ICT Schools and Faculties in Digital Curriculum Implementation: Outreach and Collaboration with Education Faculties

Report on a 2017 survey of ACDICT members supplemented by information extracted from university websites *Chris Johnson, Executive Officer ACDICT March 2018*

Schools and Faculties of ICT members of the Australian Council of Deans of ICT (ACDICT) were invited to respond to a survey in May 2017. The survey was designed to explore one aspect of the implementation of the Australian Digital Technology curriculum in primary and secondary schools, namely the extent of ICT Schools' interaction with the preparation and up-skilling of school teachers in training and in service. The survey asked whether the university also had a School or Faculty of Education (providing degrees towards training school teachers), the extent of collaboration between the university schools of ICT and of Education, and outreach to groups of in-service teachers.

A total of 18 replies were received, which was enough to provide a useful indicator of activity.

17 of these universities have a school or faculty of education, one does not. At least 9 have some form of outreach work with teacher groups (such as associations of IT teachers), and at least 5 do not (we have no information about the other 3). At least 3 have a double degree ICT and Education; most (at least 6) do not.

Examples of outreach and interaction with teacher groups:

- The extensive and intensive MOOC on Digital Technologies Education program: "This involves a range of online free Professional Learning MOOCs, as well as a national face-to-face PL program and a national lending library. We expect our MOOCs to be available long term, while the additional support is grant funded, and will not go past 2020." [University of Adelaide]
- About 5 workshops a year to familiarise teachers with the VCE *Algorithmics* subject. This year we are running a further 4, and also thinking about a conference for these teachers.... probably run close to 15 PD workshops for teachers. [Deakin University]
- A number of programs: Tools of Innovation Exploring Computer Science and the Digital Technologies Curriculum - Teacher Professional Learning. Local school teachers have been invited to come into ECU's Makerspace to explore the principles underpinning Computer Science (computational, systems and design thinking), the Australian Digital Technologies Curriculum and hands-on DIY electronics. Professional staff (software engineer) develops and leads the professional development activities for this initiative. [Edith Cowan University]
- [We] work closely with QSITE (QLD Society IT in Education) and engage with their "teach meets" where all 3 education sectors come together to share best practises [James Cook University]
- [We are] running Teacher Professional Development with in-service teachers.

- a Google CS4HS in-service program is run by the convenor of the maths specialisation of the secondary education degree, and a member of our school is involved in that program.
- regular (couple of times a year) day long workshops with teachers from (relatively) local schools.
- outreach to teacher groups and individuals, is more on a project-based initiatives and it covers broader STEM area.

Examples of forms of interaction with Education degrees:

- Our university offers Education degrees through a School of Education with ICT as a possible teaching specialisation. The IT courses in the degree are taught by our IT School.
- [The School of] IT has been teaching into the Bach EDU for many years for those who planned to specialise in ICT/IPT curriculum
- Faculty of Education has a Computational Science minor and major in BEd; offers ICT specialisation in BEd