Elementary Mathematics For Teachers | 75715630ba8253fe714cba0a8c39e9c0

Studies of teachers in the U.S. often document insufficient subject matter knowledge in mathematics. Yet, these studies give few examples of the knowledge teachers need to support teaching, particularly the kind of teaching demanded by recent reforms in mathematics education. Knowing and Teaching Elementary Mathematics describes the nature and development of the knowledge that elementary teachers need to become accomplished mathematics teachers, and suggests why such knowledge seems more common in China than in the United States, despite the fact that Chinese teachers have less formal education than their U.S. counterparts. The anniversary edition of this bestselling volume includes the original studies that compare U.S. and Chinese elementary school teachers' mathematical understanding and offers a powerful framework for grasping the mathematical content necessary to understand and develop the thinking of school children. Highlighting notable changes in the field and the author's work, this new edition includes an updated preface, introduction, and key journal articles that frame and contextualize this seminal work.

Fundamentals of Elementary Mathematics provides an understanding of the fundamental aspects of elementary mathematics. This book presents the relevance of the mathematical concepts, which are also demonstrated in numerous exercises. Organized into 10 chapters, this book begins with an overview of the study of logic to understand the nature of mathematics. This text then discusses mathematics as a system of structure or as a collection of substructures. Other chapters consider the four essential components in a mathematical or logical system or structure, namely, undefined terms, defined terms, postulates, and theorems. This book discusses as well several principles used in numeration systems and provides examples of some numeration systems that are in use to illustrate these principles. The final chapter deals with the classification of certain mathematical systems as groups, fields, or rings to demonstrate some abstract mathematics. This book is a valuable resource for students and teachers in elementary mathematics.

Strengthen mathematics lessons through collaborative learning with this research-based professional development program. Included are grade-
appropriate number and operations topics aligned with the Common Core State Standards.

How to build productive relationships in math education I wasn’t taught this way. I can’t help my child! These are common refrains from today’s parents and guardians, who are often overwhelmed, confused, worried, and frustrated about how to best support their children with what they see as the “new math.” The problem has been compounded by the shift to more distance learning in response to a global pandemic. Partnering With Parents in Elementary School Math provides educators with long overdue guidance on how to productively partner and communicate with families about their children’s mathematics learning. It includes reproducible surveys, letters, and planning documents that can be used to improve the home-school relationship, which in turn helps students, parents, teachers, and education leaders alike. Readers will find guidance on how to: · Understand and empathize with what fuels parents’ anxieties and concerns · Align as a school and set parents’ expectations about what math instruction their children will experience and how it will help them · Communicate clearly and productively with parents about their students’ progress, strengths, and needs in math · Run informative and fun family events · support homework · Coach parents to portray a productive disposition about math in front of their children Educators, families, and students are best served when proactive, productive, and healthy relationships have been developed with each other and with the realities of today’s math education. This guide shows how these relationships can be built.

Although proving is core to mathematics as a sense-making activity, it currently has a marginal place in elementary classrooms internationally. Blending research with practical perspectives, this book addresses what it would take to elevate the place of proving at elementary school. The book uses classroom episodes from two countries to examine different kinds of proving tasks and the proving activity they can generate in the elementary classroom. It examines further the role of teachers in mediating the relationship between proving tasks and proving activity, including major mathematical and pedagogical issues that arise for teachers as they implement each kind of proving task. In addition to its contribution to research knowledge, the book has important implications for teaching, curricular resources, and teacher education.

Packed with effective instructional strategies, this book explores why certain K-5 students struggle with math and provides a framework for helping these learners succeed. The authors present empirically validated practices for supporting students with disabilities and others experiencing difficulties in specific areas of math, including problem solving, early numeracy, whole-number operations, fractions, geometry, and algebra. Concrete examples, easy-to-implement lesson-planning ideas, and connections to state standards, in particular the Common Core standards, enhance the book's utility. Also provided is invaluable guidance on planning and delivering multi-tiered instruction and intervention.

Textbook on numbers, arithmetic, and prealgebra for elementary school mathematics teachers. Designed to be used with five Primary Mathematics books (textbooks 3A, 4A, 5A, 6A, and workbook 5A; all U.S. ed.), part of an elementary mathematics curriculum designed by Singapore's Ministry of Education and adapted for use in the U.S.

MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS, 6E offers future teachers a comprehensive mathematics course designed to foster concept development through examples, investigations, and explorations. In this text, intended for the one- or two-semester course required of Education majors, Bassarear demonstrates that there are many paths to solving a problem, and sometimes problems have more than one solution. The author presents real-world problems—problems that require active learning in a method similar to how archaeologists explore an archaeological find: they carefully uncover the
site, slowly revealing more and more of the structure. Visual icons throughout the main text allow instructors to easily connect content to the hands-on activities in the corresponding Explorations Manual. With this exposure, future teachers will be better able to assess student needs using diverse approaches. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

This book is designed for a mathematics for elementary school teachers course where instructors choose to focus on and/or take an activities approach to learning. It provides inductive activities for prospective elementary school teachers and incorporates the use of physical models, manipulatives, and visual images to develop concepts and encourage higher-level thinking. This text contains an activity set that corresponds to each section of the companion text, Mathematics for Elementary Teachers: A Conceptual Approach which is also by Bennett/Nelson. The Activities Approach text can be used independently or along with its companion volume. The authors are pleased to welcome Laurie Burton, PhD, Western Oregon University to this edition of Mathematics for Elementary Teachers: An Activity Approach.

Updated to reflect recent advances in mathematical teaching methods, Teaching Elementary Mathematics: A Resource for Field Experiences, 2nd Edition is a hands-on field manual for elementary school teachers. It features a range of activities to enhance student field experiences, including observation and practicum. These activities may be used with any math methods text currently used or as a stand-alone component in any course. The great flexibility of the activities also meets the unique needs of students teaching elementary mathematics.

Freitag's MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS: A PROCESS APPROACH was developed using the five Content Standards from the NCTM Principles and Standards for School Mathematics, and the Common Core State Standards for Mathematics. Traditionally, books for pre-service elementary teachers have focused on problem solving. However, problem solving is not the only process through which mathematics is learned. It is also learned through mathematical reasoning, communication, representation, and connections. Recent trends in mathematics education now advocate implementing all five processes as a vital part of learning and doing mathematics. Consequently, you need to have concrete experiences with these processes that you will be required to teach. The goal of this book is to treat each of the processes equitably by using an approach in which the five processes serve as the central pedagogical theme. Most of the examples, exercises, and activities are designed to either model the processes or to directly engage you in working with them. As a result, you will not only come to understand the different processes, but also appreciate them as an integral to learning and doing mathematics. If this broader view can be instilled, you are more likely to give your students a more well-rounded and holistic view of mathematics once you enter the classroom. The purpose of this book is to look at the content from a theoretical or generalized point of view, so that you can better understand the concepts and processes behind the mathematics you will teach. In short, the book focuses on the why behind the mathematics in addition to the how. Available with InfoTrac Student Collections http://gocengage.com/infotrac. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Textbook on measurement and geometry for elementary school mathematics teachers, including a chapter on data, probability, and statistics. Designed to be used in conjunction with Primary mathematics textbooks 4A, 5A, 3B, 5B, 6B (all U.S. ed.) and New elementary mathematics textbook 1.

The emergence of the National Council of Teachers of Mathematics Standards in 1989 sparked a sea change in thinking about the nature and quality of mathematics instruction in U.S. schools. Much is known about transmission forms of mathematics teaching and the influence of this teaching on students' learning, but there is still little knowledge about the alternative forms of instruction that have evolved from the recent widespread efforts to reform
mathematics education. Beyond Classical Pedagogy: Teaching Elementary School Mathematics reports on the current state of knowledge about these new instructional practices, which differ in significant ways from the traditional pedagogy that has permeated mathematics education in the past. This book provides a research-based view of the nature of facilitative teaching in its relatively mature form, along with opposing views and critique of this form of pedagogy. The focus is on elementary school mathematics classrooms, where the majority of the reform-based efforts have occurred, and on the micro level of teaching (classroom interaction) as a source for revealing the complexity involved in teaching, teachers' learning, and the impact of both on children's learning. The work in elementary mathematics teaching is situated in the larger context of research on teaching. Research and insights from three disciplinary perspectives are presented: the psychological perspective centers on facilitative teaching as a process of teachers' learning; the mathematical perspective focuses on the nature of the mathematical knowledge teachers need in order to engage in this form of teaching; the sociological perspective attends to the interactive process of meaning construction as teachers and students create intellectual communities in their classrooms. The multidisciplinary perspectives presented provide the editors with the necessary triangulation to provide confirming evidence and rich detail about the nature of facilitative teaching. Audiences for this book include scholars in mathematics education and teacher education, teacher educators, staff developers, and classroom teachers. It is also appropriate as a text for graduate courses in mathematics education, teacher education, elementary mathematics teaching methods, and methods of research in mathematics education.

