

Mathematical Abilities And Mathematical Skills

This text seeks to help teachers deliver the most difficult mathematics to the most challenging pupils. The book promotes discussion through interactive whole class teaching and aims to enhance the experience of maths for all pupils. Strategies are given for developing suitable activities, which cover all aspects of mathematics, and these are presented in an accessible way that provides the understanding necessary to teach them effectively.

A broad range of current experimental research on numerical cognition and the acquisition of mathematical skills is covered in this volume. The individual chapters provide in-depth analysis of specific issues, methodologies, phenomena, and theory. The book is divided into two parts. In the first part the focus is on the acquisition and development of numerical skills. Part 2 of the book contains research on the information-processing basis of numerical skills, focusing on the mechanisms of perception, attention, and memory that support number skills. The range of theoretical and methodological orientations represented in the volume captures both the diversity and coherence of contemporary research into mathematical skills. The research of educational psychologists, cognitive psychologists, and cognitive neuropsychologists mutually informs and reinforces theoretical developments within each area. The multidisciplinary interest in mathematics skills reflects the pervasiveness and importance of mathematics in education, technology, and science, and also indicates that questions about mathematical competence address important issues in diverse areas of psychology and cognitive science.

Reinforce key mathematical concepts in second grade with these fun and engaging skill-based games! Created to align to College and Career Readiness other state standards, this resource is perfect for reinforcing students' mathematical skills. Perfect for centers, workstations, or family math night, these engaging games that can be played in pairs or small groups, and results can be used for formative assessment.

The Mathematical Brain Across the Lifespan is the latest volume in the Progress in Brain Research series that focuses on new trends and developments. This established international series examines major areas of basic and clinical research within the neurosciences, as well as popular and emerging subfields. Provides a comprehensive review of the most recent progress in the mathematical brain across the lifespan Explores new trends and developments in the field Enhances the literature of neuroscience by further expanding the established, ongoing international series Progress in Brain Research

Puzzling Adventures: Tales of Strategy, Logic, and Mathematical Skill Research On and Activities For Mathematically Gifted Students

The Nature and Origin of Mathematical Skills

SAT and College Level Mathematical Ability

Neural Substrates and Genetic Influences

Math Games: Skill-Based Practice for Second Grade

How does the brain represent number and make mathematical calculations? What underlies the development of numerical and mathematical abilities? What factors affect the learning of numerical concepts and skills? What are the biological bases of number knowledge? Do humans and other animals share similar numerical representations and processes? What underlies numerical and mathematical disabilities and disorders, and what is the prognosis for rehabilitation? These questions are the domain of mathematical cognition, the field of research concerned with the cognitive and neurological processes that underlie numerical and mathematical abilities. The Handbook of Mathematical Cognition is a collection of 27 essays by leading researchers that provides a comprehensive review of this important research field.

The General Aptitude and Abilities Series provides functional, intensive test practice and drill in the basic skills and areas common to many civil service, general aptitude or achievement examinations necessary for entrance into schools or occupations.

Most children develop an understanding of addition and subtraction through everyday interactions. The informal activities give children a head start when they start learning math in school. Children are using early math skills throughout their daily routines and activities. This is good news as these skills are important for being ready for school. But early math doesn't mean taking out the calculator during playtime. Even before they start school, most children develop an understanding of addition and subtraction through everyday interactions.

Infants begin to learn Math before they can sit up. They notice differences in quantity, they compare the shape and size of objects, and they use early math concepts when they play and in other aspects of their daily lives. Math helps children to develop the ability to think critically and solve problems. Both are integral to success in school and in life, but not all children learn the math skills they need to succeed.

Teaching and learning mathematics is a political act in which children, teachers, parents, and policy makers are made visible as subjects. As they learn about mathematics, children are also learning about themselves – who they are, who they might become. We can choose to listen or not to what children have to say about learning mathematics. Such choices constitute us in relations of power. Mathematical know-how is widely regarded as essential not only to the life chances of individuals, but also to the health of communities and the economic well-being of nations. With the globalisation of education in an increasingly

market-oriented world, mathematics has received intensified attention in the first decade of the twenty-first century with a shifting emphasis on utilitarian aspects of mathematics. This is reflected in the reconceptualisation of mathematical competence as mathematical literacy, loosely conceived as those ways of thinking, reasoning and working "mathematically" that allow us to engage effectively in everyday situations, in many occupations, and the cut and thrust of world economies as active, empowered and participatory citizens. It is no surprise then that mathematics has become one of the most politically charged subjects in primary school curricula worldwide. We are experiencing an unprecedented proliferation of regional and national strategies to establish benchmarks, raise standards, enhance achievement, close gaps, and leave no child behind in mathematics education. Industries have sprung up around the design, administration and monitoring of standardised assessment to measure and compare children's mathematical achievement against identified benchmarks and each other.

