

For ensuring flexible student trajectories through the development of an innovative program that supports and sustains student access to occupational therapy education in North Queensland

SUMMARY OF CONTRIBUTION AND CONTEXT

It is well acknowledged that rural and remote students face multiple barriers to accessing education and remain underrepresented in the Australian tertiary sector (Bradley, 2008). During my initial years of teaching occupational therapy (OT) studies at James Cook University, I observed first-hand the challenges our students faced entering an on-campus health course. Many students were from rural and remote regions and had made a significant journey to enter into campus life in Townsville. Having moved from home and social supports, many students were required to work long hours in addition to their full time study and fieldwork commitments in order to financially support themselves during study. Many students also balanced study roles with family commitments. Consequently, I questioned whether the traditional 13 week, face-to-face mode of subject delivery was best teaching practice for all students and if health education would be more accessible (and just as successful) if it provided flexibility around the time and place of delivery. Within the Australian health setting, there remains a workforce shortage within rural and remote regions. Increasing opportunities for access to tertiary health education and clinical placements for rural and remote students is recognised as one strategy to address health workforce shortages (HWA, 2012). Flexible design is seen to accommodate students from diverse backgrounds who face geographical, financial or other life barriers that make access to traditional university programs challenging (James, 2010). I saw flexible delivery as one approach that could increase student access to health education.

In 2007, I began developing the first Occupational Therapy course in Australia where the first year is offered via flexible delivery, which resulted in the Bachelor of Occupational Therapy (Flexible Delivery) being delivered for the first time in 2009. Five years ago there were no undergraduate rehabilitation courses offered in Australia via flexible delivery. Hence, there was little evidence on how to deliver online and block mode health care training that prepared students for face-to-face clinical work. Therefore a scholarly approach to course design was undertaken which involved gathering information from students, staff and flexible learning scholars to develop a unique and innovative course that demonstrably met student needs. Evaluation of student experiences, access and performance in the new course demonstrates the success of the scholarly, systematic approach to course design and delivery which is summarised in Figure 1 below:

Figure 1: Scholarly Approach to Course Development of the Bachelor of Occupational Therapy (Flexible Delivery)



The scholarly approach to course design and delivery and continuous improvement (Scott, 2008) has ensured that the new course: a) effectively responded to our unique students needs; b) supported staff through the transition into flexible learning pedagogies, and; c) assured student academic success.

STAGE ONE: UNDERSTANDING OUR STUDENT NEEDS

Contemporary course design literature supports innovative approaches to learning which meets the identified needs of students (Nelson & Kift, 2005). To understand and respond to the unique needs of our students, I conducted a survey in 2008 of 180 OT students (years 1-3), which explored their demographic backgrounds, life commitments and flexible learning needs and preferences. This study demonstrated that the majority of our students (70%) moved long distances from home to attend university and worked much longer hours than the average Australian tertiary student. The survey also indicated that for certain demographics of students (rural and remote, mature age, part time and those with dependents) a blended mode of delivery (online and face-to-face) was preferable in order to pragmatically accommodate study as part of numerous life commitments. The study also hinted at a student preference for greater online learning support within the on campus course. This study strongly informed and justified the development of the Bachelor of Occupational Therapy (Flexible Delivery). Findings of from the survey indicated that nearly 20% of our students prefer study times outside of typical Monday-Friday 9am-5pm hours **and** 25% of students worked greater than 15 hours per week on top of a full time study load, mostly to afford basic needs. Students who worked longer hours were more likely to rate their course experience poorly. Of those who would have chosen to complete the first year of the course externally, their reasons for doing so included flexibility with work (37%) or family (19%) commitments or to prevent relocation for study (30%) while only 3% preferred this style of learning.

These results indicated that the key demographics of students who would benefit from a first-year flexible delivery offering of the course were; a) students who did not want to move long distances for study; b) students who wanted greater flexibility around work and/or family commitments; and c) students who wished to trial the course before committing to moving long distances for study. Interestingly, this survey showed that distance learning was not preferred, however was a pragmatic option for those who had other life commitments. From these findings, my approach to course design focused on providing

online learning materials which could be completed within flexible time frames and chosen by students to fit within their own life commitments.