Elementary mathematics specialists are teacher leaders who are responsible for supporting effective PK–6 mathematics instruction and student learning. The Association of Mathematics Teacher Educators (AMTE), the Association of State Supervisors of Mathematics, the National Council of Supervisors of Mathematics, and the National Council of Teachers of Mathematics, in a 2010 joint position paper on Elementary Mathematics Specialists (EMSs), all advocate for the use of EMSs to support the teaching and learning of mathematics. The specific roles and expectations of EMSs will vary according to the needs of each setting, "but their expertise and successful experience at the elementary level is critical" (p 1). Elementary Mathematics Specialists: Developing, Refining, and Examining Programs that Support Mathematics Teaching and Learning is AMTE's latest resource supporting the important work of EMSs. It has five sections related to the preparation and professional development of EMSs: (a) Overview and Current State of Affairs; (b) Models of EMS Program Development & Delivery; (c) Supporting EMSs in the Field; (d) The Mathematics Specialist Research; and (e) Future Directions. The book provides support to EMS practitioners, program providers/developers, and researchers seeking to answer important questions about how to prepare Mathematics Specialists, support them in the field, and research their effectiveness.

An introduction to teaching elementary and junior-high school mathematics, it incorporates recommendations of the NCTM. Focuses on the "how" and "why" of each mathematical topic, with stress on good pedagogy and development of problem-solving skills. The Second Edition contains a new chapter on the Logo computer language. References to NCTM standards now appear in every chapter and there are many new problems.

The 20th anniversary edition of this groundbreaking and bestselling volume offers powerful examples of the mathematics that can develop the thinking of elementary school children. Studies of teachers in the U.S. often document insufficient subject matter knowledge in mathematics. Yet, these studies give few examples of the knowledge teachers need to support teaching, particularly the kind of teaching demanded by reforms in mathematics education. Knowing and Teaching Elementary Mathematics describes the nature and development of the knowledge that elementary teachers need to become accomplished mathematics teachers, and suggests why such knowledge seems more common in China than in the United States, despite the fact that Chinese teachers have less formal education than their U.S. counterparts. Teachers' knowledge is a mirror that reflects the mathematics they teach and were taught. Along with the original studies of U.S. and Chinese teachers' mathematical understanding, this 20th anniversary edition includes a new preface and a 2013 journal article by Ma, "A Critique of the Structure of U.S. Elementary School Mathematics" that describe differences in U.S. and
Chinese elementary mathematics. These are augmented by a new series editor's introduction and two key journal articles that frame and contextualize this seminal work.

One of the boys in the group responded, "That’s so smart! That’s so smart! That’s what we should do!" Complex Instruction (CI) is a response to the paradox that group work offers much potential but often creates circumstances where few students seem to learn. CI is a set of ideas and strategies that address the problems that confound group work, but that create powerful learning for children. This book offers guidance to readers on how to use these strategies and ideas. The authors describe the lessons they learned using group work, explain how complex instruction helps unsuccessful students and analyse how to design assignments that support group learning - using group-worthy tasks - giving readers examples of good tasks and help in adapting math problems from their own curricula.

The book presents comparative analyses of five elementary mathematics curriculum programs used in the U.S. from three different perspectives: the mathematical emphasis, the pedagogical approaches, and how authors communicate with teachers. These perspectives comprise a framework for examining what curriculum materials are comprised of, what is involved in reading and interpreting them, and how curriculum authors can and do support teachers in this process. Although the focus of the analysis is 5 programs used at a particular point in time, this framework extends beyond these specific programs and illuminates the complexity of curriculum materials and their role in teaching in general. Our analysis of the mathematical emphasis considers how the mathematics content is presented in each program, in terms of sequencing, the nature of mathematical tasks (cognitive demand and ongoing practice), and the way representations are used. Our analysis of the pedagogical approach examines explicit and implicit messages about how students should interact with mathematics, one another, the teacher, and the textbook around these mathematical ideas, as well as the role of the teacher. In order to examine how curriculum authors support teachers, we analyze how they communicate with teachers and what they communicate about, including the underlying mathematics, noticing student thinking, and rationale for design elements. The volume includes a chapter on curriculum design decisions based on interviews with curriculum authors.