General Mathematical Ability

Extending Mathematical Ability Through Whole Class Teaching

A Study of the Rogers' Test for Mathematical Ability

The Mathematical Brain Across the Lifespan

The Connection Between Mathematical and Reading Abilities and Disabilities

Children Talk About Their Mathematics Lives

The Encyclopedia of Mathematics Education is a comprehensive reference text, covering every topic in the field with entries ranging from short descriptions to much longer pieces where the topic warrants more elaboration. The entries provide access to theories and to research in the area and refer to the leading publications for further reading. The Encyclopedia is aimed at graduate students, researchers, curriculum developers, policy makers, and others with interests in the field of mathematics education. It is planned to be 700 pages in length in its hard copy form but the text will subsequently be up-dated and developed on-line in a way that retains the integrity of the ideas, the responsibility for which will be in the hands of the Editor-in-Chief and the Editorial Board. This second edition will include additional entries on: new ideas in the politics of mathematics education, working with minority students, mathematics and art, other cross-disciplinary studies, studies in emotions and mathematics, new frameworks for analysis of mathematics classrooms, and using simulations in mathematics teacher education. Existing entries will be revised and new entries written. Members of the international mathematics education research community will be invited to propose new entries. Editorial Board: Bharath Sriraman Melony Graven Yoshinori Shimizu Ruhama Even Michele Artigue Eva Jablonka Wish to Become an Author? Springer's Encyclopedia of Mathematics Education's first edition was published in 2014. The Encyclopedia is a "living" project and will continue to accept articles online as part of an eventual second edition. Articles will be peer-reviewed in a timely manner and, if found acceptable, will be immediately published online. Suggested articles are, of course, welcome. Feel encouraged to think about additional topics that we overlooked the first time around, and to suggest colleagues (including yourself!) who will want to write them. Interested new authors should contact the editor in chief, Stephen Lerman, at lermans@lsbu.ac.uk, for more specific

instructions.

This open access Topical Survey offers a brief overview of the current state of research on and activities for mathematically gifted students around the world. This is of interest to a broad readership, including educational researchers, research mathematicians, mathematics teachers, teacher educators, curriculum designers, doctoral students, and other stakeholders. It first discusses research concerning the nature of mathematical giftedness, including theoretical frameworks and methodologies that are helpful in identifying and/or creating mathematically gifted students, which is described in this section. It also focuses on research on and the development of mathematical talent and innovation in students, including connections between cognitive, social and affective aspects of mathematically gifted students. Exemplary teaching and learning practices, curricula and a variety of programs that contribute to the development of mathematical talent, gifts, and passion are described as well as the pedagogy and mathematics content suitable for educating pre-service and in-service teachers of mathematically gifted students. The final section provides a brief summary of the paper along with suggestions for the research, activities, and resources that should be available to support mathematically gifted students and their teachers, parents, and other stakeholders.

