

The Internet permeates every aspect of the economy and society, and is becoming an essential element of young people's lives. Accordingly, policy makers need evidence of the impact of ICTs on school students' performance and well-being. Current research presents a rather mixed picture and underlines the need for additional metrics, while new indicators on students' attitudes shed light on some aspects of problematic use of the Internet.

According to the results of the 2015 OECD Programme for International Student Assessment (PISA), 17% of students in the OECD area first accessed the Internet at the age of 6 or under. For countries where data are available, less than 0.3% of 15-year-olds reported never having accessed the Internet.

The age of first access to the Internet varies across countries. Over 30% of students started using the Internet at the age of 6 or under in Denmark, Estonia, Iceland and Israel. The most common age of first access is between 7 and 9 years in about two-thirds of the countries surveyed by PISA, and 10 years and over in the remaining third.

In 2015, 43% of 15 year-olds in the OECD area spent between two and six hours a day online outside of school – a sizeable increase from less than 30% in 2012. Brazil and Chile had the largest proportion of students (over 30%) spending more than six hours a day on the Internet outside school.

Such massive Internet uptake among younger generations has led to increasing interest in the impact of online activities on children's well-being from various societal actors, including researchers, policy makers, and educational professionals, as well as parents. New evidence from PISA 2015 provides information on students' attitudes and feelings when engaged in online activities. The data show that most students enjoy using various digital devices and the Internet, but that many are at risk of problematic Internet use, as indicated by issues such as losing track of time when online and feeling bad if Internet connectivity is unavailable.

Across OECD countries, 90% of students enjoy using digital devices and 61% reported that they forget time when using them. About 55% of students in OECD countries indicate feeling bad when no Internet connection is available. In countries such as France, Greece, Portugal and Sweden, this ratio reaches about 80% compared to approximately 40% in Estonia and Slovenia. In terms of gender and income differences, girls and disadvantaged students appear to feel bad slightly more often than boys and less disadvantaged students respectively, when no Internet connection is available.

DID YOU KNOW?

In France, Greece, Portugal and Sweden, in 2015, about 80% of 15 year-olds reported feeling bad if no Internet connection was available.

Definitions

Students assessed by PISA are between the ages of 15 years, 3 months and 16 years, 2 months. They must be enrolled in school and have completed at least six years of formal schooling, regardless of the type of institution, programme followed or whether the education is full-time or part-time.

The share of *students who feel bad if no Internet connection is available* corresponds to those who stated that they “agree” or “strongly agree” with this statement. All PISA shares are reported as a percentage of respondents. Results are based on self-reporting by students.

Measurability

PISA is a triennial international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students who are nearing the end of their compulsory education. PISA assesses how well they can apply what they learn in school to real-life situations.

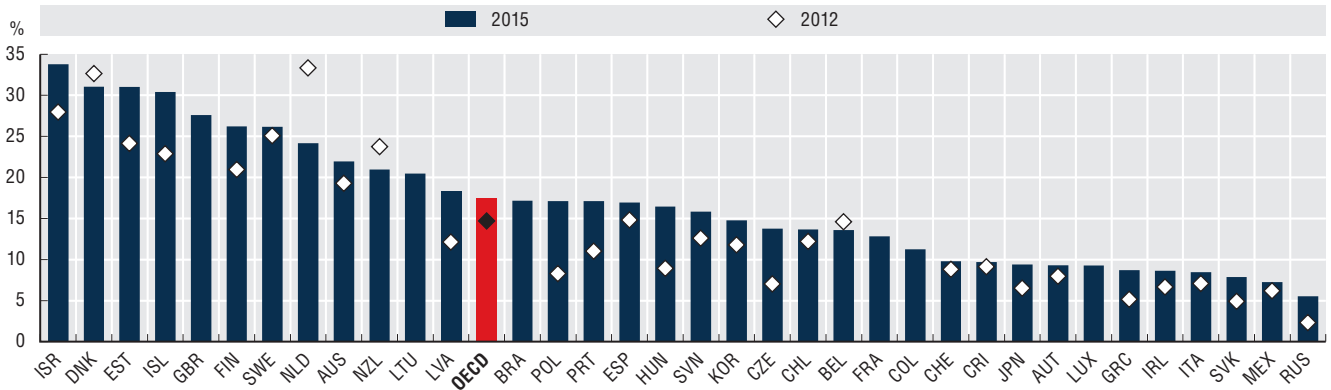
PISA 2015 assessed the skills of 15 year-olds in 72 economies. Over half a million students between the ages of 15 years, 3 months and 16 years, 2 months (a sample representing the global total of 28 million 15 year-olds) took the internationally agreed two-hour test.

