TURF Wars - Teaching Undergraduates Resilience and Futures in Universities

Stuart Pearson

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The teaching of resilience and the use of future scenarios provides scope for integrating human and biophysical systems in ways that challenge traditional discipline structures. Developing a course around student outcomes and the application of resilience to natural resource management was a useful way to learn about the ways adults consider these concepts in a formal educational context. It brought together the social and biophysical sciences in powerful ways that I could not have anticipated yet challenged conventional ways of seeing disciplines and the things worthy of study.

This shows how vulnerable the University curriculum, at least in two Australian Universities, can be to innovation by single or small groups of academics provided the organisational structure is tolerant and flexible enough. The pressures to increase control may hold these innovations at risk. Stuart proposes in this paper that perhaps the greatest threats to using resilience thinking come from within Universities and that the antidote lies in relevant experience of vulnerability, exploration of successful adaptation and strongly geographical or place-based approaches and a revived science-evidence literacy. Educating people in Universities (staff and students) to think through resilience and manage with resilience in mind is an exciting way to learn about resilience and the challenges in managing social-ecological systems.

Stuart has developed two courses that deliberately put University undergraduates in mixed discipline groups and then structured their engagement into vulnerable social and ecological communities. He will explore the key teaching materials and approaches he used and reflect on the ways students experienced the people and environments. He will show how it prepared them for being resilient members of the science and humanities community. The pedagogy of providing authentic learning experiences in the trans-disciplinary space or resilience and adaptation in environmental management is itself a wickedly complex problem within Universities.