STAGE TWO: UNDERSTANDING FLEXIBLE LEARNING DESIGN FROM OTHERS

As this was the first occupational therapy course to be offered via online flexible delivery in Australia, there was limited practical guidance both professionally and in the literature on how such a practice-based profession could be taught. As a result, a literature review was conducted to identify key issues relevant to online health education. This literature revealed that whilst online learning was successful for postgraduate courses, limited practice-based undergraduate health education had been completed online (Hollis & Madill, 2006). In order to bridge this knowledge gap, I arranged ongoing consultation with staff at community, university and professional levels. The focus of this consultation was to gain advice on how to develop a course which would fit the pragmatic needs of students who had conflicting time pressures whilst aligning with the on campus learning of other students. A flexible delivery consultative committee was formed which involved Learning Technologies staff, the Dean of Teaching and Learning, Information Technologies and Resources staff and the Head of Discipline. This committee steered the development of the course and advised on flexible learning approaches.

STAGE THREE: DEVELOPMENT OF A FLEXIBLE LEARNING PHILOSOPHY

The culmination of this consultative work led to a philosophy for flexible delivery design around the following tenets: *Make it Flexible* (times for subject contact determined by students); *Make it Equivalent* (content parallels the on campus course); *Make it Practice Based* (ensure graduates have skills necessary for practice); *Make it Accessible* (minimal content downloads for limited internet access and minimal expenditure on equipment for students); *Make it Pragmatic for Staff* (re-usable content, minimise extra workload through streamlined communication and subject templates); *Make it Personable* (have one coordinator that students get regular contact with so that they feel there is always someone there and provide opportunities such as Facebook groups for students to socialize and develop an esprit de corps similar to on campus student cohort). This model of flexible delivery, informed by the initial research into our student needs, is unique within JCU.

STAGE FOUR: STAFF TRAINING AND DEVELOPMENT

Throughout the establishment of the course, I arranged subject coordinators meetings where staff could raise their concerns, share their learning and contribute to the overall development of the course. Finally, I arranged multiple meetings with administrative staff responsible for student contact (fieldwork coordinators and enrolment) to ensure that all staff best understood the purpose of the new course and the unique needs and communication styles of remote and mixed mode students. A handbook for new subject coordinators and staff was also produced to ensure all new staff were aware of the need, philosophy and approach to flexible delivery for our students. The handbook included step-by-step tips on how to make flexible delivery successful for our students based on my research and student feedback.

OUTCOME ONE: INCREASED ACCESS TO HEALTH EDUCATION FOR STUDENTS

Through providing an alternative method of course delivery, a significantly different cohort of students has been able to enter the course (see Table 1). Honours research I co-supervised investigating the experiences of the first cohort of flexi students showed that the course offered alternative access to study and that study via flexible delivery allowed for students to study across a variety of times and locations (see Table 2) (Donohue, 2010). Greater flexibility in the course also opened up options for on campus students to study via mixed mode delivery (combination of on and off campus study) if personal circumstances meant that full time on campus studies would not be achievable. Dozens of on campus students with complex life situations and health issues were able to continue with studies due to flexible offerings. In this way, the new course assisted both on and off campus students to continue their studies despite sometimes complex personal commitments.

Table 1: Comparison of Student Demographics: On Campus and Flexible Delivery Students

	On Campus 2008	Flexi 2009	Flexi 2010	Flexi 2011	Flexi 2012
Mature age	10%	88%	72%	89%	82%
Part Time	8%	63%	63%	67%	56%

Table 2: First Cohort Experiences of Flexi Learning % of Students (participants able to indicate multiple options)

