# SNAPSHOTS

Global Assessment // Local Impact



by Catherine Underwood

SUBSCRIBE ONLINE: www.acer.edu.au/snapshots

ENQUIRIES: snapshots@acer.edu.au

## Playing computer games for recreation

Surveys like the International Computer and Information Literacy Study enable educators, policy makers and the wider community to compare Australian students with each other, as well as their counterparts across the world.

There is a growing body of research focusing on the impact of sedentary activities on children and adolescents. This issue has increased in importance as a public health concern in Australia. Early adolescence is often reported as being characterised by a steep drop in moderate to vigorous physical activity and increasing amounts of sedentary behaviours such as increases in leisure-time computer use<sup>1</sup>. In this edition of *Snapshots*, we explore the extent to which students play computer games for out-of-school recreation through data collected as part of ICILS 2013.

ICILS examined students' acquisition of computer and information literacy (CIL): 'the ability to use computers to investigate, create and communicate in order to participate effectively at home, at school, in the workplace and in society'<sup>2</sup>. The study assessed student CIL achievement in 18 countries and three benchmarking participants through a computer-based assessment administered to students in Year 8 at school.

One aspect of ICILS 2013 examined students' use of and engagement with information and communication technology at home and school, and their use of computers for recreation. This *Snapshot* focuses on students who reported using computers to play games for out-of-school recreation every day.

<sup>1</sup> http://www.isdbweb.org/documents/file/797\_14.pdf

<sup>2</sup> http://icils2013.acer.edu.au/wp-content/uploads/examples/ICILS\_2013\_Framework.pdf



#### How often do students play computer games?

Just over one-quarter of Australian students reported playing computer games *every day* for out-ofschool recreation. Nearly one-fifth of students reported playing computer games *at least once a month but not every week*, while a similar proportion reported playing computer games *less than once a month*. Just over 10 per cent of students reported *never* playing computer games.



Overall, Australian boys more frequently than girls reported playing computer games *every day*.



Internationally, nine per cent of girls in Germany, Norway and Slovenia were less inclined to play computer games *every day*. In contrast, over 50 per cent of boys in the Czech Republic, Croatia, Lithuania, Poland, the Russian Federation and the Slovak Republic reported playing computer games *every day* for out-of-school recreation.

Cze	ch	0				
Republic		Lithuania	Germany	Australia	Turkey	
-		Girls comput ever	playing er games y day	Boys playing computer games every day		
	Czech Republic – Highest percentage of boys63%					
CENTAGES	Lithuania – Highest percentage of girls					
	Germany – Lowest percentage of girls (equal with Slovenia)					
	Australia – for comparison – girls – 18%					
DER		boys37%				

Turkey – Lowest percentage of boys -

### Did you know?

- Internationally, 30 per cent of students reported playing computer games *every day* compared to 27 per cent of Australian students.
- Internationally, on average 46 per cent of boys reported playing computer games every day compared to 15 per cent of girls.
- The Czech Republic had the highest percentage of students reporting playing computer games every day (40 per cent).
- Irrespective of gender, students in the Republic of Korea reported the lowest percentage of students playing computer games *every day* (23 per cent).

#### The relationship between playing computer games and achievement on the CIL scale

Australian students, irrespective of their use of computers for out-of-school recreation, achieved an average score of 542 points on the CIL scale (significantly higher than the ICILS 2013 average of 500).

Australian students who played computer games every day achieved a similar CIL assessment score (536 score points) to their peers who never played computer games (533 score points) for out-of-school recreation.

Girls in Australia attained a higher CIL assessment score than boys irrespective of how often they played computer games for recreation.

Overall for boys in Australia, CIL achievement tends to rise and reach a peak for those who play computer games at least once a week but not every day, rising from 508 score points for those that never play computer games to 542 score points and then declining to 530 score points for those that play computer games every day. In contrast girls tend to peak and reach a plateau for those who play computer games less than once a month, at least once a month but not every week, and at least once a week but not every day with achievement declining from 557 score points to 547 score points for those who play computer games every day.



#### SOMETHING TO THINK ABOUT

Research shows that playing computer games can be an important building block to computer literacy because games teach children computer familiarity and how to use and navigate a computer.

Given the increasing amount of time students are spending on computers at home and school, however, it is important that students have a balance between physical activity and sedentary behaviours. Students need to understand the impact that frequent computer use as a recreational activity can have on their health-related outcomes particularly during early adolescence when long-term behaviour patterns are being established.



Australia's participation in the International Computer and Information Literacy Study 2013 was managed by the Australian Council for Educational Research and funded by Commonwealth, State and Territory Governments. Further information about Australia's participation in ICILS 2013 can be found at www.acer.edu.au/aus-icils/

#### IMAGES:

Page 1 Shutterstock / Sergey Novikov; Page 3 Shutterstock / Happy Together; Page 4 Shutterstock / Phoenixns

Subscribe online to Snapshots for free at www.acer.edu.au/snapshots