Description:

In our efforts to reform mathematics education, we've learned a tremendous amount about young students' strategies and the ways they construct knowledge, without fully understanding how to support such development over time. The Dutch do. So, funded by the NSF and Exxon Mobil, Mathematics in the City was begun, a collaborative inservice project that pooled the best thinking from both countries. In Young Mathematicians at Work, Catherine Fosnot and Maarten Dolk reveal what they learned after several years of intensive study in numerous urban classrooms.

In this second volume in a series of three, Fosnot and Dolk focus on how to develop an understanding of multiplication and division in grades 3-5. Their book:

* Describes and illustrates what it means to do and learn mathematics
* Provides strategies to help teachers turn their classrooms into math workshops that encourage and reflect mathematizing
* Examines several ways to engage and support children as they construct important strategies and big ideas related to multiplication
* Takes a close look at the strategies and big ideas related to division
* Defines modeling and provides examples of how learners construct models - with a discussion of the importance of context
* Discusses what it means to calculate using number sense and whether or not algorithms should still be the goal of computation instruction
* Describes how to strengthen performance and portfolio assessment
* Emphasizes teachers as learners by encouraging them to see themselves as mathematicians