Reasons for studying via flexible delivery		Time allocated to study			Location for study
To prevent moving to Townsville 31%	Preferred this style of learning 6%	6am-10am 10%	10am-2pm 30%	10pm-2am 10%	Home 75%
To maintain employment 25%	To trial Occupational Therapy subjects 6%	2pm-6pm 20%	6pm-10pm 25%	2am-6am 0%	Library 8%
To maintain involvement with family 25%	Time management 6%			Various 5%	Work 17%

OUTCOME TWO: STUDENT PERFORMANCE**Table 3: Comparison of On Campus and Flexi Students Grade Point Averages**

Subject Code	2009		2010		2011	
	On Campus	Flexi	On Campus	Flexi	On Campus	Flexi
BM1031	4.2	4.3	4.3	4.8	4.2	5
HS1003	4.7	5.3	4.3	5.4	4.3	4.3
HS1401	5.3	6	4.4	5.1	4.9	5.5
OT1001	4.9	5.2	4.6	5.4	4.8	4.6
OT1005	5.6	6	4.9	6	5.4	5.9
RH1002	5.3	6.2	4.9	5.7	4.8	5.6
RH1004	5	6	4.8	5.2	4	4.8
Average	5	5.6	4.6	5.3	4.6	5.1

Curriculum and assessment of the on and off campus students are paralleled (near identical) and so comparison of overall grade point averages can be made. As seen in Table 3, students in the Bachelor of Occupational Therapy (Flexible Delivery) perform overall as well, and often better than on campus peers in the Bachelor of Occupational Therapy (GPA is a score out of 7). Overall, flexi students have excelled as demonstrated by two out of the four current undergraduate Honours students being flexi students.

OUTCOME THREE: STUDENT ENGAGEMENT AND EXPERIENCE

AUSSE survey data from the JCU course performance review shows that flexi students, over the course of the years 2009-2011, have rated their course experience, active learning and WIL experiences as equal or higher than the University average. Research conducted into the experiences of the first cohort of flexi students show that the course design offered an opportunity to engage with study that they would not have otherwise had. As explained and documented in the Honours research (Donohue, 2010) by one student:

I actually started as an internal student last year and then my circumstances changed. So when it [flexible delivery] became available it was my opportunity to continue to study because otherwise ...I [would] have [had] to give up OT, so it was a perfect opportunity for me to continue ...

Student statements also indicated that students felt well supported to learn, even when studying from afar:

[Flexible delivery has been] easing me into university...so I feel like I am more prepared to come to university next year as an internal student.

Students have also seen my work within my role as flexi coordinator as contributing to an overall positive student experience:

Lynne rang me personally several times at the start of my course. She provided me with information that was helpful to me as a mature age student, who naturally was apprehensive and not knowing what to expect. She had lots of good advice but also listened well to my situation and was helpful with any queries I had. Lynne was a crucial link between me and the university and her telephone calls helped me to feel involved and a welcomed part of the flexible community from the start. Without Lynne's positive and informative telephone calls, I am unsure how well I would have adapted to the new environment (Student email, 2010).

OUTCOME FOUR: RECOGNITION OF THE IMPACT OF WORK WITHIN THE INSTITUTION

My work within this project has received substantial recognition within my University. I have been awarded one of only four inaugural JCU Teaching and Learning Academy Fellowships, to research staff experiences of flexible delivery at the university and inform future strategic directions in teaching and learning. In 2012, I have received a *Faculty Citation for Outstanding Contributions to Student Learning*. I have also been appointed as the leader of the *JCU Teaching and Learning Academy Flexible Delivery Special Interest Group*. I am regularly invited to present workshops and presentations across the University and to advise on the development of flexible learning programs within the University and beyond. My leadership in presenting flexible delivery options to the wider staff group at the University has been recognised as a positive contribution by my colleagues as demonstrated by the following feedback:

Enjoyed the presentation today and sharing with other academics. I have now met 4 other academics who are interested in flexible and online teaching. So I don't feel so isolated any more. More importantly, it was great to hear about the various teaching strategies being used for online teaching. Inspiring to say the least (JCU colleague email, 2012).

