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Flipped University Classrooms:
Using Technology to Enable Sound Pedagogy

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EXECUTIVE SUMMARY

The three case studies in this paper show how flipped classroom approaches can facilitate the renewal of university teaching. The case studies form part of a scholarship of teaching and learning that provides opportunities for educators to learn from the experiences of others. Descriptions of course preparation illuminate the application of constructivist pedagogy, the affordances of a range of learning technologies, and a role for university teachers that facilitates their students' engagement with learning. The cases outline the application of flipped classroom approaches at early and later stages of students' learning journeys and show how they introduce parity of learning experiences for on-campus and off-campus students. The case studies show how flipped classroom approaches can be an instrument of change, forming part of institution-wide planning for coherent and effective student learning journeys. They reveal the importance of an infrastructure of learning technologies to facilitate active and interactive learning and the significance of professional development and organized support teams, including technology experts, librarians and instructional designers, in preparing the groundwork for teachers and students using flipped classroom methodologies.

Keywords: *Authentic Learning, Flipped Classroom, Learning Technologies, Pedagogy, Student Learning Journey*

ORGANIZATIONAL BACKGROUND

This paper presents three case studies of flipped classrooms at a multi-campus, regional university in Australia. Since its inception, almost 50 years ago, the university has specialised in distance education gaining a reputation for its adoption of online and blended learning opportunities. Its investment in learning technology infrastructure was described in generational terms by Taylor (2006). The first generation was the print based correspondence model. The second stage, multi-media, model incorporated audio and videotape and computer-based learning. The third generation 'telelearning' model adopted audio-teleconferencing and video-conferencing. The fourth generation, flexible learning, model engaged students with online interactive multimedia and internet-based ac-

cess to resources, and the fifth generation 'intelligent flexible learning' model added to this mix computer mediated communication, using automated response systems and campus portal access to institutional processes and resources. The University currently uses the Moodle Learning Management System (LMS), supported by a range of online tools such as, synchronous and asynchronous voice tools, virtual classrooms, ePortfolios and multiplatform online media presentation systems.

The University has just over 27,000 students of 90 different nationalities. Seventy eight per cent of students study online. Accordingly, the University has attracted students unable to participate in traditional, on-campus, university studies. Many are older students with family and work responsibilities and some are from rural, remote, and Indigenous communities. Thirty-three percent of the University's students are from low socioeconomic backgrounds, so the University may be characterised as engaging with the widening participation agendas now being set by governments around the world.

Organizational planning at the university fosters a range of support systems to create coherent student learning journeys (Hunt & Peach, 2009). This is important because it is known that students want, 'efficient and responsive administrative, IT, library and student support systems actively working together to support … operation[s]' (Scott, 2005, p. 13). The planning processes focus on key interaction points between students and the University (See Figure 1), from decision to enrol, through the first year learning experience, which is crucial to student retention and progression, and on to work-ready graduation or preparation for further study (Sankey, 2012).

SETTING THE STAGE

The case studies in this paper form part of a scholarship of teaching and learning that is designed to improve practice (Trigwell, 2012). According to Ashwin and Trigwell (2004, p. 121) such scholarship may produce a range of knowledge outcomes:

1. An investigation to inform oneself about an aspect of their teaching/learning. This will result in the production of *personal* knowledge;
2. An investigation to inform a group within one or more shared contexts (typically department or faculty, institution) about an aspect of their teaching/learning. This will result in the production of *local* knowledge;
3. An investigation to inform a wider (international) audience about an aspect of their teaching/learning. This will result in the production of *public* knowledge.

The case studies are based on filmed interviews with practitioners about their use of flipped classrooms. The development of the videos crystallised their own awareness and also shared knowledge within the University. The videos have also been made available open-

Figure 1. Key stages of the student learning journey (Hunt & Sankey 2013, p. 263)