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Descrizione fisica	1 online resource (316 pages)
Disciplina	507.1
Soggetti	Mathematics—Study and teaching Science education Technical education Child development Schools Learning Instruction Mathematics Education Science Education Engineering/Technology Education Early Childhood Education Schools and Schooling Learning & Instruction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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STEM Leaders in Remote Indigenous Contexts: Creating Pedagogical Capital -- 10 Exploring Student Views and Perspectives within a Changing Classroom Context: Developing Mathematical Inquiry Communities with Diverse Learners -- 11 Affect and Engagement in STEM Education -- 12 Engaging Students in STEM with Non-Traditional Educational Programmes: Bridging the Gaps between Experts and Learners -- 13 Threshold Concepts in Primary School Maths and Sciences: An Investigation of some Underlying Ideas of STEM -- 14 Pedagogical Partnerships in Primary and Secondary STEM Education -- 15 Transforming Pedagogy in Mathematics and Science in Qatar: A Study of Teacher and Student Perspectives -- 16 Motivating Rural Students in STEM: Practices Contributing to Student Engagement with STEM in Rural Victorian Schools.

Sommario/riassunto

This is the first comprehensive book to consider STEM education from early childhood through to senior secondary education. It approaches STEM as a form of real-world, problem-based education that draws on the knowledge and skills of the science, technology, engineering and mathematics disciplines. Rather than presenting each of the separate disciplines to an equal extent, it focuses on STEM researchers' perspectives on how their work contributes to effective STEM education in terms of building knowledge, skills and engagement. Gathering contributions by authors from various countries, the book explores effective STEM education from a range of perspectives within the international context. Moreover, it addresses critical issues in STEM education, including transition and trajectories, gender, rurality, socioeconomic status and cultural diversity. By doing so, it not only shares the current state of knowledge in this field, but also offers a source of inspiration for future research.
