

Mentoring

Low impact for moderate cost based on moderate evidence

Mentoring in education involves pairing young people with an older peer or adult volunteer, who acts as a positive role model.

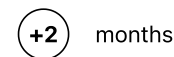
Implementation cost



Evidence strength



Impact (months)



Subject breakdown

maths: 14
reading: 18
toolkit: 44

School phase breakdown

primary: 14
secondary: 26
toolkit: 44

Technical Appendix

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

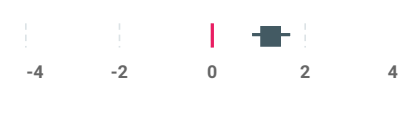
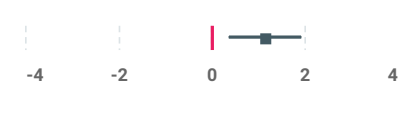

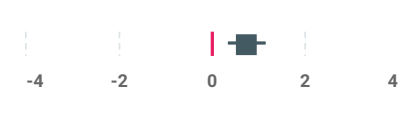
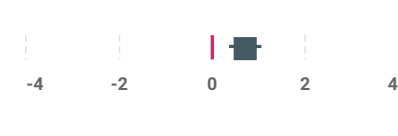
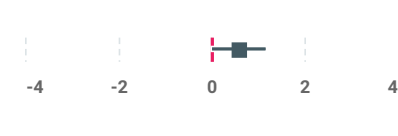
- The population sampled involved early years and school age learners from 3-18 learning in their first language.
- The intervention or approach being tested was educational in nature, including named or clearly defined programmes and recognisable approaches classifiable according to the Toolkit strand 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.


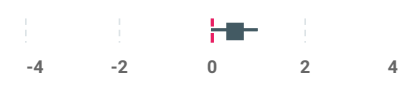
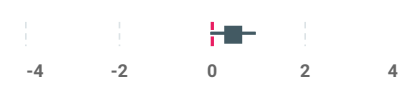


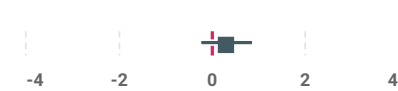



Standardised mean differences and confidence intervals for the most appropriate estimates of the impact of the intervention or approach for the Toolkit were extracted from each included study, along with other study variables. These effect sizes were further synthesised into a single pooled effect using 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).


References (44)

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.

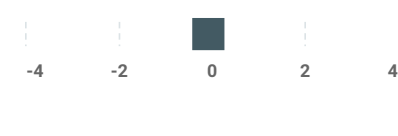
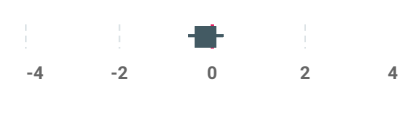
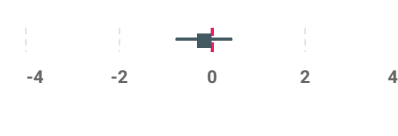
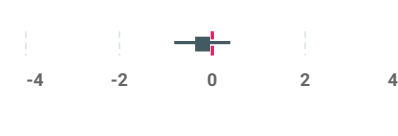

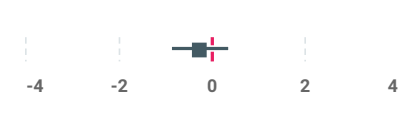
Studies that show an effect size result on the right-hand side of the red vertical red indicate that the particular intervention studied was more effective than standard practice. Studies that show an effect size on the left-hand side of the red vertical indicate that the particular intervention studied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


