

TEACHING **MATHEMATICS VOCABULARY** IN CONTEXT

Windows, Doors, and Secret Passageways



MIKI MURRAY

Foreword by Mari Muri

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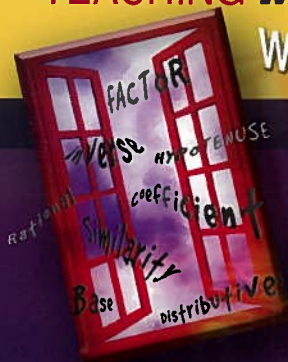
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Teaching Mathematics Vocabulary in Context is a book about one teacher's quest to connect students to mathematics in a dynamic but personal way. Giving students ownership of a language in which to express powerful ideas increases their confidence in themselves as doers of mathematics. Murray's book is chock full of teacher wisdom and examples of students' work and ideas. Any teacher at any experience level will find this book a real gem of both inspiration and practical classroom suggestions.

—Glenda Lappan

University Distinguished Professor, Department of Mathematics
Michigan State University

Miki Murray is one of my family's heroes: she is the gifted teacher who opened up the world—and words—of mathematics to my adolescent daughter. Her methods are both inspired and rigorously grounded. This book captures Miki's methodology and more—it illustrates how the power of language helped her fortunate middle school students become mathematical thinkers, then mathematicians.

—Nancie Atwell

Author of *In the Middle* and *Lessons That Change Writers*
Director of the Center for Teaching and Learning, Edgcomb, Maine

As Miki Murray proves, mathematics vocabulary has the power to enhance the conceptual learning of mathematics for middle school students. It's an essential tool to help them to express their mathematical thinking coherently and clearly to peers and teachers, to share problem-solving techniques, to gain confidence, and to participate in classroom discourse. Murray offers a range of strategies that highlight the important role language plays in the learning of math. Grounded in research and developed from more than 40 years of teaching, reflecting, and learning, Murray's proven strategies are immediately usable or adaptable by teachers.



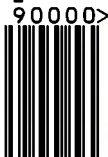
Donald Murray

MIKI (MABELLE) MURRAY taught mostly middle school mathematics for 25 years, then facilitated mathematics professional development for another 10. In 1997 she returned to the classroom at the Center for Teaching and Learning in Edgcomb, Maine, where she found the ideal environment for implementing her beliefs about how children effectively learn mathematics. Currently she consults from her home, conducts workshops, runs a successful MATHCOUNTS Club, and mentors teachers who are changing practice in order to improve student learning.



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