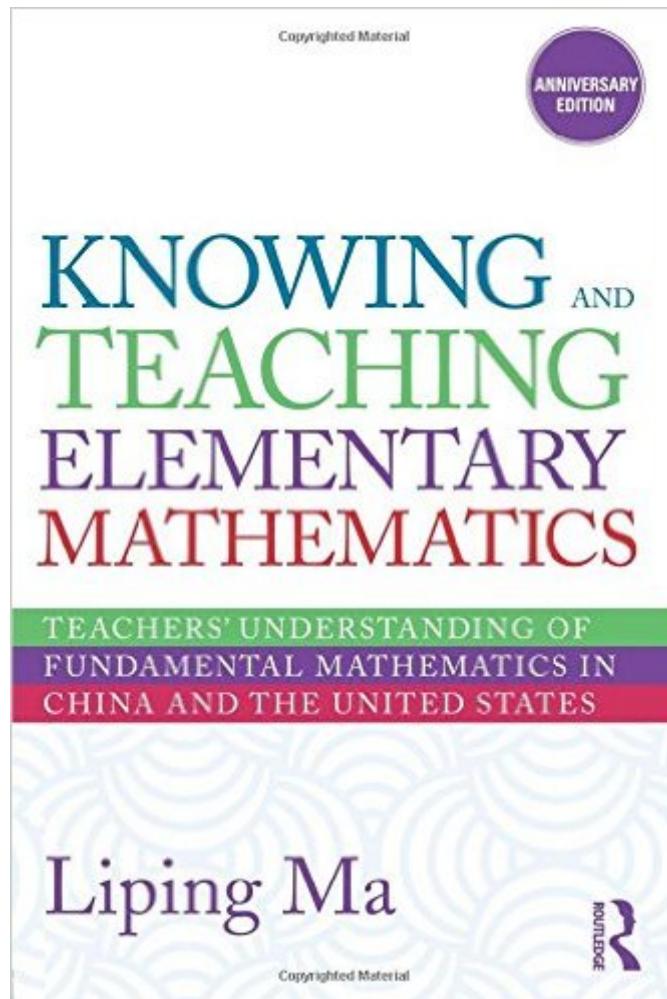


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# Knowing And Teaching Elementary Mathematics: Teachers' Understanding Of Fundamental Mathematics In China And The United States (Studies In Mathematical Thinking And Learning Series)





## Synopsis

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.

## Book Information

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## Customer Reviews

We used this book in a state-sponsored course designed to improve the way mathematics is taught in the public schools. Mathematics teaching in the US has traditionally focused on teaching and memorizing procedures rather than understanding the underlying concepts and relationships - this

book encourages teachers to question that. It may be a bit dry, but it is an excellent resource for those looking to improve their understanding of the important ideas in mathematics in order to improve the way they teach.

Superb little book in mathematics education. I've been familiar with this classic for a long time and I consider it the best mathematics education book ever written. If only our country would do the same for preparation of elementary school teachers charge was teaching elementary mathematics. Her term PUFM, Profound Understanding of Fundamental Mathematics, is standard in her native China (with several fewer years of preparation) and all too rare with ours.

The single best book on understanding the math you teach. Over my fifteen years of teaching I often revisit the book to sharpen my presentations to my struggling sixth graders

Love this book. I have learned so much about conceptual knowledge as opposed to procedural that lacks complete understanding.

This book clearly answers a lot of questions I have about the differences between Mathematics teaching in the US and Asia.

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