Author	Title	Effect Size	Effect Size (Graph)
Gordon (2000)	Mentoring urban Black male students: Implications for academic achievement, ethnic/racial identity development, racial socialization, and academic disidentification (NA)	Effect Size: 1.267 LCI: 0.838 UCI: 1.696 Weight: 2.258 Standard error: 0.219	
Portwood (2005)	YouthFriends: Outcomes from a school-based mentoring program (Journal of Primary Prevention)	Effect Size: 1.135 LCI: 0.332 UCI: 1.938 Weight: 1.114 Standard error: 0.41	
Karcher (2002)	The Effects of Developmental Mentoring on Connectedness and Academic Achievement (The School Community Journal)	Effect Size: 0.781 LCI: -0.022 UCI: 1.583 Weight: 1.115 Standard error: 0.41	
Brett (1993)	An examination of the impact of a mentoring program on inner city, seventh-grade, African American students' attitudes toward learning and other selected variables (NA)	Effect Size: 0.742 LCI: 0.316 UCI: 1.168 Weight: 2.272 Standard error: 0.217	
Starks (2002)	Mentoring at-risk youth: An intervention for academic achievement (Educational Psychology)	Effect Size: 0.709 LCI: 0.343 UCI: 1.075 Weight: 2.541 Standard error: 0.187	
Abbott (1997)	The influence of a big brothers program on the adjustment of boys in single-parent families (Journal of Psychology: Interdisciplinary and Applied)	Effect Size: 0.572 LCI: -0.024 UCI: 1.168 Weight: 1.634 Standard error: 0.304	

Author	Title	Effect Size	Effect Size (Graph)
Clarke (2009)	Effects of a school-based adult mentoring intervention on low income, urban high school freshmen judged to be at risk for drop-out: A replication and extension <i>(ProQuest Dissertations and Theses)</i>	Effect Size: 0.531 LCI: -0.263 UCI: 1.324 Weight: 1.132 Standard error: 0.405	
Moore (2006)	The impact mentoring relationships in an after-school program has on academic achievement and behavioral growth of elementary-age students <i>(Elementary education)</i>	Effect Size: 0.476 LCI: -0.047 UCI: 0.998 Weight: 1.884 Standard error: 0.267	
Gordon (2009) M	Mentoring urban Black Middle-School Male Students: Implications for Academic Achievement. <i>(The Journal of Negro education)</i>	Effect Size: 0.446 LCI: -0.063 UCI: 0.955 Weight: 1.934 Standard error: 0.26	
Kester (1998)	Year Two Program Evaluation Report: Academic Volunteer and Mentor Program. Giano Intermediate School. <i>(NA)</i>	Effect Size: 0.413 LCI: -2.643 UCI: 3.469 Weight: 0.105 Standard error: 1.559	
Simoes (2014)	Mentors and teachers: testing the effectiveness of simultaneous roles on school performance from a basic psychological needs perspective. <i>(Instructional Science)</i>	Effect Size: 0.383 LCI: 0.16 UCI: 0.605 Weight: 3.228 Standard error: 0.113	
Jones (1994)	Effects of a mentor program on the academic success and self-concept of selected black males in the junior high school - ProQuest Dissertations & Theses Global - ProQuest <i>(NA)</i>	Effect Size: 0.308 LCI: -0.256 UCI: 0.872 Weight: 1.74 Standard error: 0.288	
Schinke (2000)	Enhancing the educational achievement of at-risk youth <i>(Prevention Science)</i>	Effect Size: 0.299 LCI: -0.051 UCI: 0.649 Weight: 2.619 Standard error: 0.178	
Tomlin (1995) 1_1	A mentor program for improving the academic attainment of black adolescent males <i>(NA)</i>	Effect Size: 0.224 LCI: -0.407 UCI: 0.854 Weight: 1.531 Standard error: 0.322	
Tomlin (1995) 1_2	A mentor program for improving the academic attainment of black adolescent males <i>(NA)</i>	Effect Size: 0.22 LCI: -0.41 UCI: 0.85 Weight: 1.532 Standard error: 0.321	

