

EERA: Students? Computer and Information Literacy from a European Perspective. Findings from ICILS 2013. Part 2

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Format:Symposium

Session Information

[09 SES 05 C.IS](#), Students? Computer and Information Literacy from a European Perspective. Findings from ICILS 2013. (Part 2)

Symposium Joint Session NW 09 with NW 16 continues from 09 SES 04 C JS

Time:2015-09-09
11:00-12:30

Room:334. [Main]

Chair/Discussant:Julia Gerick/ Paulina Korsnakova

Contribution

Students? Computer and Information Literacy from a European Perspective. Findings from ICILS 2013. Part 2

Organizers of this symposium are Julia Gerick, Birgit Eickelmann, Wilfried Bos and Julian Fraillon.

The occasion and scope of this symposium is provided by the IEA study ICILS 2013 (International Computer and Information Literacy Study, 2010-2014), which investigated the *Computer and Information Literacy* (CIL) of secondary school students in 21 educational systems, comprising 12 European countries, for the first time (Fraillon et al., 2014). In this international study students? CIL was measured by means of computer-based tests in live-software environments. In addition, representative data of contexts in which students develop CIL were gathered by student, teacher and school questionnaires.

The need for students to develop *digital literacy* or *computer and information literacy* has constantly gaining in importance (i.e. Voogt, Erstad, Dede & Mishra, 2013). The European Commission defined digital competencies as one of eight key competencies for lifelong learning (European Commission, 2006). The contextual framework of ICILS 2013 (Fraillon, Schulz & Ainley, 2013) serves as the theoretical background for the research presented in this symposium. This framework develops a model which categorizes relevant factors that are in agreement with the multilevel structure inherent in the process of student CIL acquisition and differentiates between *antecedents* and *processes*. This approach follows the assumption that antecedents influence processes and that processes are closely linked to the *outcome*, the latter being understood as the level of competence in CIL.

Comparing students? computer and information literacy in ICILS 2013 it became obvious that students? competencies vary significantly between educational systems in Europe (European Commission, 2014; Fraillon et al., 2014). Several of the educational systems in Europe are part of the group of top performing countries (such as the Czech Republic, Denmark, Poland, Norway and the Netherlands). Thus the study shows that European countries are in different stages of integrating technologies in schools and supporting the acquisition of students? CIL. Taking in-depth analysis into account, this symposium aims to reveal similarities and differences in a European comparison to create knowledge for future cross-fertilization developments and research. All contributions in this symposium present analysis with either a national focus embedded in a European context or an explicit European perspective.

In this part 2 of the symposium, *Thronsen, Loi, Gudmundsdottir and Hatlevik* focus on students? computer and information literacy taking ICT self-efficacy, the ICT use as well as student background variables in Norway, Denmark and Poland into account. *Ihme, Senkbeil, Goldhammer and Gerick* deal with the assessment of CIL and compare multiple-choice tasks, simulation-based tasks and the factor structure in all European ICILS-2013 countries. *Meelissen and Punter* focus on gender differences in the CIL test. As discussant, *Kor??áková* from the IEA secretariat in Amsterdam, responsible for ICILS 2013, discusses and frames the results of the symposium and highlights the relevance of assessment of digital literacy in Europe.

References

European Commission (2006). Recommendation Of The European Parliament And Of The Council of 18 December 2006 on key competences for lifelong learning. Brussels: European Commission. European Commission (2014). The International Computer and Information Literacy Study (ICILS). Main findings and implications for education policies in Europe. Brussels: European Commission. Fraillon, J., Ainley, J., Schulz, W., Friedman, T. & Gebhardt, E. (2014). Preparing for life in a digital age. The IEA International Computer and Information Literacy Study international report. Springer. Fraillon, J., Schulz, W. & Ainley, J. (2013). International Computer and Information Literacy Study: Assessment framework. Amsterdam: IEA. Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of Computer Assisted Learning*, 29(5), 403-413.

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