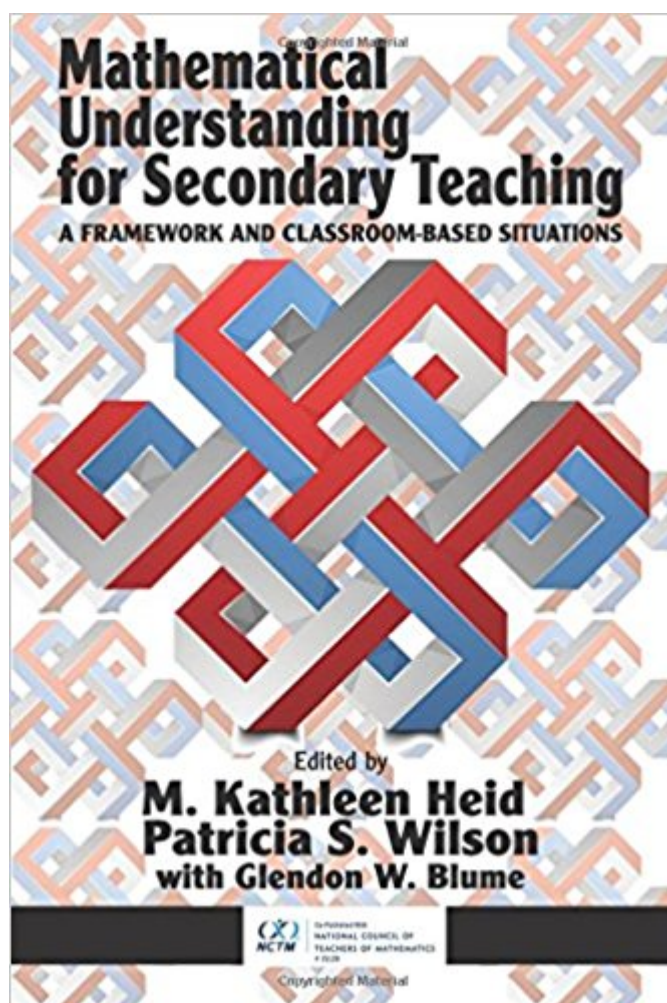


The book was found

Mathematical Understanding For Secondary Teaching: A Framework And Classroom-Based Situations



Synopsis

A perennial discussion about teacher development is the optimal content background for teachers. In recent years, that discussion has taken center stage in the work of mathematics education researchers, mathematicians, mathematics professional developers, and mathematics education policymakers. Much of the existing and prior work in this area has been directed toward mathematical knowledge for teaching at the elementary level. The work described in this volume takes a sometimes-neglected approach, focusing on the dynamic nature of mathematical understanding rather than on a stable description of mathematical knowledge, and on mathematics for secondary teaching rather than mathematics for teaching at the elementary level. The work reported in *Mathematical Understanding for Secondary Teaching: A Framework and Classroom-Based Situations* is a practice-based response to the question of what mathematical understandings secondary teachers could productively use in their teaching. For each of more than 50 events, our team of almost 50 mathematics educators who were experienced mathematics teachers developed descriptions of the mathematics that teachers could use—each of those descriptions (consisting of the event and the mathematics related to the event) is what we call a Situation. We developed our Framework for Mathematical Understanding for Secondary Teaching (MUST) based on an analysis of our entire set of Situations. We call the work practice-based because the MUST framework is based on actual events that we witnessed in our observations of secondary mathematics practice. Groups of mathematics teachers can use this volume to enhance their own understandings of secondary mathematics. School leaders and professional developers in secondary mathematics will find our MUST Framework and Situations useful as they work with teachers in enhancing and deepening their understanding of secondary mathematics. Mathematics teacher educators and mathematicians who teach mathematics to prospective and in-service secondary teachers will be able to couch their mathematical discussions in the Situations—examples that arise from secondary mathematics classrooms. They will be able to use this volume as they design courses and programs that enhance mathematics from the perspectives identified in the MUST framework. Policymakers and researchers can use our MUST framework as they consider the mathematics background needed by teachers.

Book Information

Paperback: 470 pages

Publisher: Information Age Publishing (December 1, 2015)

Language: English

ISBN-10: 1681231131

ISBN-13: 978-1681231136

Product Dimensions: 6 x 1.1 x 9 inches

Shipping Weight: 1.7 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 1 customer review

Best Sellers Rank: #785,604 in Books (See Top 100 in Books) #40 in Books > Science & Math > Mathematics > Research #739 in Books > Science & Math > Mathematics > Study & Teaching #44949 in Books > Education & Teaching > Schools & Teaching

Customer Reviews

M. Kathleen Heid, The Pennsylvania State University, USA. Patricia S. Wilson, University of Georgia, USA. Glendon W. Blume, The Pennsylvania State University, USA.

I bought this for a class, but the explanations in the book and MUST framework were surprising applicable to teaching Math. Quality information in this text.

[Download to continue reading...](#)

Mathematical Understanding for Secondary Teaching: A Framework and Classroom-Based Situations The Reading/Writing Connection: Strategies for Teaching and Learning in the Secondary Classroom, 2nd Edition 120 Content Strategies for English Language Learners: Teaching for Academic Success in Secondary School (2nd Edition) (Teaching Strategies Series) Private Secondary Schools 2009 (Peterson's Private Secondary Schools) Private Secondary Schools 2010-2011 (Peterson's Private Secondary Schools) Private Secondary Schools 2006-2007 (Peterson's Private Secondary Schools) Private Secondary Schools 2002-2003 (Peterson's Private Secondary Schools) Private Secondary Schools 2003-2004 (Private Secondary Schools, 2004) Peterson's Private Secondary Schools 2000-2001 : The Smart Parents' Guide to Private Education (Peterson's Private Secondary Schools, 2000-2001) Private Secondary Schools 2001-2002 (Private Secondary Schools, 2002) Private Secondary Schools 1995-1996 (Peterson's Private Secondary Schools) Programming Entity Framework: DbContext: Querying, Changing, and Validating Your Data with Entity Framework Framework for the Lower Back: A 6-Step Plan for a Healthy Lower Back (Framework Active for Life) Ict Framework Solutions: Year 8 (Ict Framework Solutions S.) Teaching Information Literacy Reframed: 50+ Framework-Based Exercises for Creating Information-Literate Learners Understanding and Teaching U.S. Lesbian, Gay, Bisexual, and Transgender History (The Harvey Goldberg Series for Understanding and Teaching History)

Understanding and Teaching American Slavery (The Harvey Goldberg Series for Understanding and Teaching History) Middle and Secondary Classroom Management: Lessons from Research and Practice (B&B Education) Caribbean Connections: The Dominican Republic (Caribbean Connections: Classroom Resources for Secondary Sch) Teaching and Learning Mathematics: Translating Research for Secondary School Teachers

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)