There are two kinds of math: the hard kind and the easy kind. The easy kind, practiced by ants, shrimp, Welsh corgis -- and us -- is innate. What innate calculating skills do we humans have? Leaving aside built-in mathematics, such as the visual system, ordinary people do just fine when faced with mathematical tasks in the course of the day. Yet when they are confronted with the same tasks presented as "math," their accuracy often drops. But if we have innate mathematical ability, why do we have to teach math and why do most of us find it so hard to learn? Are there tricks or strategies that the ordinary person can do to improve mathematical ability? Can we improve our math skills by learning from dogs, cats, and other creatures that "do math"? The answer to each of these questions is a qualified yes. All these examples of animal math suggest that if we want to do better in the formal kind of math, we should see how it arises from natural mathematics. From NPR's "Math Guy" -- The Math Instinct will provide even the most number-phobic among us with confidence in our own mathematical abilities. Just the math skills you need to excel in the study or practice of engineering Good math skills are indispensable for all engineers regardless of their specialty, yet only a relatively small portion of the math that engineering students study in college mathematics courses is used on a frequent basis in the study or practice of engineering. That's why Essential Math Skills for Engineers focuses on only these few critically essential math skills that students need in order to advance in their engineering studies and excel in engineering practice. Essential Math Skills for Engineers features concise, easy-to-follow explanations that quickly bring readers up to speed on all the essential core math skills used in the daily study and practice of engineering. These fundamental and essential skills are logically grouped into categories that make them easy to learn while also promoting their long-term retention. Among the key areas covered are: Algebra, geometry, trigonometry, complex arithmetic, and differential and integral calculus Simultaneous, linear, algebraic equations Linear, constant-coefficient, ordinary differential equations Linear, constant-coefficient, difference equations Linear, constant-coefficient, partial differential equations Fourier series and Fourier transform Laplace transform Mathematics of vectors With the thorough understanding of essential math skills gained from this text, readers will have mastered a key component of the knowledge needed to become successful students of engineering. In addition, this text is highly recommended for practicing engineers who want to refresh their math skills in order to tackle problems in engineering with confidence.

Extension Mathematics

A Determination of when Reading Skills Begin to Have a Negative Impact on Mathematical Ability at the Elementary Level

Why You're a Mathematical Genius (Along with Lobsters, Birds, Cats, and Dogs)

The Development of Mathematical Skills

Proceedings of the 5th International Conference on Science, Education and Technology, ISET 2019, 29th June 2019, Semarang, Central Java, Indonesia

Educating Our Preschoolers

A collection of thirty-five Scientific American mathematical puzzles is enhanced to provide maximum recreational benefits and challenges participants to strategize fund investments, escape a Minotaur, play power politics, verify DNA, and more. Original. 15,000 first printing.

Clearly babies come into the world remarkably receptive to its wonders. Their alertness to sights, sounds, and even abstract concepts makes them inquisitive explorers--and learners--every waking minute. Well before formal schooling begins, children's early experiences lay the foundations for their later social behavior, emotional regulation, and literacy. Yet, for a variety of reasons, far too little attention is given to the quality of these crucial years. Outmoded theories, outdated facts, and undersized budgets all play a part in the uneven quality of early childhood programs throughout our country. What will it take to provide better early education and care for our children between the ages of two and five? Eager to Learn explores this crucial question, synthesizing the newest research findings on how young children learn and the impact of early learning. Key discoveries in how young children learn are reviewed in language accessible to parents as well as educators: findings about the interplay of biology and environment, variations in learning among individuals and children from different social and economic groups, and the importance of health, safety, nutrition and interpersonal warmth to early learning. Perhaps most significant, the book documents how very early in life learning really begins. Valuable conclusions and recommendations are presented in the areas of the teacher-child relationship, the organization and content of curriculum, meeting the needs of those children most at risk of school failure, teacher preparation, assessment of teaching and learning, and more. The book discusses: Evidence for competing theories, models, and approaches in the field and a hard look at some day-to-day practices and activities generally used in preschool. The role of the teacher, the importance of peer interactions, and other relationships in the child's life. Learning needs of minority children, children with disabilities, and other special groups. Approaches to assessing young children's learning for the purposes of policy decisions, diagnosis of educational difficulties, and instructional planning. Preparation and continuing development of teachers. Eager to Learn presents a comprehensive, coherent picture of early childhood learning, along with a clear path toward improving this important stage of life for all children. This book is aimed at gifted and talented students in year 7, although it can also be used in the primary curriculum for highly able year 6 students. It consists of tightly focused sets of problems, with each set devoted to core ideas from the Framework but approached in a way that cultivates more profound mathematical thinking. The book is structured into a number of

sections, which comes in three varieties: tasters, core, and extensions, thus recognising differentiation within the gifted spectrum. The materials can be used within ordinary lessons for top sets.

