI: 1.01 Weight: 0.569 Standard error: 0.395	
Wolff (2011)	Effects of a Randomised Reading Intervention Study: An Application of Structural Equation Modelling (<i>Dyslexia</i>)	Effect Size: 0.227 LCI: -0.144 UCI: 0.599 Weight: 0.88 Standard error: 0.19	

Author	Title	Effect Size	Effect Size (Graph)
McKinney (1995)	The effects of an after school tutorial and enrichment program on the academic achievement and self-concept of below grade level first and second-grade students (NA)	Effect Size: 0.22 LCI: -0.368 UCI: 0.808 Weight: 0.706 Standard error: 0.3	
Rutt (2014)	Catch Up® Numeracy: Evaluation report and executive summary (NA)	Effect Size: 0.21 LCI: -0.005 UCI: 0.425 Weight: 0.988 Standard error: 0.11	
See (2018)	Maths Counts: Evaluation report and executive summary (NA)	Effect Size: 0.205 LCI: -0.025 UCI: 0.435 Weight: 0.979 Standard error: 0.118	
Gardner (1998)	Reading Recovery in Northern Ireland: the first two years (NA)	Effect Size: 0.17 LCI: -0.124 UCI: 0.465 Weight: 0.938 Standard error: 0.15	
Smith (2013)	Evaluating math recovery: Assessing the causal impact of a diagnostic tutoring program on student achievement (American Educational Research Journal)	Effect Size: 0.15 LCI: 0.032 UCI: 0.268 Weight: 1.033 Standard error: 0.06	
Golton (1975) 1:1	The effect of student interaction on computer-assisted instruction in mathematics at the sixth-grade level (NA)	Effect Size: 0.135 LCI: -0.148 UCI: 0.418 Weight: 0.945 Standard error: 0.144	
Lee (2011)	The Effect of the Experience Corps® Program on Student Reading Outcomes: (Education and Urban Society)	Effect Size: 0.133 LCI: 0.001 UCI: 0.265 Weight: 1.028 Standard error: 0.068	
Cobb (2001)	The effects of an early intervention program with preservice teachers as tutors on the reading achievement of primary grade at risk children (Reading Horizons)	Effect Size: 0.13 LCI: -0.381 UCI: 0.641 Weight: 0.768 Standard error: 0.261	
Hodgen (2019)	Catch Up Numeracy (Effectiveness Trial)- Evaluation report and executive summary (NA)	Effect Size: 0.128 LCI: 0.035 UCI: 0.221 Weight: 1.04 Standard error: 0.048	

Author	Title	Effect Size	Effect Size (Graph)
Ramaswami (1994)	The Differential Impact of Reading Recovery on the Achievement of First Graders in the Newark School District, 1991-1993 (NA)	Effect Size: 0.122 LCI: -0.464 UCI: 0.707 Weight: 0.708 Standard error: 0.299	
Mostow (2003)	Evaluation of an automated Reading Tutor that listens: Comparison to human tutoring and classroom instruction (<i>Journal of Educational Computing Research</i>)	Effect Size: 0.122 LCI: -0.533 UCI: 0.777 Weight: 0.654 Standard error: 0.334	
Fuchs (2009) 1_1	Remediating Number Combination and Word Problem Deficits Among Students With Mathematics Difficulties: A Randomized Control Trial (<i>Journal of Educational Psychology</i>)	Effect Size: 0.12 LCI: -0.29 UCI: 0.53 Weight: 0.85 Standard error: 0.209	
Rutt (2015)	Catch Up® Literacy: Evaluation report and executive summary (NA)	Effect Size: 0.12 LCI: -0.015 UCI: 0.255 Weight: 1.026 Standard error: 0.069	
Aist (2001) 1:1	Computer-assisted oral reading helps third graders learn vocabulary better than a classroom control – about as well as one-on-one human-assisted oral reading (<i>Artificial intelligence in education: AI-ED in the wired and wireless future</i>)	Effect Size: 0.111 LCI: -0.349 UCI: 0.571 Weight: 0.81 Standard error: 0.235	
Jacob (2014)	Reading partners: The implementation and effectiveness of a one-on-one tutoring program delivered by community volunteers (NA)	Effect Size: 0.1 LCI: -3.252 UCI: 3.452 Weight: 0.062 Standard error: 1.71	
Jacob (2016)	Leveraging Volunteers: An Experimental Evaluation of a Tutoring Program for Struggling Readers (<i>Journal of Research on Educational Effectiveness</i>)	Effect Size: 0.1 LCI: -3.252 UCI: 3.452 Weight: 0.062 Standard error: 1.71	
Pinnell (1994)	Comparing instructional models for the literacy education of high-risk first graders (<i>Reading Research Quarterly</i>)	Effect Size: 0.087 LCI: -0.271 UCI: 0.444 Weight: 0.891 Standard error: 0.182	
Lesnick (2006) 1:1	A mixed-method multi-level randomized evaluation of the implementation and impact of an audio -assisted reading program for struggling readers (NA)	Effect Size: 0.084 LCI: -0.173 UCI: 0.341 Weight: 0.963 Standard error: 0.131	

