

# INTER-PROFESSIONAL EDUCATION IN UNIVERSAL DESIGN: AN AUSTRALIAN CASE STUDY

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## DEAKIN UNIVERSITY



- Large regional university in Victoria, Australia (established in 1974)
- 4 campuses with over 44,000 students
- Waterfront campus in Geelong includes students studying Architecture and Occupational Therapy
- Opportunities for partnerships identified but never enacted.

## WHY? WHY NOT .....

- Increasing emphasis on equity/diversity / access in social and political agendas
  - United Nations Convention on the Rights of Person with Disabilities (2008)
  - Review of Australian Standards for Access and Mobility (AS 1428, 2009)
  - Disability (Access to Premises-Buildings) Standards(2010)
  - Build for Life Campaign (2010)
  - Livable Housing Design Guidelines
  - Growing recognition of placemaking / healthy city initiatives
- Increased focus on student experience and graduate attributes
- No one else was doing it

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## PROJECT AIMS

- Develop and trial flexible, blended teaching & learning resources, designed to provide rich experiences in inclusive design practice
- Explore and identify sustainable opportunities for architecture and occupational therapy students to learn about inclusive design practice within a framework of inter-professional education
- Explore and identify sustainable partnerships with key stakeholders that will support ongoing research and work integrated learning opportunities in the area of inclusive design practice

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## WHAT AND TO WHOM ....

- Literature review
- Consultation with key stakeholders (focus groups and telephone interviews)
- Design of online teaching resources
- Face-to-face teaching
- Simulation activities
- Formal evaluation

(1<sup>st</sup> year Architecture and 3<sup>rd</sup> year Occupational Therapy)



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## STAKEHOLDER CONSULTATIONS

- 76 people invited to participate with 28 participating in either focus group (16) or telephone interview (12)
- 75% female and 25% male
- 80% of participants aged 34 years or older
- Mean of 20.22 years of experience in accessibility
- Range of professional backgrounds and roles



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## KEY THEMES

- a) A shared understanding
- b) What's holding us back
- c) Making it happen
- d) Inter-professional practice
- e) The bureaucracy



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## SOME KEY MESSAGES

*"I like universal because it's more egalitarian. Universal to me implies everybody can do it. Inclusive implies someone's doing me a favour."*

*"I prefer this inclusive idea where there is some way of designing it that will include great diversity but not boil down to one thing for everybody."*

*"I don't think inclusive design is as well known or spoken about versus universal design but I think overall both concepts are not well known in the general community."*

*“Environmental sustainability is almost now getting ingrained. Financial sustainability has always been there ... it’s the first question that gets asked. Now the second question that gets asked is have you used recycled materials, what’s its energy use. Accessibility hasn’t reached that level of understanding ... it’s still an afterthought. It needs to be fundamental from day one.”*



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*“The thing architects don’t get is the needs of people with a disability ... and the thing that occupational therapists don’t get is architectural designing for the broadest number of people.”*

*“I don’t think much is to be gained by the occupational therapist trying to become an amateur architect or the architect trying to become an amateur health practitioner.”*



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# STUDENT LEARNING OUTCOMES

For students to be able to:

- Describe the Principles of Universal Design
- Demonstrate evidence of universal design thinking in a design solution in the built environment
- Critique a design solution from the perspective of universal design



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# FACE TO FACE TEACHING

- Architecture teaching into Occupational Therapy
- Occupational Therapy teaching into Architecture
- One day workshop with both student cohorts
- Occupational Therapy contributing to critiquing of architecture studio design projects



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# EVALUATION

## Pre and post student questionnaires

- Demographic data
- Personal experience of health condition / disability
- Understanding of universal design
- Attitudes to interprofessional practice
- Readiness for Inter Professional Learning Scale (RIPLS)  
(Parsell and Bligh, 1999)

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# READINESS FOR INTER-PROFESSIONAL LEARNING

## Questionnaire 1 (comparison b/n OT and Architecture)

- OT students significantly more positive in their responses overall but less confident about their own role than architecture students.
- Architecture students significantly more likely to think that learning with other disciplines was a waste of time
- Architecture students more inclined to think that problem solving can be learnt more effectively within their own profession
- Architecture students felt that they had to acquire more knowledge and skills than other professions

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## READINESS FOR INTER-PROFESSIONAL LEARNING

### Questionnaire 2

Differences overall remained but the gap had narrowed in some areas

**However .....**



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### OT students were more likely to ....

- Think that time spent with other professionals is a waste of time
- See that problem solving can be learnt more effectively with professionals of the same background

**And they became .....**

- Less positive about the benefits of shared learning
- Less likely to welcome opportunities for small group projects with other professionals
- Less welcoming of the opportunity to share generic lectures, tutorials and workshops with other professionals

## USEFULNESS OF SECOND LIFE™

- Architecture students neutral on its usefulness
- OT students (52% not useful, 24% useful, 24% neutral)

***“Great to do before real life simulations to gain basic understanding of access issues like steps and doorways.”***

***“It lacked the tactile and social experiences.”***

***“Quite challenging to initially get the hang of the controls involved in manoeuvring.”***

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## ‘REAL LIFE’ SIMULATIONS

90% of OT students and 88% of architecture students reported it as being “extremely useful”

***“Probably one of the most worthwhile things I could have done / could do as an architecture student.”***

***“Actually physically experiencing it changed my perspective of this topic.”***

***“It was interesting to be able to experience not only the physical hardship but the social interactions ie how people in the public reacted and how others treated us.”***

***“It made me realise that the Standards are not enough.”***

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## SINCE 2010

- Teaching into first and second year Architecture
- Teaching of architectural drawing and communication into Occupational Therapy
- Continuation of 'real life' simulation experiences
- Increase in research students in this area (Honours and Post Graduate)
- Building capacity within the Architecture program



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## CHALLENGES

- Dependent on “champions” of change
- Two professionally focused programs with highly structured unit progression
- Difficult to find time / flexibility within the programs
- The benefits and opportunities for Occupational Therapy students
- Development of a cross disciplinary unit of study focusing on health cities and environments



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This has been a life changing experience. I now see  
the world in a different way. (1<sup>st</sup> year Architecture student)



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