OUTCOME FIVE: RECOGNITION OF THE IMPACT OF THIS WORK WITHIN THE BROADER COMMUNITY

The new course has been recognised as unique in Australia in meeting the needs of the profession and rural and remote communities:

This course has enabled rural and remote students to have access to a course they would have otherwise been denied from studying. I have seen how Lynne has encouraged and assisted other lecturers turn their material into resources suited for the remote students. This course uses advanced technology, and as a result has improved equity for groups who may not have had the time or resources to complete such a program. These include individuals who are mature aged, part-time students, mothers and persons with disabilities. Lynne has stretched herself and the university to keep up with the latest available technology to enhance innovative course delivery and obtain good outcomes for the students. I understand overall the students have excelled (Anna Nicholls, Director, North Queensland Therapy Services).

The scholarly approach taken to develop the course has been recognised nationally through multiple peer reviewed conference presentations and an in-press publication of the research in an A* peer reviewed journal. In the recent professional accreditation of the Occupational Therapy courses, the significance of the flexible delivery course in providing accessible education to rural and remote students was also noted:

Good efforts have been made to encourage enrolments of students from remote areas and clearly students from rural and remote regions are enrolling in significant numbers. While the flexible delivery distance learning is still relatively new, it is an excellent initiative and should greatly enhance the learning options for students living in remote areas (Final Accreditation Report 2010, p.6).

This course has been recognised as providing a unique contribution to increasing access for students:

Lynne's work in developing this course has gained national recognition. The course has been acknowledged ... as a course which provides excellent access to occupational therapy education for rural and remote students...The students undertaking this course will be at the forefront of building and maintaining health in rural and remote communities... I commend Lynne for her exciting and innovative work (Marilyn Pattison, Executive Director, World Federation of Occupational Therapists, 2012).

More broadly, I have been recognised as a national leader within my field, having been chosen as one of only twenty Young Leaders in 2012 to represent Australia at the upcoming *Australian American Leadership Dialogue* being held in New York and Washington DC in July 2012.

SCHOLARLY OUTPUT OF MY WORK RELATED TO PROJECT

As evidence of my scholarly approach to the project, I note the following recent publications. As an early career academic, such achievements are notable.

- **Zeldenryk, L., & Bradey, S.** (in press). The Flexible Learning Needs and Preferences of Regional Occupational Therapy Students in Australia. *Higher Education Research and Development*. (note: this is an A* ERA T&L journal).
- **Zeldenryk, L.** (2011). The Flexible Learning Needs of Rural Australian Students, Australian Occupational Therapy Conference, Gold Coast, June 2011.
- Donohue, S., **Zeldenryk, L.** & Thomas, Y. (2011). The Experiences of the First Occupational Therapy Flexible Delivery Cohort, Australian Occupational Therapy Conference, Gold Coast, June 2011.
- **Zeldenryk, L.** (2010). Reducing educational barriers: The flexible learning needs of today's health students. ANZAME 2010: Overcoming BARRIERS, RE(E)Forming Professional Practice. Townsville, Australia.
- **Zeldenryk, L., & Gray, M.** (2009). Flexibility in the North: Education to Meet the Unique, Challenging and Diverse needs of Occupational Therapy Students. OT in the NT: Diverse, Challenging, Unique Conference. Darwin, Australia.
- **Zeldenryk, L.** (2009). Hiccups and hurdles: A warts and all look at the online revolution, First Year Higher Education Conference (Nuts and Bolts workshop session). Townsville, Australia.

SUMMARY:

My leadership in developing the first flexible delivery program for Occupational Therapy in Australia has demonstrated a considered and scholarly approach to course design. Throughout the development of the course, my research into student and staff needs informed the development and philosophy of the course. As a result, sustained student outcomes over the past four years indicate that the course met a need for a group of students who otherwise may not have had the opportunity to access tertiary health education and join the Occupational Therapy profession. The success of the development of this innovative program does much to strengthen the broader national agenda of encouraging students from rural and remote regions into high quality health education training. The continuing success of the flexi course provides clear evidence of how my scholarly approach to teaching and learning has successfully and innovatively contributed to student learning.