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Nota di contenuto	Part I. Socioscientific issues, Nature of Science and scientific thinking -- 1. The relevancy of science education to public engagement with science -- 2. Engaging in argumentation as critical evaluation of the anti-vaccination movement -- 3. Theory of planned behavior in the context of stem cell donation -- 4. Prior knowledge, epistemic beliefs and socio-scientific topic context as predictors of the diversity of arguments on socio-scientific issues -- 5. Toward a questionnaire to assess biology student teachers' knowledge of the nature of scientific

inquiry (NOSI) -- 6. Introducing primary school students to aspects of the nature of scientific knowledge -- Part II. Teaching and learning in biology -- 7. Digital narratives for biology learning -- 8. Digital first? Effects of digital and analogue learning tools on the plant knowledge acquisition of future biology teachers -- 9. Comparing inquiry-based learning and interactive lectures while teaching physiology to undergraduate students -- 10. Train the trainer in the jigsaw puzzle of biology education: effects of mentor training on teaching quality -- 11. The assessment of an educational proposal to address the relationship between genetic information and protein synthesis -- 12. Evaluating the effectiveness of a teaching intervention in a marine biology course: the case of Greek vocational students -- 13. Promoting students' understanding of gene-environment interaction in genetics education -- 14. Students' conceptions as a neglected perspective in trainee teachers' biology lesson plans -- Part III. Perceptions of biology and biology education -- 15. Students' opinions about interdisciplinary lessons -- 16. Correlation between the popularity and difficulty of secondary school biology and perceived importance of knowledge acquired for personal wellbeing -- 17. Perception of biological disciplines by upper secondary school students -- 18. Analyzing the relationships between pre-service biology teachers' modelling processes, scientific reasoning competencies and general cognitive abilities -- 19. The pitfalls of using presentation technology in the biology classroom -- Part IV. Textbook analysis -- 20. Human reproduction in Greek Secondary Education textbooks (1870s to present) -- 21. Exploring logico-semantic relations of historical gene models in similar genetic content in Greek biology school textbooks -- Part V. Outdoor and environmental education -- 22. Children's interests and orientations towards nature: views from young children in England -- 23. Picturing the urban environment: using photovoice to bring university students' views and voices into urban environmental education.

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#### Sommario/riassunto

This book is a collection of full papers based on the peer-reviewed submissions accepted for the ERIDOB 2020 conference (which was cancelled due to COVID-19). ERIDOB brings together researchers in Biology Education from around the world to share and discuss their research work and results. It is the only major international conference on biology education research, and all the papers therefore are written by international researchers from across Europe (and beyond), which present the findings from a range of contemporary biology education research projects. They are all entirely new papers describing new research in the field. The papers are peer-reviewed by experienced international researchers selected by the ERIDOB Academic Committee. The papers reflect the ERIDOB conference strands by covering topics on: Socioscientific issues, Nature of Science and scientific thinking Teaching and learning in biology Perceptions of biology and biology education Textbook analysis Outdoor and environmental education By providing a collection of new research findings from many countries, this book is a great resource for researchers and practitioners such as school, college and university biology teachers' around the world. It is useful for training biology teachers and therefore valuable to teacher training institutions.

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