Author	Title	Effect Size	Effect Size (Graph)
Thompson (2001)	The Impact of Mentoring on Academic Achievement of At-Risk Youth <i>(Children and Youth Services Review)</i>	Effect Size: 0.192 LCI: -0.595 UCI: 0.979 Weight: 1.146 Standard error: 0.401	
Brooks (1995)	An evaluation of the VCU Mentoring Program <i>(ProQuest Dissertations and Theses)</i>	Effect Size: 0.186 LCI: -0.347 UCI: 0.72 Weight: 1.845 Standard error: 0.272	
Davis (1988)	A mentor program to assist in increasing academic achievement and attendance of at-risk ninth-grade students <i>(ProQuest Dissertations and Theses)</i>	Effect Size: 0.182 LCI: -0.578 UCI: 0.942 Weight: 1.202 Standard error: 0.388	
Barron-McKeagney (2003)	Youth mentoring: Emerging questions about effects on self-concept and school performance. <i>(School Social Work Journal)</i>	Effect Size: 0.157 LCI: -0.58 UCI: 0.894 Weight: 1.254 Standard error: 0.376	
DeSocio (2007)	Engaging Truant Adolescents: Results From a Multifaceted Intervention Pilot <i>(Preventing School Failure: Alternative Education for Children and Youth)</i>	Effect Size: 0.135 LCI: -0.298 UCI: 0.567 Weight: 2.242 Standard error: 0.221	
Royse (1998)	Mentoring high-risk minority youth: Evaluation of the brothers project. <i>(Adolescence)</i>	Effect Size: 0.133 LCI: -0.448 UCI: 0.714 Weight: 1.683 Standard error: 0.296	
Morrow-Howell (2009) M	Evaluation of Experience Corps: Student reading outcomes <i>(NA)</i>	Effect Size: 0.126 LCI: -0.006 UCI: 0.258 Weight: 3.594 Standard error: 0.068	
Hayes (1998)	An evaluation of a staff mentor program for at-risk students in an Oregon high school: CAKE (Caring About Kids Effectively) <i>(ProQuest Dissertations and Theses)</i>	Effect Size: 0.109 LCI: -0.319 UCI: 0.537 Weight: 2.263 Standard error: 0.218	
Herrera (2007)	Making a difference in schools: The big brothers big sisters school based mentoring impact study <i>(Child Development)</i>	Effect Size: 0.09 LCI: 0.012 UCI: 0.168 Weight: 3.745 Standard error: 0.04	

Author	Title	Effect Size	Effect Size (Graph)
Herrera (2011)	Mentoring in Schools: An Impact Study of Big Brothers Big Sisters School-Based Mentoring <i>(Child Development)</i>	Effect Size: 0.09 LCI: 0.012 UCI: 0.168 Weight: 3.745 Standard error: 0.04	
Grossman (1998)	Does mentoring work? An impact study of the Big Brothers Big Sisters Program <i>(Evaluation Review)</i>	Effect Size: 0.08 LCI: -0.008 UCI: 0.168 Weight: 3.722 Standard error: 0.045	
Nguyen (2008) M	Information, role models, and perceived returns to education: Experimental evidence from Madagascar <i>(Unpublished manuscript)</i>	Effect Size: 0.079 LCI: -0.078 UCI: 0.236 Weight: 3.506 Standard error: 0.08	
Herrera (2013)	The Role of Risk: Mentoring Experiences and Outcomes for Youth with Varying Risk Profiles. <i>(MDRC)</i>	Effect Size: 0.07 LCI: -0.302 UCI: 0.442 Weight: 2.513 Standard error: 0.19	
McQuillin (2012)	Randomized evaluation of an instrumental school-based mentoring program for first and second year middle school students <i>(NA)</i>	Effect Size: 0.04 LCI: -0.313 UCI: 0.393 Weight: 2.605 Standard error: 0.18	
de Blank (2009)	Effects of quality and quantity of the mentoring relationship on outcomes for at-risk early adolescent girls <i>(0620: Developmental psychology 0622: Psychotherapy)</i>	Effect Size: 0.039 LCI: -0.28 UCI: 0.359 Weight: 2.763 Standard error: 0.163	
McPartland (1991)	Using Community Adults as Advocates or Mentors for At-Risk Middle School Students: A Two-Year Evaluation of Project RAISE <i>(American Journal of Education)</i>	Effect Size: -0.01 LCI: -0.224 UCI: 0.205 Weight: 3.264 Standard error: 0.109	
Bernstein (2009)	Impact Evaluation of the U.S. Department of Education's Student Mentoring Program. Final Report. NCEE 2009-4047 <i>(National Center for Education Evaluation and Regional Assistance)</i>	Effect Size: -0.023 LCI: -0.104 UCI: 0.058 Weight: 3.739 Standard error: 0.041	
Johnson (1997)	Mentoring at-risk youth: A research review and evaluation of the impacts of the Sponsor-A-Scholar program on student performance <i>(NA)</i>	Effect Size: -0.026 LCI: -0.057 UCI: 0.006 Weight: 3.817 Standard error: 0.016	

