Having it all - creative, interdisciplinary teaching and learning while saving the planet! Towards developing cross-faculty education for sustainability

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What is the problem?

Climate change increases the intensity and frequency of extreme weather, i.e. bushfires, heatwaves and drought.

What can we do to fix it?

- Education for sustainability is an approach guided by sustainability principles and practices: learning to know, learning to be, learning to live together, learning to do and learning to change and transform individuals and society.
- Interdisciplinary teaching and learning
- By addressing international and national policy imperatives
- Promote creativity and pedagogy of stimulation and support
- Applied for a Strategic Teaching and Learning Grant in 2009 to progress education for sustainability in line with the University’s strategic goals for teaching and learning

What solution did we come up with?

A trial curriculum program titled ‘Explain, Sustain, Remain’. The aim of the program was to develop and trial a cross-faculty, interdisciplinary module in education for sustainability. Over 100 students from across the four faculties participated in the trial. The program ran over a six week period and students met each week for 1.5 hours in small discussion groups facilitated by two cross-faculty staff. Teaching and learning comprised multiple methods and processes such as guest speakers, sharing food (organic and locally sourced), film, dramatization, poems, stand up comedy, fashion parades, virtual museum tours, rap songs and dancing, film making and youtube posting were some examples. Some examples are shown in the images below:

Students worked in multidisciplinary groups to envision a sustainable future in 2030 utilizing backcasting, futures and systems thinking. Without exception, each group comprising students from multi-discipline backgrounds, presented creative, intelligent, insightful presentations. The program appeared to “hook” and resonate with the students which can be evidenced through the risks students took in their presentations: poems, stand up comedy, fashion parades, virtual museum tours, rap songs and dancing, film making and youtube posting were some examples.

Some examples are shown in the images below:

View a student presentation on-line on youtube at: http://www.youtube.com/watch?v=de8kPo-Lju0

What did it achieve?

Students who participated in the trial were asked to complete a pre and post survey. In addition several focus groups were undertaken separately with students and staff to explore survey findings. Responses indicate that students’ knowledge about both sustainability content and predictions for the future was significantly enhanced by their participation in the program.

Findings illustrate that students felt more confident about their future employment and achieving environmental sustainability following the Explain, Sustain, Remain program (figure 2 below). And if we had any doubts about the value of cross disciplinary teaching and learning, the survey results were unequivocal (figure 3 below).

The success of the program also translated into a University wide systems change in the shape of a graduate attribute and approval for the first cross-faculty, interdisciplinary unit.

Why did it work?

Development of shared vision, hope and ownership of the project within the team. Teaching and learning processes needed to reflect the content as well as the spirit of imagining a sustainable future as well as reflect our pedagogical beliefs of participatory learning. As a cross disciplinary team of educators we modelled interdisciplinary co-operation by creating a journey metaphor, developing the common learning tasks and delivering stimulating and creative content in multidisciplinary teaching teams.

References


Table 1: Overview of the weeks

<table>
<thead>
<tr>
<th>Week</th>
<th>Theme/topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome to your journey</td>
</tr>
<tr>
<td>2</td>
<td>State of the current world situation</td>
</tr>
<tr>
<td>3</td>
<td>Consistency of issues</td>
</tr>
<tr>
<td>4</td>
<td>Change for a more sustainable outcome</td>
</tr>
<tr>
<td>5</td>
<td>Enabling change for a sustainable future</td>
</tr>
<tr>
<td>6</td>
<td>Presentations and Green jobs and volunteering expo</td>
</tr>
</tbody>
</table>

Figure 1

Figure 2

Figure 3