The use of Information and Communications Technologies (ICT) has become an integral part of schooling for Australian students of all ages. It is difficult to imagine future higher education or employment opportunities for today’s school students that will not require well-developed skills in ICT. The importance of ICT literacy – defined as the ability of individuals to use ICT appropriately to access, manage, integrate and evaluate information, develop new understandings, and communicate with others in order to participate effectively in society – is acknowledged by its inclusion in Australia’s National Assessment Program along with literacy and numeracy and civics and citizenship.

Previous international studies have shown us that Australian students and teachers are among the highest users...
ICT Proficiency standards

The proficient standard set for Year 6 indicates that a student at this level is able to: ‘generate simple general search questions and select the best information source to meet a specific purpose, retrieve information from given electronic sources to answer specific, concrete questions, assemble information in a provided simple linear order to create information products, use conventionally recognised software commands to edit and reformat information products.’

The proficient standard set for Year 10 indicates that a student at this level is able to: ‘generate well targeted searches for electronic information sources and select relevant information from within sources to meet a specific purpose, create information products with simple linear structures and use software commands to edit and reformat information products in ways that demonstrate some consideration of audience and communicative purpose.’

Research Developments 3
The improvement in performance by Year 6 students was linked to an increase in the use of computers at home and school. In 2008 54 per cent of Year 6 students and 73 per cent of Year 10 students used a computer at home almost every day or more frequently. In 2005 the corresponding figures were 43 per cent and 58 per cent. The study showed that use of a computer at home – particularly when it was used for study purposes – had a positive impact on achievement.

While the overall achievement of most students is pleasing, the study also identifies some areas where achievement is not as good as we would hope. This report, like many before it, has highlighted a disadvantage for Australia’s Indigenous students as well as those from lower socioeconomic backgrounds and rural areas. These findings were perhaps not surprising as they reflect those of a range of studies on educational achievement over many years.

The largest influence on student achievement was socioeconomic background. In Year 6, 41 per cent of students whose parents worked in jobs described as ‘unskilled manual, office and sales’ attained the proficient standard compared to 72 per cent of students whose parents are ‘senior managers and professionals’. In Year 10 the corresponding figures are 52 per cent and 78 per cent. These differences are similar to those reported in 2005.

There is a substantial gap between the ICT literacy of Indigenous and non-Indigenous students. In Year 6, 24 per cent of Indigenous students attained the proficient standard compared to 59 per cent of non-Indigenous students. In other words, non-Indigenous students were more than twice as likely as Indigenous students to reach or exceed the proficient standard. At Year 10, the corresponding percentages were 32 per cent and 68 per cent. The gap in ICT literacy achievement between Indigenous and non-Indigenous students is greater in 2008 than it was in 2005.

Location also had an effect on performance. Students’ ability seemed to decline with distance from a metropolitan area. Students in metropolitan areas outperformed those in regional areas who in turn outperformed students from rural and remote locations. Access to computers and related services such as reliable internet connections may offer some explanation for the weaker performance of non-metropolitan students but this is uncertain. The differences between results attained for each geographic location are very similar to those reported from the 2005 survey.

ICT is part of life in modern society and students who do not develop proficiency in ICT are likely to be limited in their participation in later economic and social life. In general the results from the 2008 assessment of ICT literacy indicate that Australian students are well prepared to participate in contemporary life. However, the study does highlight that some students are at risk of being left behind in this vital area of their education. The percentage of students achieving in the lowest two levels of proficiency remained relatively unchanged from 2005 indicating a lack of progress where improvement was most needed. This also suggests there are some students struggling to master ICT skills. Some intervention may be required to help these students reach the desired proficiency standards.

Whether progress has been made or if the same groups of students continue to struggle will be shown in the results of the third National Assessment Program-ICT Literacy to be conducted in 2011.

Further findings and details about the assessment methods used are available in the full report of the National Assessment Program-ICT Literacy Years 6 and 10.

See <www.mceecdya.edu.au>