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Nota di contenuto	Chapter 1. MACAS as a Cloud Point -- Part I: Mathematics in a pedagogical context and from an educational and historical perspective -- Chapter 2. Mathematics Education in different contexts -- Chapter 3. Selected Views on Mathematics Education -- Part II: Mathematics and Subjects -- Chapter 4. Mathematics in STEM Education -- Chapter 5. Mathematics and Sciences -- Chapter 6. Mathematics, Aesthetics and Arts -- Chapter 7. Mathematics and Language and Literature -- Conclusion and Outlook.
Sommario/riassunto	This book celebrates the 15th anniversary of the bi-annual symposium series Mathematics and its Connections to the Arts and Sciences

(MACAS), which was first held in 2005 following the continued collaboration of an international group of researchers from ICME Topic Study Group 21. The MACAS-conferences bring together scientists and educators who are interested in the connection between mathematics, arts and science in educational curriculum, while emphasizing on, as well as researching about, the role of mathematics. By pooling together these different approaches and viewpoints between mathematics, arts and sciences, this book reveals possible synergies and paths for collaborations. In view of the challenges of the 21st century, a modern approach to education with a focus on multi- and interdisciplinarity is more important than ever. The role of mathematics assumes a key role in this approach as it is connected to all other disciplines, such as STEM education, physics, chemistry, biology, aesthetics and language, and can serve as a bridge between them. This book discusses, amongst others, the curricular approaches to integrate mathematics and other disciplines, the importance of mathematical modelling and the interdisciplinarity ways for learning and studying of mathematics, as well as the intercultural dimensions of mathematics and mathematics in the digital era. All topics will be presented from very different perspectives and regarding very different contexts, including digitization, culture and sustainability. This unique collection will serve as a very valuable and compact source for all above mentioned scientists and educators, as well as for use in advanced teacher education courses.