Early Childhood Mathematics Skill Development in the Home Environment Springer

Skill-Based Practice for Fifth Grade

The Psychology of Mathematical Abilities in Schoolchildren

Mathematics Education in the Early Years

Effects of Mathematical Ability, Pretraining, and Interest on Self-direction in Programed Instruction

Essential Math Skills for Engineers

Encyclopedia of Mathematics Education

Development of Mathematical Cognition: Neural Substrates and Genetic Influences reviews advances in extant imaging modalities and the application of brain stimulation techniques for improving mathematical learning. It goes on to explore the role genetics and environmental influences have in the development of math abilities and disabilities. Focusing on the neural substrates and genetic factors associated with both the typical and atypical development of mathematical thinking and learning, this second volume in the *Mathematical Cognition and Learning* series integrates the latest in innovative measures and methodological advances from the top researchers in the field. Provides details about new progress made in the study of neural correlates of numerical and arithmetic cognition
Addresses recent work in quantitative and molecular genetics Works to improve instruction in numerical, arithmetical, and algebraic thinking and learning Informs policy to help increase the level of mathematical proficiency among the general public

This volume presents current research on the connections between the home and family environment on children's mathematics development. Focusing on infancy through first grade, it details the role of parents and other caregivers in promoting numeracy and the ways their active participation can prepare young children for learning about formal mathematics. Research data answer key questions regarding the development of numeracy alongside cognitive and linguistic skills, early acquisition of specific math skills, and numeracy of children with atypical language skills. The book also provides practical recommendations for parents and other caregivers as well as implications for future research studies and curriculum design. Included in the coverage: Ways to optimize home numeracy environments. Individual differences in numerical abilities. Cross-cultural comparisons and ways to scaffold young children's mathematical skills. Mathematics and language in the home environment. Center-based and family-based child care. Games and

home numeracy practice. Early Childhood Mathematics Skill Development in the Home Environment is an essential resource for researchers, graduate students, and professionals in infancy and early childhood development, child and school psychology, early childhood education, social work, mathematics education, and educational psychology.

The Springer Handbook of Auditory Research presents a series of comprehensive and synthetic reviews of the fundamental topics in modern auditory research. The volumes are aimed at all individuals with interests in hearing research including advanced graduate students, post-doctoral researchers, and clinical investigators. The volumes are intended to introduce new investigators to important aspects of hearing science and to help established investigators to better understand the fundamental theories and data in fields of hearing that they may not normally follow closely. Each volume presents a particular topic comprehensively, and each serves as a synthetic overview and guide to the literature. As such, the chapters present neither exhaustive data reviews nor original research that has not yet appeared in peer-reviewed journals. The volumes focus on topics that have developed a solid data and conceptual foundation rather than on those for which a literature is only beginning to develop. New research areas will be covered on a timely basis in the series as they begin to mature.

Cognitive Foundations for Improving Mathematical Learning, Volume 5, the latest release in the Mathematical Cognition and Learning series, focuses on informal learning environments and other parental influences on numerical cognitive development and formal instructional interventions for improving mathematics learning and performance. Chapters cover the use of numerical play and games for improving foundational number knowledge, school math performance, the link between early math abilities and the approximate number system, and how families can help improve the early development of math skills. In addition, the book examines learning trajectories in early mathematics, the role of mathematical language in acquiring numeracy skills, evidence-based assessments of early math skills, approaches for intensifying early mathematics interventions, the use of analogies in mathematics instruction, schema-based diagrams for teaching ratios and proportions, the role of cognitive processes in treating mathematical learning difficulties, and more. Identifies the relative influence of school and family on math learning Discusses the efficacy of numerical play for improvement in math Features learning trajectories in math Examines the role of math language in numeracy skills Includes assessments of math skills Explores the role of

cognition in treating math-based learning difficulties

The Foundations of Numerical and Mathematical Abilities

How the Mind Creates Mathematics

A Literature Review

A Pedagogical Study of the Black Man's Mathematical Ability

Eager to Learn

Music Perception

Results from national and international assessments indicate that school children in the United States are not learning mathematics well enough. Many students cannot correctly apply computational algorithms to solve problems. Their understanding and use of decimals and fractions are especially weak. Indeed, helping all children succeed in mathematics is an imperative national goal.

*However, for our youth to succeed, we need to change how we're teaching this discipline. *Helping Children Learn Mathematics* provides comprehensive and reliable information that will guide efforts to improve school mathematics from pre--kindergarten through eighth grade. The authors explain the five strands of mathematical proficiency and discuss the major changes that need to be made in mathematics instruction, instructional materials, assessments, teacher education, and the broader educational system and answers some of the frequently asked questions when it comes to mathematics instruction. The book concludes by providing recommended actions for parents and caregivers, teachers, administrators, and policy makers, stressing the importance that everyone work together to ensure a mathematically literate society.*

This book gives insights in the vivid research area of early mathematics learning. The collection of selected chapters mirrors the research topics presented at the fourth POEM conference in May 2018. Thematically, the volume reflects the importance of this evolving area of research, which has begun to attract attention in the spheres of education and public policy due to increased interest in early years learning. The research foci of the chapters comprise children's mathematical reasoning, early years mathematics teaching, and the role of parents for children's mathematical development. The 2018 conference included a wider range of researchers than previous years.

