

1. Record Nr.	UNINA9910783382003321
Titolo	Beliefs: A Hidden Variable in Mathematics Education? [[electronic resource] /] / edited by Gilah C. Leder, Erkki Pehkonen, Günter Törner
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands, , 2002
ISBN	0-306-47958-3
Descrizione fisica	1 online resource (XIX, 364 p.)
Collana	Mathematics Education Library ; ; 31
Disciplina	370
Soggetti	Education Mathematics - Study and teaching Mathematics Education Learning & Instruction Education, general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Setting the Scene -- Beliefs: Conceptualization and Measurement -- Framing Students' Mathematics-Related Beliefs -- Rethinking Characterizations of Beliefs -- Affect, Meta-Affect, and Mathematical Belief Structures -- Mathematical Beliefs — A Search for a Common Ground: Some Theoretical Considerations on Structuring Beliefs, Some Research Questions, and Some Phenomenological Observations -- Measuring Mathematical Beliefs and Their Impact on the Learning of Mathematics: A New Approach -- Synthesis — Beliefs and Mathematics Education: Implications for Learning, Teaching, and Research -- Teachers' Beliefs -- Mathematics Teacher Change and Developments -- Mathematics Teachers' Beliefs and Experiences with Innovative Curriculum Materials -- A Four Year Follow-Up Study of Teachers' Beliefs After Participating in a Teacher Enhancement Project -- Belief Structure and Inservice High School Mathematics Teacher Growth -- Participation and Reification in Learning to Teach: The Role of Knowledge and Beliefs -- A Study of the Mathematics Teaching Efficacy Beliefs of Primary Teachers -- Situating Research on Mathematics Teachers' Beliefs and on Change -- Students' Beliefs -- Beliefs About Mathematics and Mathematics Learning in the Secondary School:

Measurement and Implications for Motivation -- "The Answer is Really 4.5": Beliefs About Word Problems -- Beliefs About the Nature of Mathematics in the Bridging of Everyday and School Mathematical Practices -- Beliefs and Norms in the Mathematics Classroom -- Intuitive Beliefs, Formal Definitions and Undefined Operations: Cases of Division by Zero -- Implications of Research on Students' Beliefs for Classroom Practice.

Sommario/riassunto

The twenty chapters in this book all focus on aspects of mathematical beliefs, from a variety of different perspectives. Current knowledge of the field is synthesized and existing boundaries are extended. The book is divided into three, partly overlapping, sections. The first concentrates on conceptualizations and measurement of beliefs, the second on research about teachers' beliefs, and the third on facets of students' beliefs about mathematics. A diversity of instruments is used for data collection, including surveys, interviews, observations, and essay writing, as well as more innovative approaches. The volume is intended for researchers in the field, as well as for mathematics educators teaching the next generation of students. The book is also useful for those working in other subject disciplines, since many of the themes explored have relevance well beyond mathematics education.
