Interdisciplinary Design - Exploring emergent design and learning in cross-disciplinary teams

12.30 - 2.00pm
Tuesday 3 March

Oceans Institute Seminar Room G.05, corner Fairway Street and Edwards Street

Abstract

Three potential limitations of higher education programmes are that:

1. theory is often taught with little apparent relevance to practice

2. students work in disciplinary silos without developing the skills and understanding necessary to work in inter-disciplinary teams with outside stakeholders

3. there is insufficient focus on developing the important generic attribute, citizenship.

4. the “expert” role projected by unit coordinators often encourages students to play a passive role in their learning, which does not support our aim of preparing them for a lifetime of learning.

The UWA interfaculty wheatbelt project was undertaken for the first time in second semester 2014 with ambitious intentions including addressing the above issues. Arts, engineering, and urban planning students worked in five inter-disciplinary teams on scoping projects for wheatbelt towns.

In this presentation we will outline the project and explore the experience of the unit coordinators, within the theoretical framework of possible selves (Markus & Nurius, 1986). The theory links desirable, achievable and undesirable perceptions of possible selves with motivation. We therefore identify hopes and fears as unit coordinators at the start of the project and compare these with the realised experience. Coordinators hoped to mentor students in open-ended inter-disciplinary learning. Fears were minimal. One unit coordinator expressed fear about the status of her discipline.

A learning community emerged in which hopes were exceeded and the complementary value of all disciplines was exemplified. Unexpected challenges arose for the unit coordinators learning to working across disciplines and from lack of university systems for inter-faculty teaching and learning.

Speaker

Professor Carolyn Oldham

Carolyn Oldham is Professor at the University of Western Australia in the School of Civil, Environmental and Mining Engineering. She has a BSc with Honours in Chemistry and a PhD in Environmental Engineering. Since 1994, Carolyn has worked to integrate her cross-disciplinary research interests in transport processes, environmental chemistry and spatial and temporal patchiness. This focus on cross-disciplinary integration, i.e. trans-disciplinary research, has led Carolyn to collaborate with hydrologists, oceanographers, estuarine and groundwater scientists. Carolyn brings the same trans-disciplinary approach to her teaching and in 2010, received a national Australian Learning and Teaching Council Award for an “outstanding and sustained commitment to increasing the diversity of student learning experiences in engineering”.

Notes for participants

RSVP:
Please register your attendance to fase-ecm@uwa.edu.au by Wednesday 25 February.

There will be a light lunch, refreshments and an opportunity to network informally from 12.30pm followed by the presentations.