

**Final Report for Australian Council of Deans of ICT
ACDICT Learning & Teaching Academy (ALTA)
Engagement Grant 2012-2013**

**Debunking the myths: providing a compelling ICT experience through outreach activity
and intentional role-modelling.**

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1. Outcomes achieved or expected:

- Conducted a brainstorming session with school teachers to determine their requirements and level of support to deliver a unit of work to increase both student engagement with ICT activities and enjoyment.
- Developed the 4 week unit of work including peer and self-evaluation for secondary school students using the AppInventor resources available on the web.
- Obtained Ethics approval from Swinburne University of Technology as well as the principals at three schools to run the program and collect pre and post data from teachers and students.
- Employed four current female undergraduate ICT students to act as classroom facilitators during the 4 week unit of study.

2. How outcomes have been or will be disseminated:

- *A successful model to expand outreach activities by involving more schools, staff, students and alumni.*
 - This has been achieved. The model provides the curriculum to the teacher, loans the resources (phones) and where possible, supply of classroom facilitators from undergraduate students. The model is a self-contained 4 week student-directed, peer-assessed unit of work that teachers can deliver in their classes. Because of the open ended nature of the activities it is suitable for years 8-11, and actually matches one of the Year 11 VCE unit requirements. This model can be replicated readily to suit different computing education environments.
- *Improved collaboration between secondary schools and universities to improve the numbers and diversity of students seeking an ICT degree place at university.*
 - Included schools and staff that have not previously been associated with our outreach activities (e.g. Carey and Geelong High School).
 - We presented the details of the program during an invited presentation to Victorian IT Teachers Association in February this year.
 - Two of the teachers involved in the program have disseminated their experiences with the program. One at the VITTA conference in 2012, the other within his school community as an in-school teacher PD activity.
- *An academic paper for a conference or journal*
 - Forthcoming: We will write a paper to be submitted to ACSW by August 12.
- In addition:

- Our work on this has helped secure a CS4HS grant as well as informing other grant applications through both Swinburne and Deakin Universities.
- We also submitted an EOI for the OLT in round one, and while it was not successful it was reviewed highly.

3. How identified benefits will be sustained:

- Ongoing outreach activities and research. This grant has acted as a springboard to other opportunities (e.g. Office of Learning and Teaching grants). We intend to submit an OLT full Innovation Grant application building on these resources and activities, in November 2013.
- We have now purchased a class set of android phones that enable outreach programs to be supported and conducted by staff and students (e.g. FICT Outreach coordinator).
- We have made ongoing research connections with Georgia Institute of Technology, in particular the Institute of Computing Education which is a leader in delivering outreach programs in the USA. They will be our partners in the OLT grant application.

4. What the money has been spent on, or will be spent:

• Mobile phones (class set)	\$1490 (Swinburne already owned some)
• Research Assistant/Curriculum Developer	\$3656
• Female classroom facilitators.	\$ 432
• Consumables/catering costs	\$ 408
• SITE Conference Registration	\$ 853
• Accommodation *2 (conference)	\$1576
	<u>\$8290</u>

The amount received was \$9197 leaving a balance of \$782 which will cover expenses incurred in future meetings and consultations on the research project.