MACQUARIE UNIVERSITY SUSTAINABILITY

Sustainability in core business

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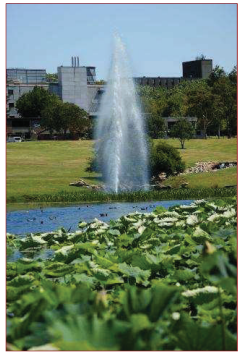

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I am not an expert!

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Nor will this be a presentation that has all the answers

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

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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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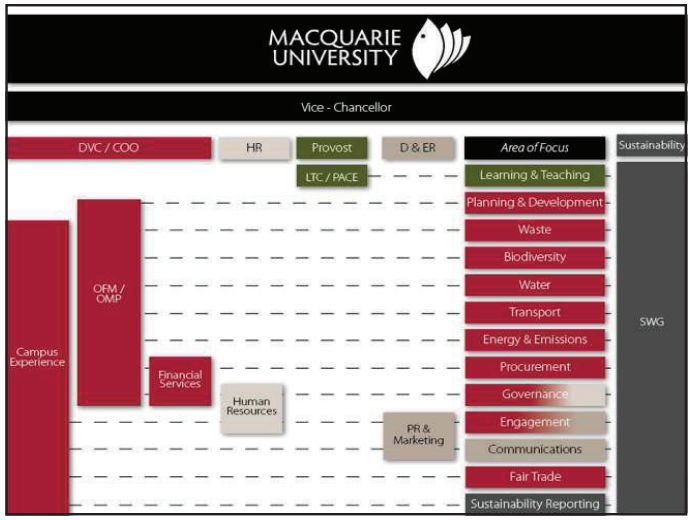

Background

- 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

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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

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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?**

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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

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Opportunities

Revised L&T Plan:

- "Principle and enabler to guide implementation of the values" of the Plan

How to interpret this in practice?

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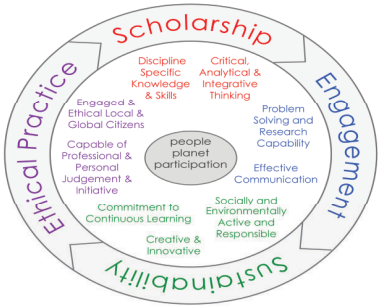
Opportunities

Graduate Capabilities:

- All students to leave with these abilities
- Recalibration of curriculum: learning outcomes alignment

Currently no process to evaluate…



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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!**

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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??

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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…

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A Framework – Defining sustainability

Still missing:

- Definition of 'sustainability' to start the dialogue

Considering UNDESD framework

http://portal.unesco.org/education/admin/ev.php?URL_ID=27234&URL_DO=DO_TOPIC&URL_SECTION=201

- University of Bradford used this successfully

However, discussions with academic staff revealed some resistance to this framework

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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?**

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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

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Visualising the Framework

Level	Supporting structures	Content	Process
1	No explicit support through university frameworks, plans, policies	Acknowledges sustainability is a consideration. This includes limited attention to: Environment – water, energy, waste, deforestation; poverty; health and wellbeing….	Typical teaching framework – lecture, assignment, exam based learning with at least 5% of total assessment including an aspect of sustainability
2			
3			
4			
5			

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

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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

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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

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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

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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

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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!

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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

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Links to Research – Creating hubs

Numerous benefits:

- Financially sustainable
- Supports research priorities
- Demonstrates best practice
- Increase reputation and standing
- Broadens community outreach
- Links campus and research

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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

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