

The University of Adelaide

UTILISING ONLINE SOCIAL NETWORKING
TOOLS FOR FIRST AND FINAL YEAR
DESIGN EDUCATION

BY

JOSH MCCARTHY

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ABSTRACT

This thesis investigates the evolving learning needs and expectations of modern day higher education students in Australia, and explores the efficacy of online social networking tools within design and digital media education. This research is concerned with tertiary students at both first and final year levels, and also focuses on the international student experience within Australia. The principle aims of the research are a) to determine the effectiveness of social networking sites for improving the first year learning experience by establishing connections, both academic and social, between students, specifically connections between local and international students; and b) to establish networking opportunities for final year design students with relevant professionals, including recent graduates and industry leaders. The core research is conducted through two case studies, focussing on the use of *Facebook* as an online learning environment for both first and final year education. The first year case study uses the course *Imaging Our World* as an academic platform, and is analysed from 2008 to 2011. The final year case study uses the *Master of Design with Digital Media* program as an academic platform, and is analysed from 2009 to 2011.

From 2008 to 2011 first year students engaged with their peers through an online forum in *Facebook*, in addition to the traditional teaching mechanisms of lectures and tutorials. Students were required to submit work online, and critique their peers' submissions. The 2008 experience showed that the virtual classroom hosted by *Facebook* provided a platform for students to generate preliminary academic and social interactions with peers in first year university, while meeting the diverse learning needs and attitudes of Generation-Y. These relationships however often stayed embryonic in nature, due to a lack of connection between the real and virtual classrooms. In 2009 online discussions were transferred and expanded upon in the physical classroom to promote face-to-face interaction. This blended learning environment helped transform emergent online connections into meaningful relationships by supporting virtual communication with face-to-face communication in the classroom. A shift in focus from stand-alone content galleries to work-in-progress galleries in 2010 revealed that the virtual environment in *Facebook* enabled students to produce strong academic results, by submitting preliminary design work throughout the semester and receiving constant feedback from a range of sources. In 2011 the study expanded to include national and international partners. The resulting experience indicated that *Facebook* has the potential to host international design classrooms, allowing students from around the world to connect with their global peers, learn about new fields of design, and improve their own work via feedback from an ever-growing number of sources.

The online environment in *Facebook* improved the first year experience by providing students with a platform to establish connections with their peers. The virtual environment negated common first

year communicative pitfalls, and enabled interaction that might not have otherwise occurred. Between 2008 and 2011, relationships, both academic and social, were forged between peers; these relationships provided support for students as they adjusted to university life, and led to a sense of belonging in the learning community.

The three year study in the *Master of Design with Digital Media* program provided much insight into the use of *Facebook* as a learning environment for industry and peer mentoring in design education. From 2009 to 2011 final year students engaged with their peers and a group of industry mentors within an online forum in *Facebook*. Students were required to submit work-in-progress related to major assignments online, whereupon mentors would provide critical feedback the following week. The 2009 pilot study showed that the scheme allowed students to receive feedback and critiques from a range of sources including current peers, recent graduates from the program, and leading local and national industry professionals. It also presented students with the opportunity to gain insight into various design professions while they were still studying and forge connections with potential future employers. In the 2010, the scheme was revised with a more structured framework and as a result there was more consistent feedback for all students from the mentors. At least two mentors provided critiques to each student every week, resulting in long online discussions and significant networking opportunities for the cohort. Both the 2009 and 2010 schemes led to strong connections between mentor and mentee participants, including work experience and paid employment. In 2011 the study expanded to include an international partner in the United States. In this scheme final year students from Australia would mentor undergraduate students from the United States, while the Australian students would in turn be mentored by United States staff and industry professionals. The 2011 experience outlined that *Facebook* is suitable to host collaborative international mentor projects. Interaction between students was strong throughout the semester, and all parties benefitted from the opportunity to collaborate with their global peers and industry partners.

The online environment in *Facebook* helped establish a framework for an *evolving* and *expanding* community of students, recent graduates and industry leaders, to promote professional networking. Given the global nature of the design industry, there is a strong need to connect with peers and industry leaders around the world. The opportunities for national and international collaboration are endless, at both university and industry levels. Students seeking advice and mentoring are no longer limited to their immediate geographical location, and similarly, companies can discover and establish connections with potential employees all over the world.

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STATEMENT OF ORIGINALITY

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution to Josh McCarthy, and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Associated publications:

McCarthy, J. (2011). "Connected: online mentoring in *Facebook* for final year digital media students", *Collaborative Learning 2.0: Open Educational Resources*, eds Dr Alexandra Okada & Teresa Connolly, IGI Global.

McCarthy, J. (2011). "Online networking: integrating international students into first year university", *Multiculturalism in Technology-Based Education: Case Studies on ICT-Supported Approaches*, ed Dr Francisco Jose Garcia, IGI Global.

McCarthy, J. (2010). "Blended learning environments: using social networking sites to enhance the first year experience", *Australasian Journal of Educational Technology*, 26 (6), pp729-740.

McCarthy, J. (2010). "Connected: linking postgraduate students and industry through online mentoring", *On the edge: cross-disciplinary and intra-disciplinary connections in architectural science. Proceedings ANZASCA Auckland*. 2010.

McCarthy, J. (2009). "Utilising Facebook: immersing Generation-Y students into first year university", *Journal of the Education Research Group of Adelaide*, 1 (2), pp39-49.

McCarthy, J. (2009). "Blending virtual and physical classrooms to enhance the first year experience", In *Same places, different spaces. Proceedings Ascilite Auckland*. 2009.

McCarthy, J. (2007). "Digital design and student learning through videoconference collaboration", In *ICT: Providing choices for learners and learning. Proceedings Ascilite Singapore*. 2007.