*Acquisition of Complex Arithmetic Skills and Higher-Order Mathematics Concepts focuses on typical and atypical learning of complex arithmetic skills and higher-order math concepts. As part of the series *Mathematical Cognition and Learning*, this volume covers recent advances in the understanding of children's developing competencies with whole-number arithmetic, fractions, and rational numbers. Each chapter covers these topics from multiple perspectives, including genetic disorders, cognition, instruction, and neural networks. Covers innovative measures and recent methodological advances in mathematical thinking and learning Contains contributions that improve instruction and education in these domains Informs policy aimed at increasing the level of mathematical proficiency in the general public*

Funded by the National Science Foundation and successfully field-tested in a variety of settings, the materials presented give teachers the opportunity to grow as learners for the classes they teach.

Activities and Investigations for Grade 6-12 Teachers

Development of Mathematical Abilities in Children

Math Games: Skill-Based Practice for Fifth Grade

Development of Mathematical Cognition

ISET 2019

Effects of Number Sense Activities on Elementary Students' Mathematical Ability and Confidence Levels

First Published in 1996. Routledge is an imprint of Taylor & Francis, an informa company. The processing of numerical information is a dominant feature of everyday life. Whether it is in the context of financial transactions, such as shopping for groceries or in gauging how many people are in a room, we are constantly using numerical information to guide our behavior and make decisions. While there has been much more attention placed on literacy and its importance for life success, there is clear evidence to suggest that basic numerical and mathematical skills play a critical role in determining an individual's life success. Furthermore, there is abundant evidence that low numeracy skills are associated with substantial costs to society at large (Butterworth, Varma, and Laurillard; Bynner and Parsons, 1997; Duncan et al., 2007). In view of this, a better understanding of how the ability to process numerical information develops could lead to improvements in how these skills are taught and used by individuals to improve their lives across the globe. As an extension of this, improving numerical skills among individuals will have benefits for society at large as it will lead to a stronger working force and thus measurable economic improvements. The focus of the review will be on the foundations of number processing abilities upon which higher-level abilities, such as mental arithmetic are built. In this way, the literature review does not provide a comprehensive overview of the development of numerical and mathematical skills, but rather explore the foundational systems underlying numerical and mathematical abilities. By doing so the review aims to identify key variables that characterize foundational competencies of numerical abilities that can be used in the context of educational assessments and become targets for educational interventions. It is a central contention of the present review that in order to improve the early acquisition of numerical competencies, a focus on foundational systems is necessary. If the foundations are well set then the system can develop optimally.

Our understanding of how the human brain performs mathematical calculations is far from complete. But in recent years there have been many exciting scientific discoveries, some aided by new imaging techniques--which allow us for the first time to watch the living mind at work--and others by ingenious experiments conducted by researchers all over the world. There are still perplexing mysteries--how, for instance, do idiot savants perform almost miraculous mathematical feats?--but the picture is growing steadily clearer. In *The Number Sense*, Stanislas Dehaene offers general readers a first look at these recent stunning discoveries, in an enlightening exploration of the mathematical mind. Dehaene, a mathematician turned cognitive neuropsychologist, begins with the eye-opening discovery that animals--including rats, pigeons, raccoons, and chimpanzees--can perform simple mathematical calculations, and he describes ingenious experiments that show that human infants also have a rudimentary number sense (American scientist Karen Wynn, for instance, using just a few Mickey Mouse toys and a small puppet theater, proved that five-month-old infants already have the ability to add and subtract). Further, Dehaene suggests that this

