1. Record Nr. UNINA9910254995503321 Autore Aspray William Titolo Participation in Computing: The National Science Foundation's Expansionary Programs / / by William Aspray Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 **ISBN** 3-319-24832-4 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (X, 200 p. 1 illus. in color.) Collana History of Computing, , 2190-6831 Disciplina 353.00855 Soggetti Computers Science education History of Computing Science Education Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Introduction -- Opening Computing Careers to Underrepresented Groups -- The Broadening Participation in Computing Alliances --Recent Efforts to Broaden Formal Computer Science Education at the K-12 Level -- Recent Efforts to Broaden Informal Computer Science Education -- Conclusions -- Appendix: CISE-Supported Projects Targeted at Women in IT. This text presents a focus on the efforts of the U.S. National Science Sommario/riassunto Foundation (NSF) to broaden participation in computing of women, underrepresented minorities (especially African Americans, Hispanics, and American Indians), and people with disabilities. The work illuminates a mostly overlooked aspect of NSF's history, and provides an historical framework to the social scientists working on current Sloan Foundation grants related to underrepresentation in computing. Topics and features: Discusses the importance and extent of underrepresentation in computing Surveys the coevolution of computing and the NSF since the end of the Second World War Describes the history of NSF programs intended to broaden participation in the computing and STEM disciplines up to the present

day Examines in detail the Alliances formed under the NSF Broadening

Participation in Computing program – arguably NSF's most successful activity in this realm Reviews NSF's recent effort to revitalize formal K-12 education in the United States Contrasts these formal efforts with more informal startup efforts to provide informal computer education This important study will be of great value to a broad audience including social scientists and learning scientists interested in computing, computer scientists interested in issues of education or diversity, science policymakers, and historians of science and technology. Dr. William Aspray is the Bill and Lewis Suit Professor of Information Technologies in the School of Information at the University of Texas at Austin. His other Springer publications include Women and Underrepresented Minorities in Computing, Formal and Informal Approaches to Food Policy and Food in the Internet Age.