PRESS RELEASE

The new International Computer and Information Literacy Study (ICILS) reveals that 'Only 2% of students use their critical thinking and teachers lack confidence in teaching essential ICT skills'. ICILS is a first-of-its-kind study that assesses the digital competences of students worldwide.

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'Acquiring and mastering ICT skills and computer and information literacy (CIL) is paramount. There is a common assumption that students have fostered familiarity with ICT and many consider themselves 'digital natives'. However, the IEA ICILS Survey demonstrates that this is not the case,' explained Dirk Hastedt, Executive Director of the International Association for the Evaluation of Educational Achievement (IEA), which conducted the study that is being launched across the world today. Although 99% of the schools assessed had an internet connection, the results across the education systems varied greatly.

For instance, while 83% of students achieved at least a Level 1, indicating their minimum knowledge of basic software, whereas only a small 2% achieved a Level 4 which required the application of critical thinking whilst searching for information online. Furthermore, students seemed to use ICT more at home than at school. In turn, less than half of the teachers felt that they were computer savvy when carrying out more complex tasks; only 22% of them had followed an advanced class on the topic. On a positive note, 18 out of the 21 education systems currently have in place national, state or regional policies concerning the use of ICT in education.

The ICILS study was undertaken by the International Association for the Evaluation of Educational Achievement (IEA). ICILS is an inaugural international comparative study assessing computer and information literacy skills from 60,000 eighth graders (average age was 13,5 years old) in over 3,300 schools from 21 education systems. CIL refers to an individual's ability to use computers to investigate, create, and communicate in order to participate effectively at home, at school, in the workplace, and in the community.

The rapid development and implementation of computer and other information technologies over the last decade are distinct features of the 21st century. Knowledge about, access to and the use of ICT are vital for participating effectively in modern society. Acquiring and mastering ICT skills and computer and information literacy (CIL) is paramount. There is a common assumption that students have fostered familiarity with ICT and many consider themselves 'digital natives'. However, the IEA ICILS Survey demonstrates that this is not the case.

This study provides information on the contexts in which CIL is taught and learned. It looks at how students engage in ICT at home and at school and examines the role that schools and teachers play in teaching CIL.

Some of the key findings of the study are:

- The use of ICT in schools remains limited.
- Teachers tend to use ICT in teaching when they are confident in these skills. Less than 50% of teachers consider themselves self-sufficient when it comes to using computers for more complex tasks, such as installing software and collaborating with others using shared resources.
- 46% of teachers acquire ICT skills by observing other teachers using ICT in teaching.
- Although students have grown up in the digital age, it does not necessarily imply that they are digital natives. In all the participating countries, on average 17% of the students did not achieve a level 1. On average, only 2% of the students achieved a level 4 with a maximum of 5% in Korea.
- Girls tended to outperform boys in computer and information literacy in all participating countries.
- On average, 94% of students used computers for more than 7 years. However, 87% of students stated they used a computer once a week at home, with only 54% reporting the same frequency of computer usage at school.
- The three main types of software used in school for teaching purposes are word processors, presentation software and computer-based information resources. More complicated programs such as digital learning games, data logging and monitoring tools are rarely used – although 75% of the schools reported to having installed learning games.
- **The results of the ICILS show that in all 9 participating EU countries, except for the Czech Republic and Denmark, 25% of students demonstrate low levels of computer and information literacy (the level 1 or below). Although there are many initiatives and policy reforms in the EU in the use of technology in education, more emphasis should be given to ICT use.**

Countries that took part in the ICIL Study:

Australia, the City of Buenos Aires (Argentina)*, Chile, Croatia, Czech Republic, Denmark, Germany, Hong Kong SAR, Korea, Lithuania, the Netherlands, Norway (Grade 9), Newfoundland and Labrador (Canada)*, Ontario (Canada)*, Poland, the Russian Federation, the Slovak Republic, Slovenia, Switzerland, Thailand, and Turkey.

**Benchmarking participants*

Links: To read the full report including country results and methodology as well as other materials produced for this survey, please visit the IEA website: www.iea.nl

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About the International Association of Educational Achievement (IEA)

The International Association for the Evaluation of Educational Achievement (IEA) is an independent, international cooperative of national research institutions and governmental research agencies. It conducts large-scale comparative studies of educational achievement and other aspects of education, with the aim of gaining in-depth understanding of the effects of policies and practices within and across systems of education.