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Nota di contenuto	Chapter 1. Overview of the book -- Part I: Mathematics education across cultures -- Chapter 2. Searching Continues for the Identity of East Asian Mathematics Education: Impact of Leung (2001) -- Chapter 3. The Challenges for Cross-Cultural Comparative Study of Mathematics Classroom -- Chapter 4. Mathematics teachers' belief about the nature, teaching and learning of mathematics and their teaching practices: Does culture matter? -- Chapter 5. Pre-service mathematics teachers' professional knowledge of elementary mathematics from a higher standpoint – revisited -- Chapter 6. Examining teachers' process of learning in a cross-cultural lesson study in China and the United States -- Chapter 7. Nexus of Neo-Confucianism and Examination Culture of Mathematics in Korea through the Lens of Oryun (), the Five Relationships -- Part II: Mathematics education within Chinese culture -- Chapter 8. Linguistic path to mathematical cognition: Chinese handwriting legibility and children's performance in procedural calculation -- Chapter 9. Cultural

Dynamics, Socio-economic Status, and Mathematics Achievement in China: A Review of Recent Developments.-Chapter 10. A Quantitative Study of Chinese Pre-service Teachers' Mathematics Beliefs in the Context of Curriculum Reform -- Chapter 11. Investigating Students' Conceptions of Mathematics Learning in Mainland China: A Drawing Analysis -- Chapter 12. Evolution of Non-Cognitive Development Goals in China's 21st Century Mathematics Curriculum -- Chapter 13. Assessing academic motivation towards mathematics: Measurement invariance and latent mean differences between Chinese Dai and Han students -- Part III: Commentary and Dialogues with Professor Leung -- Chapter 14. Commentary - Cultural themes inspired by Professor Frederick K. S. Leung's research -- Chapter 15. Dialogues with Professor Leung: Behind the success.

Sommario/riassunto

This book, compiled in honor of Chair Professor Frederick K. S. Leung, contributes to revisiting, renewing and enriching the knowledge of cultural matters to mathematics education, widening the horizon in the use of cultural perspectives to explain the characteristics of classroom teaching and learning in East Asia, and to explain/re-interpret the differences in teacher knowledge and beliefs between East Asian and Western countries. Multiple research methods are used to explore how different cultures influence mathematics education. In particular, the book discusses the comparative studies of mathematics education, the influence of different cultures on mathematics teaching and learning, and the use of the Confucian Heritage Culture to explain the phenomenon of superior mathematics achievement of East Asian students. The research methods include qualitative approaches, quantitative approaches (such as structured equation modelling, exploratory factor analysis and confirmation factoranalysis), case studies and a meta-analysis of the literature review. This book is dedicated to Chair Professor Frederick K. S. Leung's (Hans Freudenthal Medallist 2013 and President of ICMI 2021-2024), one of the pioneers in investigating the cultural differences in mathematics education and establishing a framework for the relationship between cultures and mathematics educations. This book acknowledges his many contributions to the field and showcases promising research advancements that sparked directly or indirectly from his intellectual contributions to different mathematics educators globally.