Media Release ACDICT June 2014

ICT teaching deficit is severe

The Australian Mathematical Sciences Institute issued a media release on 12 June [copied below] noting that around 40% of years 7-10 maths classes in Australian schools were taught without a qualified maths teacher. The situation is even worse for ICT (often abbreviated to IT) where nearly 60% of the same age school children are taught IT by teachers without a formal IT qualification[1]. Moreover, whereas 76% of maths teachers are qualified for teaching years 11-12 in maths, only 52% of IT teachers for the same age group have an IT qualification[1].

This lack of suitably qualified ICT teachers for those senior school years is likely to be a significant factor in the declining enrolments in ICT in higher education over the past dozen years[2]. It is also a significant cause of the concomitant lack of ICT skills in the Australian workplace[3]. ICT also has a major lack of females in schools, higher education and the workforce.

"These data for ICT and maths are of concern and we need action on several fronts to improve the situation" said Professor Leon Sterling, President of ACDICT. Professor Sterling pointed out that ACDICT is working with the Australian Curriculum, Assessment and Reporting Authority (ACARA) to help improve the ICT schools curriculum. ACDICT is also identifying practices to increase female participation in ICT.

He added "ACDICT is working with other stakeholders, such as the CSIRO and NICTA to increase the participation of industry and academia in schools such as in the mentoring of teachers to help with any ICT skills gaps and provide the students with interesting projects".

Professor Sterling noted that there are many national activities designed to show school students how skilful, enjoyable and rewarding ICT studies can be. He gave the examples of Young ICT Explorers (managed by NICTA), and Big Day In events (managed by the ACS Foundation) where ICT graduates in industry talk with school students about their careers.

He concluded, "While the data given in various published reports could be depressing, if enough stakeholders continue to work together in a variety of ways, there is cause for optimism in Australian education producing the ICT innovation leaders of tomorrow".

Contacts
Professor Leon Sterling lsterling@swin.edu.au 0415 397 826
Dr Tony Koppi, EO@acdict.edu.au 0410 427 543

References
[1]McKenzie, Phil; Rowley, Glenn; Weldon, Paul R.; and Murphy, Martin, "Staff in Australia's schools 2010: main report on the survey" (2011). http://research.acer.edu.au/tll_misc/14
[2]ACS 2013 Australian ICT Statistical Compendium.

http://www.acs.org.au/__data/assets/pdf_file/0004/28570/Australian-ICT-Statistical-Compendium-2013.pdf
[3]ACDICT Action Plan on ICT Skills 2013.
http://acdict.edu.au/documents/ACDICTskillsActionPlan300613_000.pdf