Author	Title	Effect Size	Effect Size (Graph)
Demack (2016)	ThinkForward: Evaluation report and executive summary (NA)	Effect Size: 0.07 LCI: -0.075 UCI: 0.215 Weight: 1.023 Standard error: 0.074	
Mantzicopoulos (1992)	Use of the SEARCH/TEACH tutoring approach with middle-class students at risk for reading failure (<i>The Elementary School Journal</i>)	Effect Size: 0.054 LCI: -0.463 UCI: 0.57 Weight: 0.764 Standard error: 0.263	
Hickey (2019)	Effects of the TutorBright tutoring programme on the reading and mathematics skills of children in foster care: a randomised controlled trial (<i>Oxford Review of Education</i>)	Effect Size: 0.049 LCI: -0.42 UCI: 0.518 Weight: 0.803 Standard error: 0.239	
Therrien (2006)	Effect of a Combined Repeated Reading and Question Generation Intervention on Reading Achievement (<i>Learning Disabilities Research & Practice</i>)	Effect Size: 0.04 LCI: -0.688 UCI: 0.769 Weight: 0.601 Standard error: 0.372	
Schwartz (2005)	Literacy learning of at-risk first-grade students in the Reading Recovery early intervention (<i>Journal of Educational Psychology</i>)	Effect Size: 0.03 LCI: -0.489 UCI: 0.55 Weight: 0.761 Standard error: 0.265	
Vadasy (2008) 1:1	Code-oriented instruction for kindergarten students at risk for reading difficulties: a replication and comparison of instructional groupings (<i>Reading and Writing</i>)	Effect Size: 0.01 LCI: -0.298 UCI: 0.318 Weight: 0.928 Standard error: 0.157	
Torgerson (2016)	Affordable Online Maths Tuition: Evaluation report and executive summary (NA)	Effect Size: 0.01 LCI: -0.264 UCI: 0.284 Weight: 0.951 Standard error: 0.14	
Roy (2019)	Catch Up Literacy (Effectiveness Trial) - Evaluation report and executive summary (NA)	Effect Size: 0.01 LCI: -0.16 UCI: 0.18 Weight: 1.012 Standard error: 0.087	
Patel (2017)	Switch-On Effectiveness Trial: Evaluation report and executive summary (NA)	Effect Size: 0.001 LCI: -0.129 UCI: 0.131 Weight: 1.028 Standard error: 0.066	