Your game plan for unlocking mathematics by focusing on students’ strengths. What if instead of focusing on what students haven’t mastered, we identify their mathematical strengths and build on students’ points of power? Beth McCord Kobett and Karen S. Karp highlight five key teaching turnarounds are presented: identify teaching strengths, leverage students’ strengths, design instruction from a strengths-based perspective, help students identify their points of power, and promote strengths in the school community. Each chapter provides opportunities to reflect and transfer practice while also sharing · Downloadable resources, activities, and tools · Examples of student work within Grades K–6 · Real teachers’ notes and reflections for discussion.

The need to improve the mathematical proficiency of elementary teachers is well recognized, and it has long been of interest to educators and researchers in the U.S. and many other countries. But the specific proficiencies that elementary teachers need and the process of developing and improving them remain only partially conceptualized and not well validated empirically. To improve this situation, national workshops were organized at Texas A&M University to generate focused discussions about this important topic, with participation of mathematicians, mathematics educators and teachers. Developing Mathematical Proficiency for Elementary Instruction is a collection of articles that grew out of those exciting cross-disciplinary exchanges. Developing Mathematical Proficiency for Elementary Instruction is organized to probe the specifics of mathematical proficiency that are important to elementary teachers during two separate but inter-connected professional stages: as pre-service teachers in a preparation program, and as in-service teachers teaching mathematics in elementary classrooms. From this rich and inspiring collection, readers may better understand, and possibly rethink,
their own practices and research in empowering elementary teachers mathematically and pedagogically, as educators or researchers.

Elementary mathematics for teachers (EMFT) is oriented for pre-service teachers in a semester or two-quarter university course although it is appropriate for practicing K-8 teachers as well. The textbook is designed to be used in conjunction with five volumes of the Primary Mathematics series. The aim is to develop an understanding of elementary mathematics at the level of ‘teacher knowledge’ and is organized around numbers and arithmetic with topics covered roughly in the order they are developed in an elementary school. It utilizes the Concrete > Pictorial > Abstract approach of teaching arithmetic and focuses on the principle that mathematics is best learned by solving problems. For that reason it incorporates almost no external information or discussions of non-mathematical topics. Further explorations in elementary mathematics centering on measurement and geometry are covered in the sequel: Elementary geometry for teachers.

Based on the Primary Mathematics series from Singapore. Designed to equip students with a strong foundation in mathematics and critical thinking skills, the program offers an integrated solution to different learning needs in the classroom.

(Originally Published by Houghton Mifflin Company, 2004) There is a national consensus that teachers who teach middle-grades and elementary mathematics need deeper and broader exposure to mathematics in both their undergraduate and in their graduate studies. The Mathematics Education of Teachers, published by The Conference Board on the Mathematical Sciences, recommends 21 semester hours of mathematics for prospective teachers of middle-grades mathematics. In several states pre-service teachers preparing to teach middle-grades mathematics and pre-service teachers preparing to teach elementary school must complete 6-9 semester hours of mathematics content at the junior-senior level. Graduate schools across the nation have developed special programs for educators who specialize in teaching mathematics to elementary school children and to middle grades students. However, there is a paucity of text materials to support those efforts at junior-senior level and graduate level courses. Faculty members must choose to teach yet another course out of one of the “Mathematics for Teachers” texts that have formed the basis of the curriculum for the last two decades. These texts tend to treat a very limited set of topics on a somewhat superficial level. Alternatively, faculty members can use mathematics textbooks written primarily for students majoring in mathematics or the sciences. Neither the topic choice nor the pedagogical style of these texts is optimal for pre-service and in-service teachers of middle grades and elementary mathematics. Discrete Mathematics for Teachers is a text designed to fill this void. The topic is right. Discrete mathematics provides a rich and varied source of problems for exploration and communication, expands knowledge of mathematics in directions related to elementary and middle school curricula, and is easily presented using our best understanding of the ways that mathematics is learned and taught. The presentation is right. In the spirit of NCTM’s Principles and Standards for School Mathematics, topics are presented with careful attention to the best traditions of problem solving, reasoning and proof, communication, connections with other disciplines and other areas of mathematics, and varied modes of representation.

