I am not an expert!

What it will do is take you through our attempt to integrate sustainability with core business.

Nor will this be a presentation that has all the answers.
**Background**

A bit about Macquarie

- Located in Sydney, Australia
- 17 concentrations of research excellence
- Four faculties: Arts; Business and Economics; Human Science; and Science
- Total enrolled students in 2010 – 31,286
- Total FTE staff – 2,118
- In 2008, we reported 74 courses explicitly teaching sustainability, most postgraduate:
  Graduate School of the Environment

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**Background**

Macquarie Sustainability

- Commenced in 2008
- There are 8 staff in total – 5 full time and 3 part time
- Sustainability sits in the Vice-Chancellor’s portfolio
  
  → Work across the divisions

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**Background**

- Adhoc technical beginnings with a focus on resource efficiency - an incomplete attempt to address sustainability.
- Formed the SWG – strategic invitations to specific people on campus.
- Sought out opportunities to embed sustainability into existing discussions – remembering that the focus is on
  
  **CORE BUSINESS**
Key point

The focus on sustainability was introduced in 2008 at a time when the institution was facing serious, large scale change on campus which presented both opportunities and challenges.

Context – Learning & Teaching specific

Opportunities included:
• Revision of the L&T Plan
• Defining of graduate capabilities
• Reviewing of the curriculum

The new Provost had a vision which included cross-disciplinary learning, combined with experiential learning for all students.....How could I utilise this?

Context – Learning & Teaching specific

Challenges included:
• Competing priorities
• Lack of understanding
• Apathy
• Relevance
• Pre-determined assumption of my role and expertise
• Change fatigue

...And the list continues

Opportunities

Revised L&T Plan:
• “Principle and enabler to guide implementation of the values” of the Plan

How to interpret this in practice?
Opportunities

Graduate Capabilities:
• All students to leave with these abilities
• Recalibration of curriculum: learning outcomes alignment
Currently no process to evaluate…

Opportunities

Curriculum review:
• Cut the deadwood and introduce People, Planet, Participation

Sounds promising…but the reality is it falls short of the real potential to embed sustainability in the curriculum
⇒ Add this to the challenge list!

Facing the challenges

Asked some questions:
• What can I feasibly address?
• What will have the most impact?
• What makes sense in the scheme of what I’m trying to achieve?
• Importantly WHAT WAS I ACTUALLY TRYING TO ACHIEVE??

Understanding

What does sustainability in the curriculum look like?

Needs to address two aspects of L&T:
• process and content

Did not want this to only be about developing new units/programs – i.e. content driven
Integrated approach considering both but…
A Framework – Defining sustainability

Still missing:
• Definition of ‘sustainability’ to start the dialogue
Considering UNDESD framework
• University of Bradford used this successfully However, discussions with academic staff revealed some resistance to this framework

A Framework - Process

Defining ‘sustainability’ really only talks to content.
Need to consider process as this is really looking at holistically embedding sustainability.
• Reflective practice
• Experiential learning
• Peer mentoring
• Assessment tasks
• Interactive learning → practical application …New learning environments

A Framework – Defining sustainability

• Revisit the grad caps: need to frame any definition in context to these
• Two departments developed their own indicators of attainment re grad caps – could this be the way forward and how could it be presented?

Visualising the Framework

<table>
<thead>
<tr>
<th>Level</th>
<th>Supporting structures</th>
<th>Content</th>
<th>Process</th>
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<tbody>
<tr>
<td>1</td>
<td>No explicit support through university frameworks, plans, policies</td>
<td>Acknowledges sustainability is a consideration. This includes limited attention to Environment – water, energy, waste, deforestation; poverty; health and wellbeing…</td>
<td>Typical teaching framework – lecture, assignment, exam based learning with at least 5% of total assessment including an aspect of sustainability</td>
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Understanding current situation

• Necessary to perform a gap analysis
• Development of an online curriculum mapping tool to do this…
  …But, this has been under development for about two years with no clear indication when it will finish!!!
• Will require other means to complete in interim

What’s been done

Conversations
• Workshops, focus groups – but often only engaging the engaged

Resource Development
• Handbook
• Annotated bibliography
• Learning outcomes for sustainability
• Assessment for sustainability
• Case studies

What’s been done?

Grants scheme
• Incentivise action – in 2nd year

Linking with the campus
• Arboretum
• Assessment tasks
• Restoration demonstration area
• Creek studies
• Sustainability tour

Links with Research

Centre for Research on Social Inclusion
• Research into the social, cultural, economic and political determinations of inclusion and exclusion

Climate Futures
• Quantify and assess climate change associated risks for key sectors such as water, food, biodiversity, economies, financial markets and national security
Climate Futures

- Executive Board position
- Great research, interdisciplinary representation
- Industry partnership – Environmental Sustainability Chair
- Little communication internally or externally
- Little interaction with on campus opportunities
- Not embracing broader opportunities e.g. carbon tax

Revise the direction to address the issues

Next steps – Climate Futures

- Create opportunities for interdisciplinary work
- Ascertain the opportunities arising
- Fill known gaps
- Audit to ensure students have value of research
- Promote, promote, promote!

Links to Research – Creating hubs

- Dual purpose – increase commercialisation whilst establishing research hubs
- Cochlear international headquarters
- Hearing hub
- Strengthen engineering through GE partnership
- Possible building demonstrating best practice

Numerous benefits:
- Financially sustainable
- Supports research priorities
- Demonstrates best practice
- Increase reputation and standing
- Broadens community outreach
- Links campus and research
Wrap up

• Ask the questions about what is achievable and applicable to your context
• Make sure that ‘sustainability’ is clearly defined and understood
• Need to consider both content and process to truly embed sustainability
• Research links can be commercial as well as community opportunities