1. Record Nr. UNINA9910132307803321 Autore Fraillon Julian Titolo Preparing for Life in a Digital Age [[electronic resource]]: The IEA International Computer and Information Literacy Study International Report / / by Julian Fraillon, John Ainley, Wolfram Schulz, Tim Friedman, Eveline Gebhardt Pubbl/distr/stampa Cham, : Springer Nature, 2014 Cham:,: Springer International Publishing:,: Imprint: Springer,, 2014 **ISBN** 3-319-14222-4 Edizione [1st ed. 2014.] 1 online resource (305 pages): illustrations Descrizione fisica Disciplina 370.285 Soggetti Assessment Education—Data processing International education Comparative education Assessment, Testing and Evaluation Computers and Education International and Comparative Education Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Foreword -- List of Tables and Figures -- Executive Summary -- 1. Nota di contenuto Introduction -- 2. The Contexts for Education on Computer and Information Literacy -- 3. Students' Computer and Information Literacy -- 4. The Influence of Students' Personal and Home Background on Computer and Information Literacy -- 5. Students' Use of and Engagement with ICT at Home and School -- 6. School Environments for Teaching and Learning Computer and Information Literacy -- 7. Teaching with and about Information and Communication Technologies -- 8. Investigating Variations in Computer and Information Literacy --9. Conclusions and Discussion -- Appendices -- References -- Tables and Figures. Sommario/riassunto Ability to use information and communication technologies (ICT) is an

imperative for effective participation in today's digital age. Schools

worldwide are responding to the need to provide young people with that ability. But how effective are they in this regard? The IEA International Computer and Information Literacy Study (ICILS) responded to this question by studying the extent to which young people have developed computer and information literacy (CIL), which is defined as the ability to use computers to investigate, create, and communicate with others at home, school, the workplace and in society. The study was conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA) and builds on a series of earlier IEA studies focusing on ICT in education. Data were gathered from almost 60,000 Grade 8 students in more than 3,300 schools from 21 education systems. This information was augmented by data from almost 35,000 teachers in those schools and by contextual data collected from school ICT-coordinators, school principals, and the ICILS national research centers. The IEA ICILS team systematically investigated differences among the participating countries in students' CIL outcomes, how participating countries were providing CIL-related education, and how confident teachers were in using ICT in their pedagogical practice. The team also explored differences within and across countries with respect to relationships between CIL education outcomes and student characteristics and school contexts. In general, the study findings presented in this international report challenge the notion of young people as "digital natives" with a self-developed capacity to use digital technology. The large variations in CIL proficiency within and across the ICILS countries suggest it is naive to expect young people to develop CIL in the absence of coherent learning programs. Findings also indicate that system- and school-level planning needs to focus on increasing teacher expertise in using ICT for pedagogical purposes if such programs are to have the desired effect. The report furthermore presents an empirically derived scale and description of CIL learning that educational stakeholders can reference when deliberating about CIL education and use to monitor change in CIL over time.