rudimentary number sense is as basic to the way the brain understands the world as our perception of color or of objects in space, and, like these other abilities, our number sense is wired into the brain. But how then did the brain leap from this basic number ability to trigonometry, calculus, and beyond? Dehaene shows that it was the invention of symbolic systems of numerals that started us on the climb to higher mathematics, and in a marvelous chapter he traces the history of numbers, from early times when people indicated a number by pointing to a part of their body (even today, in many societies in New Guinea, the word for six is "wrist"), to early abstract numbers such as Roman numerals (chosen for the ease with which they could be carved into wooden sticks), to modern numbers. On our way, we also discover many fascinating facts: for example, because Chinese names for numbers are so short, Chinese people can remember up to nine or ten digits at a time--English-speaking people can only remember seven. Dehaene also explores the unique abilities of idiot savants and mathematical geniuses, asking what might explain their special mathematical talent. And we meet people whose minute brain lesions render their mathematical ability useless--one man, in fact, who is certain that two and two is three. Using modern imaging techniques (PET scans and MRI), Dehaene reveals exactly where in the brain numerical calculation takes place. But perhaps most important, *The Number Sense* reaches many provocative conclusions that will intrigue anyone interested in mathematics or the mind. Dehaene argues, for instance, that many of the difficulties that children face when learning math, and which may turn into a full-blown adult "innumeracy," stem from the architecture of our primate brain, which has not evolved for the purpose of doing mathematics. He also shows why the human brain does not work like a computer, and that the physical world is not based on mathematics--rather, mathematics evolved to explain the physical world the way that the eye evolved to provide sight. A truly fascinating look at the crossroads where numbers and neurons intersect, *The Number Sense* offers an intriguing tour of how the structure of the brain shapes our mathematical abilities, and how our mathematics opens up a window on the human mind.

Current research into the psychology of children's mathematics is extremely diverse. The present volume reflects this diversity; it is unique in its breadth, bringing together accounts of cutting-edge research from widely differing, sometimes opposing viewpoints. The reader with a grounding in developmental psychology but no knowledge of mathematical development will enjoy a wide ranging and challenging summary of current trends. Those already familiar with some of the work may take the opportunity to broaden their knowledge and to evaluate new methodologies and the insights they offer. The book is an invitation to explore a complex set of phenomena for which no unitary explanation can be offered. It aims to show that apparently disparate research perspectives may be complementary to each other; and to suggest that progress towards a comprehensive account of mathematical skills may require a broad-based understanding of research from more than one viewpoint.

Results from the POEM4 Conference, 2018

Reading and Mathematical Skill Development

The Number Sense : How the Mind Creates Mathematics

Experimental Tests of Mathematical Ability and Their Prognostic Value

Destrezas, habilidades y actitudes matematicas 5 / Skills, math abilities and attitudes

Cognitive Foundations for Improving Mathematical Learning

The General Mathematical Ability Passbook(R) prepares you by sharpening the skills and abilities necessary to succeed on math questions found on the GED and high-school equivalency exams. It includes supplementary text on a variety of topics, and provides hundreds of multiple-choice questions (with solutions) that include, but are not limited to: basic arithmetic; fractions; percentages; geometry; graphs and charts; and more.

Bring learning mathematical skills into a whole new light for students in 5th grade! This book provides fun and unique skill-based games that encourage whole-group, whole-class, small-group, and partner interaction and collaboration. These activities will reinforce students' knowledge of mathematical skills while keeping learners motivated and engaged. Promote a fun learning environment for students to achieve mathematical success!

Abstract :This study compared the mathematics performance of number sense related areas: understanding whole numbers, understanding operations, and computing of thirteen fourth graders before and after five weeks of small group mathematics intervention. Student mathematical confidence was also compared before and after five weeks of intervention. Interventions consisted of daily, 15 minute, small group mathematics interventions that focused on engaging number sense activities. Students' mathematical ability increased 16.17%. Students' overall mathematical confidence levels increased from 3.2 to 3.4, which is an increase of 0.2, on a scale of 5. It was discovered that confidence levels regarding students' ability to do mathematics increased, while students' levels regarding liking mathematics varied. I did not compare the improvements to any other method, so while students' mathematical abilities and mathematical confidence improved, I don't know if they would have improved more or less with another type of intervention or just with small group instruction alone.

The proceedings of International Conference on Science, Education, and Technology 2019 are the compilation of articles in the internationally refereed conference dedicated to promote acceleration of scientific and technological innovation and the utilization of technology in assisting pedagogical process.

Skill-Based Practice for Second Grade

Ways to Think About Mathematics

The Handbook of Mathematical Cognition

Early Childhood Mathematics Skill Development in the Home Environment

Helping Children Learn Mathematics

Acquisition of Complex Arithmetic Skills and Higher-Order Mathematics Concepts