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BOOKS

FROM NCTM

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Beyond Good Teaching: Advancing Mathematics Education for ELLs

Sylvia Celedon-Pattichis and Nora G. Ramirez, 2012. Gr. pre-K-2; 3-5; 6-8; 9-12. 236 pp, \$35.95 paper. ISBN 978-0-87353-688-2. Stock no. 14118. National Council of Teachers of Mathematics; www.nctm.org.



Beyond Good Teaching is intended to assist pre-K-grade 12 instructors who are teaching mathematics to one or more English language

learners (ELLs). In 2009–2010, approximately 10 percent of public school students were ELLs, according to the National Center for Education Statistics. This book is a research-based presentation that delves into the teaching philosophy of, and strategies, tips, and tools for, the math teacher. It provides information through classroom-based examples and vignettes. It is *not* limited to Spanish-speaking students, however, but includes information about students who speak many other languages.

Prices on software, books, and materials are subject to change. Consult the suppliers for the current prices. The comments reflect the reviewers' opinions and do not imply endorsement by the National Council of Teachers of Mathematics.

Other invested groups—bilingual teachers, monolingual teachers with ELL students, ELL parents, and ELL students themselves—are represented in this book. The interactive components, including online resources and video clips, provide clear examples of recommended methods, highlighting the fact that mathematics is not language free.

This book contains simple tips that can be readily implemented. Recommendations include using printing rather than writing in cursive, cautioning against underestimating a student's math ability because of a language or cultural difference, and devising teaching format changes. In addition, it provides insight into working with ELL parents, expanded assessment strategies, and multifaceted issues pertaining to word problems. This book is useful to teachers, in general, because of its emphases on differentiation of mathematical discourse and academic language and tips on how to work appropriately with students from beginning to advanced English language abilities. Many of its discussion points can be used in secondary classes regardless of the content area or with elementary school English-speaking special needs children.

In short, this book should be required reading for every math teacher.

—Jeanne Ramirez Mather

University of Science and

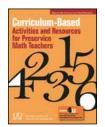
Arts of Oklahoma

Chickasha, Oklahoma

Curriculum-Based Activities and Resources for Preservice Math Teachers

Gwendolyn M. Lloyd and Vanessa R. Pitts Bannister, eds., 2011. 119 pp.,

\$35.95 paper. ISBN 978-0-87353-682-0. Stock no. 13993. National Council of Teachers of Mathematics; www.nctm.org.



This book is intended for use with preservice mathematics teachers by mathematics teacher educators. The book frames the

activities and investigations primarily around NCTM's Principles and refers to the Standards, Curriculum Focal Points, and strands of mathematical proficiency. The Common Core State Standards for Mathematics are covered less directly.

Each chapter, written by those who implemented that content's activities, provides insight into preservice teacher thinking. Templates for each activity are provided in the book and online through the more4U link. Activities include working with tasks within a lesson, planning a lesson, comparing lesson goals, considering how a curriculum prepares students for assessment, and thinking about the big ideas of a curriculum. Each chapter ends with a list of readings. The final chapter provides links for online resources to access videos and sample materials from a variety of curricula at varying grade levels.

I used an activity focused on analyzing fraction content across different elementary lessons. This was an insightful activity that challenged my preservice teachers to consider how different curricula impact what they teach and how what they know about mathematics influences their understanding of mathematics in a lesson.

I would recommend this book to any mathematics educator working

with future mathematics teachers. It provides a guide within which you can design and modify curricular experiences for preservice teachers.

> —Marshall Lassak Eastern Illinois University Charleston, Illinois

FROM OTHER PUBLISHERS

Exploring Expressions and Equations with The Geometer's Sketchpad, Version 5

2012. Gr. 6–8, 263 pp., \$29.95 paper. ISBN 978-1-60440-226-1. Key Curriculum Press; www.key curriculum.com.

This collection of exercises is designed to help students understand a range of algebraic concepts, from the coordinate plane to polynomials. The collection does not constitute a course curriculum and is best used to supplement a prealgebra or algebra curriculum. One of its best features is the discussion of virtual manipulatives, such as algebra tiles. Using virtual manipulatives in combination with the graphing and calculating capabilities of GSP allows for greater flexibility and less mess than using the concrete versions.

I assigned my seventh-grade students an updated and expanded version of an activity about balancing equations using a scale with weights and balloons. The students enjoyed the activity, and it was a useful anchor point and model for solving equations as the unit continued. However, many of the activities require that both the teacher and students have prior experience with GSP. The student activity sheets lack the notes in the margins, common in other GSP books, which explain the technical aspects of the software.

Those who teach students with no experience using GSP can anticipate devoting time to troubleshooting technical issues rather than mathematical issues. Also, several sketches contained

errors, most often labels that were intended to be used as measurements, and one answer key used in class had an error. I recommend this book to any teacher who has used GSP before but do not recommend it for novices.

—Rebecca Damas Trevor Day School New York, New York

Mathematical Reasoning Middle School Supplement

Darin Beigie, 2011. 154 pp., \$19.99 paper. ISBN 978-1-60144-411-0. The Critical Thinking Co.; www.critical thinking.com.

This book, described as a resource of nonroutine problems, provides supplementary activities covering content areas of Number and Operations, Algebra, Geometry, Measurement, and Data Analysis and Probability. The book is intended for seventh-grade and eighth-grade students and provides a wide range of problems on different content areas to help develop students' reasoning skills. An additional strength is that activities reinforce connections between different content areas. For example, activity 18 (Fraction Finder) could be considered under the Number and Operations content area, and some questions within the activity relate to Measurement content.

A few weaknesses were found. Although the activities or problems purport to be nonroutine, some questions do not fit into this category. For example, questions on finding mean and median (see p. 69, question 2, or p. 72, question 4). Providing math facts related to the problems within an activity could be seen as another weakness. Such listed facts could hinder the creativeness of the students by hinting that they focus on them. These math facts instead could have been listed as resources at the end of the book. In that way, students could see a list and choose the appropriate

tool to accomplish the problem.

I would consider using this book as a supplementary resource for preservice elementary teachers in their math content courses.

> —Gulden Karakok University of Northern Colorado Greeley, Colorado

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