

1. Record Nr.	UNINA9910410011903321
Titolo	Values in Science Education : The Shifting Sands // edited by Deborah Corrigan, Cathy Bunting, Angela Fitzgerald, Alister Jones
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	9783030421724 3030421724
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (233 pages)
Disciplina	507.1
Soggetti	Science - Study and teaching Teachers - Training of Learning, Psychology of Education - History Education - Curricula Science Education Teaching and Teacher Education Instructional Psychology History of Education Curriculum Studies
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 The Shifting Sands of Values in Science Education; Deborah Corrigan, Cathy Bunting, Alister Jones and Angela Fitzgerald -- Section 1: Values in Science -- 2 Communicating Certainty and Uncertainty in Science in Out-of-School Contexts; Leonie Rennie -- 3 Teachers' Perceptions of the Values that Underpin Science as a Way of Thinking and Acting; Kathy Smith and Deborah Corrigan -- 4 Exploring Values of Science through Classroom Practice; Rebecca Cooper and John Loughran -- Section 2: Values for Science Education -- 5 Science as "Just Opinion" -- the Significance for Science Education of Emerging Social Media; Karen Marangio and Richard Gunstone -- 6 Changing Values in Science Education and the Emergence of Science Gallery; Joseph Roche and Colette Murphy -- 7 Using Biotechnology to Develop Values Discourse

in School Science; Cathy Bunting and Alister Jones -- Section 3: Values of Science Education Practice -- 8 What do Science Teachers Value? How can Values Change During Professional Learning?; Shirley Simon and John Connolly -- 9 Exploring the Professional Learning Values Inherent in Japan's Lesson Study; Tetsuo Isozaki -- 10 Changing Context, Shifting Values? Science, the Environment and Citizenship at Minstead Study Centre 12 Years on; Justin Dillon and Alan Reid -- Section 4: Values of Science Education Systems -- 11 Intended, Achieved and Unachieved Values of Science Education; Gillian Kidman and Peter Fensham -- 12 The Place of Values in the Aims of School Science Education; Jennifer Mansfield and Michael Reiss -- 13 Exploring Values Through Lived Experiences of the World Heritage Site of Petra: A Case Study; Angela Fitzgerald and Diana Abouali.

Sommario/riassunto

In 2007, the Monash-Kings College London International Centre for the Study of Science and Mathematics Curriculum edited a book called *The Re-emergence of Values in Science Education*. This book reflects on how values have been considered since this original publication, particularly in terms of socio-cultural, economic and political factors that have impacted broadly on science, technology and society, and more specifically on informal and formal science curricula. Hence, the title of this book has been framed as *Values in Science Education: The shifting sands*. As in the first book, this collection focuses on values that are centrally associated with science and its teaching, and not the more general notion of values such as cooperation or teamwork that are also important values in current curricula. Such values have indeed become more of a focus in science education. This may be a response to the changing global context, where technological changes have been rapid and accelerating. In such complex and risky environments, it is our guiding principles that become the important mainstays of our decisions and practices. In terms of science education, what is becoming clearer is that traditional content and traditional science and scientific methods are not enough for science and hence science education to meet such challenges. While shifts in values in science education continue, tensions remain in curriculum development and implementation, as evidenced by the continued diversity of views about what and whose values matter most. .
