

ASK A REL Response

Tutoring PreK–12 Students in Reading and Mathematics December 2013

Background

REL Southwest received a request for information seeking resources to use in tutoring underprivileged preK–12 students in mathematics and reading.

Search of Databases and Websites

Institute of Education Sciences (IES) website (www.ies.ed.gov)

ERIC database (www.eric.ed.gov)

EBSCO's Academic Search Elite database

SEDL website (www.sedl.org)

Keywords and Search Strings Used in the Search

(Mathematics OR Literacy OR Reading) AND PreK–12 AND Tutoring

Criteria for Inclusion

REL Southwest selected the following resources that provide guidance and resources for tutoring children in math and reading/literacy. Afterschool resources as well as articles and websites on tutoring in general were also included.

Please note that we have not done an evaluation of the resources themselves, but offer this list to you for your information only.

Date of the Publication: The most current information (primarily published from 2008 to the present) was included.

Mathematics Resources

Nebraska Department of Education. (2010). *Helping your child learn math: Math tips for parents.*

<http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED522950>

From the ERIC abstract: This paper presents tips, activities, resources, and games that parents can use to help their children become more proficient in math. Some helpful tips offered are (1) be positive; (2) play family games; (3) avoid stereotypes; (4) choose gifts that develop problem-solving skills; (5) expand your children's horizons; (6) buy or borrow library books; (7) connect math learning to the real world; (8) visit museums, libraries, and community centers; (9) talk with teachers and other school staff; and (10) encourage your children to solve problems. Also includes activities for elementary school

students, puzzles and games to solve problems, graphing complex information, and math resources from the U.S. Department of Education, National Council of Teachers of Mathematics (NCTM).

Williams, H., Molina, C., Martinez, D., & Dimock, V. (2012). *Connecting kids to mathematics and science*. Austin, TX: SEDL.

<http://www.sedl.org/pubs/catalog/items/ms107.html>

From the SEDL abstract: The *Connecting Kids to Mathematics and Science* professional development course is designed to provide teachers in grades 4–8 with hands-on experience in integrating mathematics, science, and technology in the classroom. The course guides teachers through developing and implementing problem-based lessons that connect math and science and employ technology to promote student learning. The *Connecting Kids* course materials include session guides, slide presentations, and handouts. The materials are designed for use by an experienced trainer or facilitator.

Williams, H., Molina, C., Martinez, D., & Dimock, V. (2012). *Mosaic: An integrated approach to mathematics, science, technology, & language*. Austin, TX: SEDL.

<http://www.sedl.org/pubs/catalog/items/ms106.html>

From the SEDL abstract: MOSAIC is a K–5 supplemental instructional program that provides engaging and rigorous lessons and resources that integrate math, science, and technology while supporting English learners and academic language skills. Aligned with Texas standards and grounded in research, the inquiry-based activities and real-life scenarios make math and science exciting and relevant for students while building a strong foundation of skills and connections among concepts.

Reading/Literacy Resources

Fleming, M. H. (2005, Spring–Summer). Two together after school: A literacy tutoring project. *School Community Journal*, 15(1), 75–88.

<http://files.eric.ed.gov/fulltext/EJ794815.pdf>

From the ERIC abstract: Research shows that afterschool programs with structured literacy components can contribute positively to children's success in school, reading improvement, and social skills, and that successful programs involve partnerships with the community and continually expanding outreach to parents and caregivers. This program report describes just such an afterschool and summer enrichment program, with the aim of identifying which aspects of the program are replicable, the specific markers of its success, and perhaps even determine further ways of measuring that success.

Joyner, S., & Quiroz, B. (Eds.). (2012). *Stepping stones: A Texas migrant early childhood program for 3- and 4-year-olds*. Austin, TX: SEDL and Texas Education Agency. http://www.sedl.org/pubs/catalog/items/early_childhood103.html

From the SEDL abstract: This program, developed in partnership with the Texas Education Agency (TEA), updates the state's existing home-based migrant preschool program to ensure its alignment with the Revised Texas Prekindergarten Guidelines. This home-based program consists of 100 lessons, in both English and Spanish,

bundled into sets of 10 around early learning themes or units. The lessons heavily emphasize language and literacy development and follow a “gradual release of responsibility” model that empowers parents to be successful teachers of their children with guidance from a home visitor. Along with the lessons, a manual is available to guide home educators and migrant program coordinators in effective implementation of the program.

