

1. Record Nr.	UNINA9910299519703321
Titolo	The 21st Century Mathematics Education in China // edited by Yiming Cao, Frederick K.S. Leung
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2018
ISBN	9783662557815 3662557819
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XI, 493 p. 71 illus.)
Collana	New Frontiers of Educational Research, , 2195-349X
Disciplina	510.71051
Soggetti	Mathematics - Study and teaching Mathematics Education
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Preface -- Section I A General Introduction of Chinese Mathematics Education -- Chapter 1 Mathematics Education of Chinese Communities from the Perspective of International Studies of Mathematics Achievement -- Chapter 2 Chinese Mathematics Education System and Mathematics Education Tradition -- Chapter 3 Chinese Mathematics Curriculum Reform in the 21 Century -- Chapter 4 Education Equity in China: An Analysis of Local and Migrant students' Mathematics Learning in Shanghai -- Chapter 5 Shadow Education of Mathematics in China -- Section II Mathematical Curriculum and Textbook -- Chapter 6 Developments and Changes in the Primary School Mathematics Curriculum and Teaching Material in China -- Chapter 7 The development of mathematics curriculum and teaching materials in secondary schools in the second half of the 20th-century -- Chapter 8 The evolution of mathematics curriculum and teaching materials in secondary schools in the 21st century -- Chapter 9 Features and Characteristics of Chinese New Century Mathematics Textbooks -- Section III Mathematical Classroom Instruction -- Chapter 10 A study of Mathematics classroom teaching in China: Looking at lesson structure, teaching and learning behaviour -- Chapter 11 Task Design in Mathematics Classrooms -- Chapter 12 The Design and Implementation of the Mathematics Teaching Goal --

Chapter 13 Integration of Information Technology (IT) and the Mathematics Curriculum -- Chapter 14 Mathematics Teaching Reform Experiments in China in the 21st Century -- Section IV Mathematical Learning -- Chapter 15 A Case Study of Transformation of Students with Mathematics Learning Difficulties -- Section V The Professional Development of Mathematical Teachers -- Chapter 16 School-based professional development of Mathematics teachers in China -- Chapter 17 Pre-service Mathematics Teacher Education -- Chapter 18 Post-Service Education of Mathematical Teachers -- Chapter 19 A study of the status of teacher's professional knowledge -- Chapter 20 Chinese Teachers'Beliefs about Mathematics Teaching -- Section VI The Evaluation of Mathematics Education -- Chapter 21 The assessment of mathematics classroom instruction in primary and secondary schools -- Chapter 22 Primary and Secondary Mathematics Selective Examinations -- Chapter 23 Practice and Theoretical Thinking in Constructing a Developmental Assessment System for Mathematics Ability.

Sommario/riassunto

This book intends to provide a comprehensive introduction to the status of development of Chinese mathematics education in the 21st century. To this end, the book summarizes and presents the research and practices of Chinese mathematics education in the following aspects: (1) characteristics of Chinese school mathematics curriculum and textbooks, (2) Chinese ways and strategies of teaching mathematics and the characteristics of mathematics classroom instruction in China, (3) Chinese instructional practices in developing (both gifted and underachieving) students' mathematical capabilities, (4) how professional development of mathematics teachers is promoted in China, including mathematics teachers' pre-service and in-service education, and how Chinese mathematics teachers design and implement teaching and research activities, and (5) how mathematics education is assessed and evaluated, including how to evaluate teachers' teaching and students' achievements. Relevant research in Chinese mathematics education involving methods of surveys, interviews, text analysis, etc., are reviewed and analyzed. Results of a number of video studies of Chinese mathematics classroom teaching and learning are also integrated into this book.
