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.

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.

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.

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

Programme for International Student Assessment (PISA)

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

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.

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.

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.