Author	Title	Effect Size	Effect Size (Graph)
Vadasy (2008)	Repeated reading intervention: Outcomes and interactions with readers' skills and classroom instruction. <i>(Journal of Educational Psychology)</i>	Effect Size: -0.006 LCI: -0.314 UCI: 0.302 Weight: 0.928 Standard error: 0.157	
Lachney (2002)	Adult-mediated reading instruction for third through fifth grade children with reading difficulties <i>(NA)</i>	Effect Size: -0.007 LCI: -0.661 UCI: 0.646 Weight: 0.656 Standard error: 0.333	
Fives (2013)	A one-to-one programme for at-risk readers delivered by older adult volunteers <i>(Review of Education)</i>	Effect Size: -0.017 LCI: -0.286 UCI: 0.252 Weight: 0.955 Standard error: 0.137	
Penney (2002)	Teaching Decoding Skills to Poor Readers in High School <i>(Journal of Literacy Research)</i>	Effect Size: -0.033 LCI: -0.742 UCI: 0.676 Weight: 0.614 Standard error: 0.362	
Hedrick (1996)	An administrative review of an early reading intervention <i>(NA)</i>	Effect Size: -0.041 LCI: -0.232 UCI: 0.15 Weight: 1.001 Standard error: 0.097	
Torgesen (1999) 1:1	Preventing reading failure in young children with phonological processing disabilities: Group and individual responses to instruction <i>(Journal of Educational Psychology)</i>	Effect Size: -0.042 LCI: -0.515 UCI: 0.431 Weight: 0.799 Standard error: 0.241	
Miller (2012)	The effects of a volunteer mentoring programme on reading outcomes among eight- to nine-year-old children: A follow up randomized controlled trial <i>(Journal of Early Childhood Research)</i>	Effect Size: -0.054 LCI: -0.232 UCI: 0.125 Weight: 1.007 Standard error: 0.091	
Maxwell (2014)	TextNow Transition Programme: Evaluation report and executive summary <i>(NA)</i>	Effect Size: -0.06 LCI: -0.215 UCI: 0.095 Weight: 1.018 Standard error: 0.079	
Villiger (2019) 1_2	Effectiveness of an extracurricular program for struggling readers: A comparative study with parent tutors and volunteer tutors <i>(Learning and Instruction)</i>	Effect Size: -0.08 LCI: -0.423 UCI: 0.263 Weight: 0.902 Standard error: 0.175	

Author	Title	Effect Size	Effect Size (Graph)
Huggins (1999)	Longitudinal Study of the Reading Recovery Program, 1994-1998 (NA)	Effect Size: -0.099 LCI: -0.458 UCI: 0.26 Weight: 0.89 Standard error: 0.183	
Vernon-Feagans (2012)	Targeted Reading Intervention: A Coaching Model to Help Classroom Teachers With Struggling Readers (<i>Learning Disability Quarterly</i>)	Effect Size: -0.104 LCI: -0.443 UCI: 0.234 Weight: 0.906 Standard error: 0.173	
Acalin (1995)	A comparison of Reading Recovery to Project READ (NA)	Effect Size: -0.112 LCI: -0.595 UCI: 0.371 Weight: 0.791 Standard error: 0.246	
Villiger (2019) 1_1	Effectiveness of an extracurricular program for struggling readers: A comparative study with parent tutors and volunteer tutors (<i>Learning and Instruction</i>)	Effect Size: -0.137 LCI: -0.476 UCI: 0.202 Weight: 0.905 Standard error: 0.173	
Miller (2013) 1:1	A Randomized Controlled Trial Evaluation of "Time to Read", a Volunteer Tutoring Program for 8- to 9-Year-Olds (<i>Educational Evaluation and Policy Analysis</i>)	Effect Size: -0.184 LCI: -0.329 UCI: -0.039 Weight: 1.023 Standard error: 0.074	
Lorenzo (1993) 1:1	Effects of an experimental mentoring program on measures of performance of at-risk elementary students (NA)	Effect Size: -0.279 LCI: -0.916 UCI: 0.357 Weight: 0.669 Standard error: 0.325	
Loenen (1989)	The Effectiveness of Volunteer Reading Help and the Nature of the Reading Help Provided in Practice (<i>British Educational Research Journal</i>)	Effect Size: -0.358 LCI: -0.798 UCI: 0.082 Weight: 0.826 Standard error: 0.224	
Chapman (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 (<i>Scientific Studies of Reading</i>)	Effect Size: -0.478 LCI: -1.069 UCI: 0.114 Weight: 0.703 Standard error: 0.302	
Gilbert (2013)	Efficacy of a First-Grade Responsiveness-to-Intervention Prevention Model for Struggling Readers (<i>Reading Research Quarterly</i>)	Effect Size: -0.586 LCI: -1.185 UCI: 0.013 Weight: 0.698 Standard error: 0.306	

Author	Title	Effect Size	Effect Size (Graph)
Mertes (2013)	A Mathematics Education Comparative Analysis of ALEKS Technology and Direct Classroom Instruction (NA)	Effect Size: -0.67 LCI: -0.95 UCI: -0.39 Weight: 0.948 Standard error: 0.143	
Parham (1993)	An analysis of the effects of tutoring on seventh-grade students engaged in the mastery of pre-algebra concepts (NA)	Effect Size: -0.927 LCI: -1.372 UCI: -0.482 Weight: 0.822 Standard error: 0.227	