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Titolo	Innovative methods for science education [[electronic resource]] : history of science, ICT and inquiry based science teaching / / Olivier Bruneau ... [et al.] (eds.)
Pubbl/distr/stampa	Berlin, : Frank & Timme, 2012
ISBN	3-86596-981-X
Descrizione fisica	1 online resource (357 p.)
Soggetti	Science - Study and teaching Inquiry-based learning
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	<p>""Contents""; ""Preface""; ""Inquiry Based Science Teaching and History of Science""; ""Developing and evaluating visual materials on historical experiments for physics teachers: Considerations, Experiences, and Perspectives""; ""Using educational ICT to include history in science teaching and in science teacher training""; ""The Role of the History of Mathematics in Teacher Training Using ICT""; ""Conceiving classroom IBST ICT EHST resources: practice analysis in mathematics""; ""Inquiry based mathematics teaching and the history of mathematics in the English curriculum""</p> <p>""ICT and History of mathematics in the case of IBST""""Remarks about ethical specificities of presenting online resources in history of biology for inquiry-based science teaching""; ""Tackling Mobile & Pervasive Learning in IBST""; ""Patrimonial Traditions Meet Educational Preoccupations: The Interpretive Shift of the Accessibility Requirement""; ""Towards a new strategy for teaching energy based on the history and philosophy of the concept of energy""; ""Historical contexts in mathematics curriculum for secondary school""</p> <p>""Some peculiarities of mathematics teaching in Lithuanian basic school: computer, project, excursions, mathematics history""""</p> <p>Introduction of a historical perspective in physics secondary school: replication and use of Galileo's experiments between theatre and modelisation""; ""Suggestions for Introducing the History of Chinese</p>

Tech-nology into Education""; ""The application of the history of science and the use of the Internet as methodological tool in the subject of sciences of the contemporary world""; ""The Importance of Games of Chance at the Inception of Probability Theory""
""Author index""

Sommario/riassunto

Long description: This collective book results of several meetings since 2006 between European historians of science and technology. Regularly, the six editors (and most of the authors present in this publication) organized symposia inside international conferences about the role of history of science and technology in science education and teacher training. The principal objectives of this book are: i) to enlighten and to discuss different research problems concerning HST (History of Science and Technology) and ICT (Information and Communication Technology), HST and IBST (Inquiry Based Science Teaching), HST and Science Education. In this way, it is dedicated to scholars, ii) to offer teachers and teacher trainers different ways to explore HST by using digital resources online, using a new teaching method and to become more familiar with the method in HST. Biographical note: As historians, the six editors develop research in the following fields: history of mathematics (O. Bruneau, M. R. Massa-Esteve and T. de Vittori), history of physics, chemistry and technology (P. Grapí, P. Heering, S. Laubé). As teacher trainers at the university, they are also involved in research in science education about the role of HST to teach science at primary and secondary schools.