Afterschool Resources

Beckett, M., Borman, G., Capizzano, J., Parsley, D., Ross, S., Schirm, A., & Taylor, J. (2009). *Structuring out-of-school time to improve academic achievement: A practice guide* (NCEE #2009-012). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
http://ies.ed.gov/ncee/wwc/pdf/practice_guides/ost_pg_072109.pdf

From the IES abstract: Out-of-school time programs can enhance academic achievement by helping students learn outside the classroom. The five recommendations in this guide are intended to help district and school administrators, out-of-school program providers, and educators design out-of-school time programs that will increase learning for students. The guide also describes the research supporting each recommendation, how to carry out each recommendation, and how to address roadblocks that might arise in implementing them.

Program in Education, Afterschool and Resiliency at Harvard University, & SEDL National Center for Quality Afterschool. (2008). *Afterschool curriculum choice: Literacy resources* [Website]. <http://www.sedl.org/afterschool/guide/literacy/>

From the SEDL abstract: This resource is designed to help practitioners locate and make informed choices about high-quality literacy resources to enrich their programs. Resources were selected based on proven use in afterschool settings and include challenging lesson plans and organized activities.

Program in Education, Afterschool and Resiliency at Harvard University, & SEDL National Center for Quality Afterschool. (2008). *Afterschool curriculum choice: Mathematics resources* [Website]. <http://www.sedl.org/afterschool/guide/math/>

From the SEDL abstract: This resource is designed to help practitioners locate and make informed choices about high-quality mathematics resources to enrich their programs. Resources were selected based on proven use in afterschool settings, and include challenging lesson plans and organized activities.

Tutoring Resources

Hollandsworth, S. (2010, July). Leave it to Bea. *Texas Monthly*, 38(7), 58–68.
<http://www.texasmonthly.com/story/leave-it-bea>

From the EBSCO Academic Search Elite abstract: The article profiles Bea Salazar, founder of Bea's Kids, a small nonprofit organization based in Carrollton, Texas, which offers afterschool tutoring to children in three low-income apartment complexes in the

area. The charitable act started in 1991 in Metrocrest Village when Salazar received books, school supplies, bread, and peanut butter to give to poor children. The significance of afterschool programs to children's achievements is explained. Salazar's family background is also presented.

Wood, D. (2003). The why? what? when? and how? of tutoring: The development of helping and tutoring skills in children. *Literacy Teaching and Learning*, 7(1–2), 1–30. <http://files.eric.ed.gov/fulltext/EJ966143.pdf>

From the ERIC abstract: In this article, the author talks about tutoring and learning. He first discusses the analytical and technical questions about the why, what, when, and how of tutoring. He begins by saying a little bit about why he is involved, interested, and fascinated by the very complex human activity people call tutoring. He argues that tutoring is an outgrowth of helping. Even though helping is a natural part of human nature, it is a much neglected topic, particularly in research. He argues that in looking at the development of helping children, there are some fascinating phenomena about childhood of which adults know very little. The article is divided into the following sections: (1) The Why of Tutoring; (2) The How, What, and When of Tutoring; (3) Tutor Challenges; (4) Establishing and Maintaining the Tutorial Relationship; (5) Contingent Support for Learning; (6) Contingent Tutoring; (7) It Takes Two to Tutor; (8) Looking for Help When You're in Trouble; (8) The Learner's Use of Time on Task; (9) A Feeling of Not Knowing, Zone of Proximal Development, and Seeking Help; (10) The Quadratic Tutor; (11) Is Working Fast a Sign of Effective Learning? and (12) Data: Are Lower Achievers Generally Poorer at Regulating Their Own Learning Environment?

Tutoring Websites

General

Funbrain provides educational games for math and reading in an arcade environment. <http://www.funbrain.com>

HomeworkLouisiana includes live, online tutoring from trained instructors, available to students with Louisiana public library cards. Students can get help with math, English, social studies, and science homework. <http://www.homeworkla.org>

The Khan Academy website contains a library of free video tutorials on the subjects of math, science, computer science, finance and economics, test preparation, as well as some humanities. <https://www.khanacademy.org>

Math

The AplusMath website help students improve math skills through interactive problems. <http://aplusmath.com>

Ask Dr. Math is an online forum that provides expert guidance for solving math problems and teaching math concepts. <http://mathforum.org/dr.math>

Coolmath-Games.com provides math games, exercises, quizzes, and a glossary to explain math terms. <http://coolmath-games.com>

Reading

Book Adventure lets students choose books from 8,500 titles, take short quizzes, and redeem points for prizes. <http://bookadventure.com>

Project Gutenberg features 40,000 free e-books past their copyright dates that can be downloaded and read on electronic devices. <http://www.gutenberg.org>

Vocabulary.com teaches students new words by using multiple choice quizzes, remembering what participants get wrong and returning to those words until they get them right. <https://www.vocabulary.com>

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