Mathematics for Elementary Teachers: A Contemporary Approach, 10th Edition makes readers motivated to learn mathematics. With new-found confidence, they are better able to appreciate the beauty and excitement of the mathematical world. The new edition of Musser, Burger, and Peterson's best-selling textbook focuses on one primary goal: helping students develop a true understanding of central concepts using solid mathematical content in an accessible and appealing format. The components in this complete learning program work in harmony to help achieve this goal. The Tenth Edition features the Common Core Standards to accompany the NCTM standards that are integrated throughout the text.
Guide teachers to help all PreK-8 learners make sense of mathematics. Elementary and Middle School Mathematics: Teaching Developmentally illustrates how children learn mathematics, and then shows pre-service teachers the most effective methods of teaching PreK-8 math through hands-on, problem-based activities. As teacher candidates engage with the activities, they boost their own knowledge of the math and learn concrete, developmentally appropriate ways to incorporate problem-based tasks in their classrooms. Examples of real student work and new common challenges and misconception tables allow readers to visualize good mathematics instruction and assessment that supports and challenges all learners. An important reference to consult throughout a teaching career, this book reflects the Common Core State Standards and NCTM’s Principles to Actions, as well as current research and coverage of the latest teaching technology. -- Provided by publisher.

Mathematics teacher education has a critical role to play in preparing teachers to put at center stage goals to support equity in mathematics education and to diversify student interest and participation in mathematics. These goals must also resonate with broader public interest goals to improve educational and social conditions both in the U.S. and abroad. The Mathematics Teacher Education in the Public Interest book aims to support mathematics teacher educators to prepare teachers with new knowledge and skills to support all students to learn mathematics and to become informed, engaged, and critical citizens within their community, nation, and world. While internationally there is considerable interest among mathematics educators in issues of equity and social justice, the literature on mathematics teacher education for equity and social justice thus far has been very limited. The book provides theoretical discussions on the need for equity and social justice emphases in mathematics teacher education, as well as practical examples from mathematics teacher educators, documenting their own professional efforts to center practices on equity and social justice. Section emphases include critical perspectives on mathematics teacher education, the use of equity and social justice-themed activities in mathematics teacher preparation courses, and issues of identity and community and cultural contexts in mathematics teacher education. In addition syntheses of major ideas of the book are offered by experienced researchers.

This text provides guidance for elementary teachers who are looking to learn the basics of the varying levels of elementary math. Sonnabend provides an active, engaging approach that illuminates the underlying concepts of mathematics in grades K–8. The text includes coverage of reasoning, sets, arithmetic, geometry, measurement, algebra, statistics, and probability. The text’s interactive lesson format encourages students to participate in the development and explanation of concepts, establishing a solid understanding of mathematics.

Strengthen mathematics lessons through collaborative learning with this research-based professional development program. Included are grade-appropriate number and operations topics aligned with the Common Core State Standards.

This book builds on the Teachers Empowered to Advance Change in Mathematics (TEACH Math) project, which was an initiative that sought to develop a new generation of preK-8 mathematics teachers to connect mathematics, children’s mathematical thinking, and community and family knowledge in mathematics instruction – or what we have come to call children’s multiple mathematical knowledge bases in mathematics instruction, with an explicit focus on equity. Much of the work involved in the TEACH Math project included the development of three instructional modules for preK-8 mathematics methods courses to support the project’s goals. These activities were used and refined over eight semesters, and in Fall 2014 shared at a dissemination conference with other mathematics teacher educators from a variety of universities across the United States. Chapter contributions represent diverse program and geographical contexts and teach prospective and practicing teachers from a variety of socioeconomic and ethnic backgrounds, in particular providing accounts of supports, challenges, and tensions in implementing equity-based mathematics teacher education. The chapters supply rich evidence and illustrative examples of how other mathematics teacher educators and professional developers might make the modules work for their
unique practices, courses, workshops, and prospective teachers/teachers. It promises to be an important resource for offering guidance and examples to those working with prospective teachers of mathematics who want to create positive, culturally responsive, and equity-based mathematics experiences for our nation’s youth.

This enhanced ebook also contains a selection of additional interactive features specifically designed to support you in your study, including: Multiple choice questions with dedicated feedback at the end of key sections enabling you to test your understanding of what you have just read. End of Chapter Quizzes which test your knowledge of the chap.

