

# Students, Computers & Learning

## Making the connection

On average, in the past 10 years there has been no appreciable improvement in student achievement in reading, mathematics or science in the countries that have invested heavily in information and communication technologies for education.



In **Australia, New Zealand and the United Kingdom**, every 15-year-old has individual access to a computer at school.



In **Germany, Italy and Japan**, there is **only one school computer available for every four 15-year-old students**.

On average, **72%** of 15-year-olds



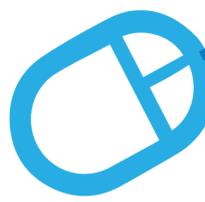
in OECD countries use computers at school; but in **Korea**, which is **among the top 3 performers** in both the PISA computer-based assessment of mathematics and the PISA digital reading test, **only 42%** of students reported using computers at school.



Students who use computers moderately at school tend to be somewhat more skilled in online reading than students who rarely use computers. **But students who use computers very frequently at school do a lot worse in reading**, even after accounting for students' background.



**Singapore is the top performer** in the PISA tests of digital reading and computer-based mathematics.

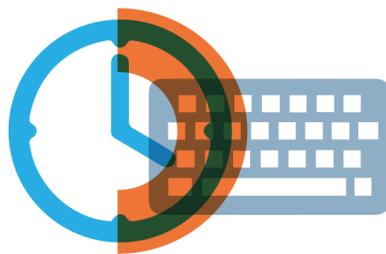


Students in **Australia, Canada, Ireland, Korea, Singapore and the United States** show **the most advanced web-browsing skills**: the vast majority thinks before clicking on links.

In **Macao-China, Shanghai-China and Chinese Taipei**, **one in five students is digitally adrift**: when searching for specific information on a website, these students visit more task-irrelevant pages than task-relevant ones.

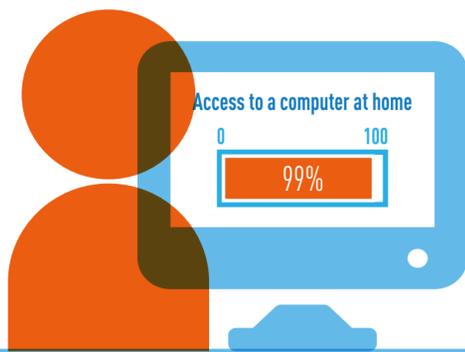


Students who spend more than **6 hours per day on line**



outside of school, are more likely to report that they **feel lonely at school, arrive late or skip days of school**. In the **Russian Federation and Sweden**, about **one in eight students** spends this much time on line during a typical weekday.

**Between 2009 and 2012**, access to computers improved the most among disadvantaged students. By 2012, in **Denmark, Finland, Hong Kong-China, the Netherlands, Slovenia and Sweden**, **more than 99% of disadvantaged students** had access to a computer at home.



**Disadvantaged students** in **Australia, Belgium, Ireland and Slovenia** are more likely to **play videogames**



than to read news, while **advantaged students** are more likely to **read news** than to play videogames during their leisure time on line.