Author	Title	Effect Size	Effect Size (Graph)
Maxwell (2014)	TextNow Transition Programme: Evaluation report and executive summary (NA)	Effect Size: -0.06 LCI: -0.215 UCI: 0.095 Weight: 3.513 Standard error: 0.079	
Holloway (2004)	The effects of a school-based mentoring program on middle school students at-risk for school failure (NA)	Effect Size: -0.078 LCI: -0.521 UCI: 0.366 Weight: 2.195 Standard error: 0.226	
Rhodes (2000)	Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment (Child Development)	Effect Size: -0.081 LCI: -0.207 UCI: 0.045 Weight: 3.614 Standard error: 0.064	
Aiello (1988)	Assessment of a mentor program on self-concept and achievement variables of middle school underachievers (ProQuest Dissertations and Theses)	Effect Size: -0.139 LCI: -0.541 UCI: 0.263 Weight: 2.377 Standard error: 0.205	
Fresko (1985) 1_1	The Effect of Two Years of Tutoring on Mathematics and Reading Achievement (The Journal of Experimental Education)	Effect Size: -0.181 LCI: -0.812 UCI: 0.45 Weight: 1.529 Standard error: 0.322	
Anderson (2006)	Efficacy of problem solving focused mentoring with minority youth (NA)	Effect Size: -0.217 LCI: -0.838 UCI: 0.405 Weight: 1.556 Standard error: 0.317	
Fresko (1985) 1_2	The Effect of Two Years of Tutoring on Mathematics and Reading Achievement (The Journal of Experimental Education)	Effect Size: -0.224 LCI: -1.019 UCI: 0.57 Weight: 1.131 Standard error: 0.405	
Holt (2007)	Enhancing school engagement in urban minority youth at risk for adolescent problems (ProQuest Dissertations and Theses)	Effect Size: -0.264 LCI: -0.887 UCI: 0.359 Weight: 1.552 Standard error: 0.318	
McQuillin (2011)	Randomized evaluation of a single semester transitional mentoring program for first year middle school students: a cautionary result for brief, school-based mentoring programs (Journal of Community Psychology)	Effect Size: -0.44 LCI: -0.793 UCI: -0.087 Weight: 2.605 Standard error: 0.18	

Author	Title	Effect Size	Effect Size (Graph)
Newton (1994)	A study of the effectiveness of using collegiate mentors to reduce violent behavior, improve self-concept, and increase academic success in an urban middle school <i>(ProQuest Dissertations and Theses)</i>	Effect Size: -0.48 LCI: -1.059 UCI: 0.099 Weight: 1.689 Standard error: 0.295	
Gibbs-Roseboro (2010)	The effect of mentoring and extended learning program on North Carolina end-of-course tests <i>(Education)</i>	Effect Size: -0.508 LCI: -0.788 UCI: -0.228 Weight: 2.955 Standard error: 0.143	