The ICT familiarity questionnaire is an optional module and consists of questions on the availability of ICTs at home and school, the frequency of use of different devices and technologies, students' ability to carry out computer tasks and their attitudes towards computer use. In 2015, 47 out of 72 economies participating in PISA ran this specific module. Despite the valuable information gained as a result of implementation, the ICT questionnaire was not administered in several OECD countries (Canada, Norway, Turkey and the United States) in 2015 due largely to the high costs generated by the inclusion of these additional questions in the survey.

The increasing availability of data from multiple PISA waves has enabled the assessment of student use of ICTs both at school and outside school over time, as well as investigation of the impact on school performance, which is a key concern for education policy makers.

Students who first accessed the Internet at age 6 or under, 2015

As a percentage of 15 year-old students

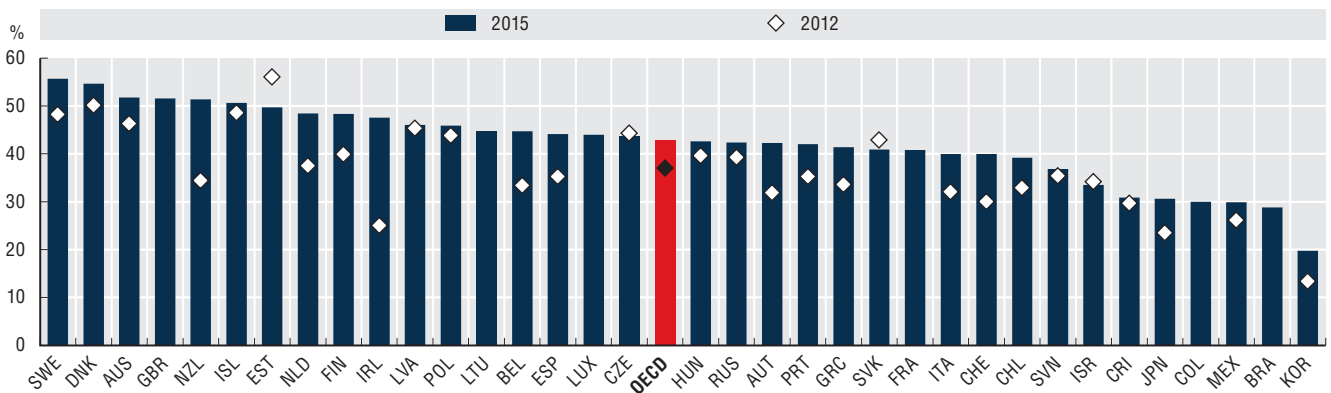


Source: OECD calculations based on PISA 2015 Database, September 2018.

StatLink <https://doi.org/10.1787/888933929376>

Time spent on the Internet by students outside school, 2015

Percentage of 15 year-old students spending two to six hours on the Internet during a typical weekday

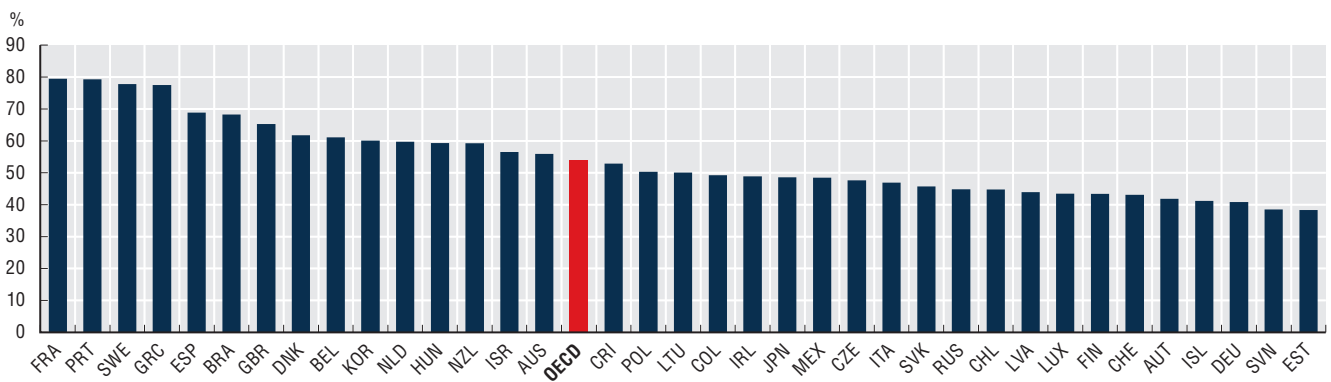


Source: OECD calculations based on PISA 2015 Database, September 2018.

StatLink <https://doi.org/10.1787/888933929395>

Students who feel bad if no Internet connection is available, 2015

As a percentage of 15 year-old students



Source: OECD calculations based on OECD PISA 2015 Database, September 2018.

StatLink <https://doi.org/10.1787/888933929414>



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