THE book for elementary education mathematics content courses! Designed to help prospective teachers of elementary school mathematics learn content beyond the rote level, this text stimulates readers to think beyond just getting the problem right and fosters their development into thoughtful, reflective, self-motivated, life-long learners. It stresses the what and why of elementary school mathematics content. Hints are provided about how to teach the content but this is mostly left to courses and texts that are dedicated to that purpose. The text is organized around the National Council for Teachers of Mathematics’ Principles and Standards for School Mathematics. The Standards dictate the basic sections of the text. Within each section, appropriate specific topics are developed, intertwined with technology, problem solving, assessment, equity issues, planning, teaching skills, use of manipulatives, sequencing, and much more. In addition, major focal points of the Standards are emphasized throughout: effective teachers of mathematics should be able to motivate all students to learn, should understand the developmental levels of how children learn, should concentrate on what children need to become active participants in the learning environment, and should be engaged in ongoing investigations of new mathematical concepts and teaching strategies. Mathematics Content for Elementary Teachers is based on several fundamental premises: *The focus of mathematics education should be on the process, not the answer. *Elementary teachers should know the mathematics content they are teaching, know more than the content they are teaching, and teach from the overflow of knowledge. *It is important for teachers to be flexible in allowing students to use different procedures--teaching from the "overflow of knowledge" implies knowing how to do a given operation more than one way and being willing to examine many different ways. *Teachers need to learn to carefully cover the topics to be taught, to reflect upon them, and to be able to organize them. To help prospective elementary teachers concentrate on the mathematics content they will be expected to teach and begin to build the foundation for the methods they will use, this text includes only elementary mathematics content and does not address middle school concepts. Pedagogical features: *The text is organized according to NCTM Standards. *An informal writing style speaks directly to readers and is geared to pre-service teachers. *Focus is given to multiple methods of problem solving at four developmental levels. *Questions, exercises, and activities are interspersed throughout each section rather than gathered at the end of each chapter. *Complete solutions for exercises are provided.

This activities manul includes activities designed to be done in class or outside of class. These activities promote critical thinking and discussion and give students a depth of understanding and perspective on the concepts presented in the text.

Your guide to grow and learn as a math teacher! Let’s face it, teaching elementary math can be hard. So much about how we teach math today may look and feel different from how we learned it. Today, we recognize placing the student at the center of their learning increases engagement, motivation, and academic achievement soars. Teaching math in a student-centered way changes the role of the teacher from one who traditionally "delivers knowledge" to one who fosters thinking. Most importantly, we must ensure our practice gives each and every student the opportunity to learn, grow, and achieve at high levels, while providing opportunities to develop their agency and authority in the classroom which results in a positive math identity. Whether you are a
brand new teacher or a veteran, if you find teaching math to be quite the challenge, this is the guide you want by your side. Designed for just-in-time learning and support, this practical resource gives you brief, actionable answers to your most pressing questions about teaching elementary math. Written by four experienced math educators representing diverse experiences, these authors offer the practical advice they wish they received years ago, from lessons they've learned over decades of practice, research, coaching, and through collaborating with teams, teachers and colleagues—especially new teachers—every day. Questions and answers are organized into five areas of effort that will help you most thrive in your elementary math classroom: 1. How do I build a positive math community? 2. How do I structure, organize, and manage my math class? 3. How do I engage my students in math? 4. How do I help my students talk about math? 5. How do I know what my students know and move them forward? Woven throughout, you'll find helpful sidebar notes on fostering identity and agency; access and equity; teaching in different settings; and invaluable resources for deeper learning. The final question—Where do I go from here?—offers guidance for growing your practice over time. Strive to become the best math educator you can be; your students are counting on it! What will be your first step on the journey?

This book highlights how students learn math and the pedagogy behind it. Using vignettes based on real classroom discussions, the authors illustrate effective teaching practices to support math learning. Success from the Start: Your First Years Teaching Elementary Mathematics acts as a supportive and reassuring companion that you can return to throughout your journey as an elementary mathematics teacher. As a beginning elementary mathematics teacher you might already be asking yourself these questions: How can I differentiate my teaching to meet the diverse needs of my students? What assessments best advance student learning? How can students understand math if I do not show them different strategies and tell them about the underlying mathematical structures and properties? What advice do I give parents about how to support their children's math learning?

For courses in Math for Future Elementary Teachers. Empowering Tomorrow's Math Teachers Mathematics for Future Elementary Teachers, 5 th Edition connects the foundations of teaching elementary math and the "why" behind procedures, formulas and reasoning so students gain a deeper understanding to bring into their own classrooms. Through her text, Beckmann teaches mathematical principles while addressing the realities of being a teacher. With in-class collaboration and activities, she challenges students to be actively engaged. An inquiry-based approach to this course allows fu.