

In addition to the built-in professional support in *Contexts for Learning Mathematics*, Cathy and her colleagues from Mathematics in the City and the Freudenthal Institute also offer an array of professional development options including books for teachers, video-based resource packages for teacher education, on-site workshops, and online support.

Young Mathematicians at Work

In this **three-book series** Catherine Twomey Fosnot and Maarten Dolk present the research, theories, and practices that guide their innovative approach to teaching mathematics. Written for teachers, this series:

- examines ways to engage and support children as they construct important strategies and big ideas in mathematics
- defines and gives examples of modeling, emphasizing the importance of context
- suggests strategies for turning classrooms into math workshops that encourage and reflect mathematizing
- discusses calculation using number sense and the role algorithms should play in computation instruction
- describes how to strengthen performance and portfolio assessment.

Young Mathematicians at Work Resource Packages

The *Young Mathematicians at Work* Resource Packages help teachers unpack the research and theories with live-from-the-classroom video clips. Each Resource Package includes three components:

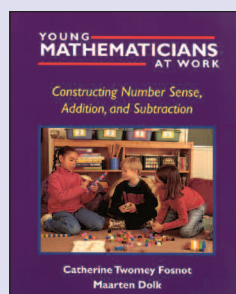
- an interactive **CD-ROM** (developed by Maarten Dolk and Catherine Twomey Fosnot) allows workshop participants to explore video of instruction and assessment, sample student work over time to analyze development, take notes on what they see, and capture and share specific footage
- a **Professional Development Overview Manual** provides general advice on how to use the CD-ROM for staff development
- a **Facilitator's Guide** (developed by Antonia Cameron, Sherrin B. Hersch, Lynn Tarlow, Suzanne Werner, Bill Jacob, Carol Teig, and Catherine Twomey Fosnot) includes suggestions for using the video clips, sample dialogue from workshops, and tips for facilitating discussions.

For more information visit heinemann.com

Inservice, Workshops, and Online Support

- Mathematics in the City** offers a variety of institutes including two-week summer institutes and two-day DELTA institutes once a month. Visit mitccny.org for more information
- Heinemann Professional Development** offers related workshops. Visit pd.heinemann.com for more information.

For a listing of related professional development options see contextsforlearning.com



Young Mathematicians at Work: Constructing Number Sense, Addition, and Subtraction

Cathy and Maarten focus on children between the ages of four and eight as they construct a deep understanding of number and the operations of addition and subtraction. They describe teachers who use rich problematic situations to promote inquiry, problem solving, and construction, and children who pursue their own ideas.

PreK-Grade 3 / 978-0-325-00354-2 / 0-325-00353-X / 194pp / \$23.50



Addition and Subtraction Minilessons

Clips of effective minilessons in real classrooms show you how these short, focused sessions can build big mathematical thinking in young learners.

978-0-325-00675-8 / 0-325-00675-X / \$49.50

Taking Inventory: The Role of Context

Students inventory classroom materials, developing number sense, counting strategies, and the big ideas underpinning place value.

978-0-325-00672-7 / 0-325-00672-5 / \$49.50

Exploring Ages: The Role of Context

Students explore addition and subtraction through the lens of age differences, building new understandings and strategies and learning concepts like removal, missing addends, and constant difference.

978-0-325-00676-5 / 0-325-00676-8 / \$49.50

Working with the Number Line: Mathematical Models

Students construct number lines as tools for measuring, computing, and mathematical teaching.

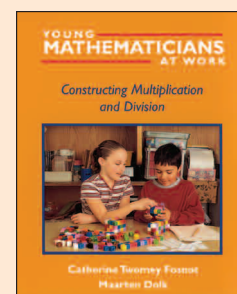
978-0-325-00673-4 / 0-325-00673-3 / \$49.50

Fostering Children's Mathematical Development: The Landscape of Learning

Short clips capture children's ideas, strategies, and mathematical models at critical moments in their development.

978-0-325-00674-1 / 0-325-00674-1 / \$49.50

Additional Professional Support



Young Mathematicians at Work: Constructing Multiplication and Division

In this second of three volumes Cathy and Maarten focus on how to develop an understanding of multiplication and division in grades 3-5. They describe and illustrate what it means to do and learn mathematics and provide strategies to help teachers turn their classrooms into vibrant math workshops that foster a community of activity, discourse, and reflection

Grades 3-5 / 978-0-325-00354-2 / 0-325-00354-8 / 170pp / \$23.50



Multiplication and Division Minilessons

Clips of teachers conducting effective minilessons in real classrooms show you how these short, focused sessions can build big mathematical thinking. (2 CDs)

978-0-325-00776-2 / 0-325-00776-4 / \$65.00

Turkey Investigations: A Context for Multiplication

Exploring contexts of weights and measures, children invent strategies such as repeated addition on the number line, doubling and halving, and using ratio tables.

978-0-325-00774-8 / 0-325-00774-8 / \$49.50

Exploring Soda Machines: A Context for Division

Fourth graders connect partitive and quotative division and the inverse relationship between multiplication and division, highlighting the power of arrays and other models for division.

978-0-325-00772-4 / 0-325-00772-1 / \$49.50

Working with the Array: Mathematical Models

Fourth graders construct the big ideas related to surface area and volume, making connections between multiplication's commutative and associative properties and uncovering landmark division strategies like halving and factoring.

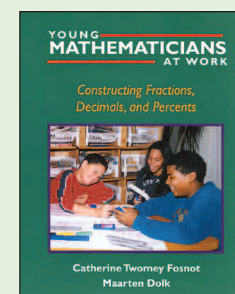
978-0-325-00778-6 / 0-325-00778-0 / \$49.50

Fostering Children's Mathematical Development: The Landscape of Learning

Short clips capture children's ideas, strategies, and mathematical models at critical moments in their development.

978-0-325-00780-9 / 0-325-00780-2 / \$49.50

For more information visit contextsforlearning.com



Young Mathematicians at Work: Constructing Fractions, Decimals, and Percents

In this third volume, Cathy and Maarten focus on how children in grades 5-8 construct their knowledge of fractions, decimals, and percents. They contrast word problems with true problematic situations that support investigation and explore how children develop strategies for fractions, decimals, and their equivalents.

Grades 5-8 / 978-0-325-00355-9 / 0-325-00355-6 / 192pp / \$23.50



Minilessons for Operations with Fractions, Decimals, and Percents

Clips of teachers conducting effective minilessons in real classrooms show you how these short, focused sessions can build big mathematical thinking in young learners. (2 CDs)

978-0-325-00902-5 / 0-325-00902-3 / \$65.00

Exploring Playgrounds: A Context for Multiplication of Fractions

Seventh graders multiply fractions, make connections between fractional parts and a changing whole and generalize strategies from one problem to all fractions.

978-0-325-00904-9 / 0-325-00904-X / \$49.50

Sharing Submarine Sandwiches: A Context for Fractions

Fifth graders make connections among fair sharing, partitive division, and the relationship between numerators and denominators.

978-0-325-00898-1 / 0-325-00898-1 / \$49.50

Working with the Ratio Table: Mathematical Models

Sixth graders make connections between ratios and equivalence, uncover strategies like common denominators, and use the power of ratio tables and other models for division.

978-0-325-00896-7 / 0-325-00896-5 / \$49.50

Fostering Children's Mathematical Development: The Landscape of Learning

Short clips capture children's ideas, strategies, and mathematical models at critical moments in their development.

978-0-325-00900-1 / 0-325-00900-7 / \$49.50