Institutional teaching and learning interventions at UWC: A capabilities perspective

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Structure of Presentation

• Rationale for institutional approach for enhancement of teaching and learning
• The Capabilities Approach
• Development of Strategic Plan
• The Strategic Plan and Charter of Graduate Attributes
• Implementation of the Plan
• A Case Study of the Implementation process – Teaching and Learning Retreats for HoDs
• Institutional constraints and opportunities
Chris Winberg’s (2011) Five generations of Academic Staff Development (ASD)

1. ASD as Technique/technology
2. ASD for student learning
3. ASD for reflective scholarly practice
4. ASD in the disciplines
5. An institutional view of ASD
Institutional approach to teaching and learning

• The dangers of academic ‘development’ being seen as colonisation (Manathunga, 2006)

• Mainstreaming expertise in teaching and learning

• Institutionalising the process
The Capabilities Approach

• Main contributors Sen and Nussbaum

• Central idea - in order to lead a good life and flourish, persons need resources that best suit their particular context-specific circumstances

• Appropriate framework for UWC with struggle history
Capabilities Approach

Functionings as referred to in the capability perspective are beings and doings which are valued by people and capabilities provide the freedom or opportunities to achieve these functionings.
Capabilities Approach and conversion factors

- *Conversion factors* refer to the ability of the individual to translate resources into desired functionings and may be divided into three categories:
  - Personal
  - Social
  - Environmental
CA and Teaching & Learning

• What are valued functionings for higher educators?
• What opportunities are there to achieve these functionings?
• What conversion factors exist to translate desired resources into desired functionings?
CA and Higher Education

• CA can be used in HE for the assessment and evaluation of individual well-being, of social arrangements and of social interventions including social policies (Robeyns, 2011)

• We used the capabilities framework to evaluate the social arrangements at UWC regarding teaching and learning, a particular teaching and learning strategy and a social intervention which is part of the policy and its impact on lecturers' academic well-being i.e. what they were able to be and to do as a result of these social arrangements and this intervention
Background to development of plan

- HEQC institutional audit
- IOP process 2010-2014
- Social justice and ethics of care approach
- Research into students' and staff needs
- Regulatory environment
Research into students’ learning needs
Development of Strategic Plan

• Visits to HEIs and review of International Strategic Plans on Teaching & Learning
• Collaborative engagement across faculties and institutional structures
• Establishment of infrastructure – Senate Teaching and Learning Committee 2008
• SANTED funding – Senior Exec Involvement
Strategic Plan

1. Enhance and promote the status of teaching and learning
2. Develop and promote the scholarship of teaching and learning
3. Professionalise teaching through formal and informal education for academics
4. Infuse technology into teaching and learning and promote the use of e-pedagogy
5. Develop an infrastructure for teaching and learning
7. Develop a more responsive teaching and learning environment which promotes and enhances flexible learning

8. Embed graduate attributes into academic programmes and curricula

9. Enhance epistemological access through responsive teaching and learning programmes and practices that adequately address students' learning needs and that improve retention and throughput for students.

10. Provide a dynamic and relevant academic programme that is contextually responsive
What would UWC Graduate Attributes for the 21st Century look like?
Two tiers of graduate attributes (Barrie, 2004)

Tier 1
‘complex interwoven aspects of human ability’ (Barrie, 2005:3)
• attributes that allow graduates to prosper in an uncertain world of change (Barnett, 2004)
  UWC Charter generic attributes:
• scholarship, citizenship and the social good, lifelong learning

Tier 2
* Clusters of personal skills and abilities (UWC charter)
• Inquiry-focused and knowledgeable
• Critically and relevantly literate
• Autonomous and collaborative
• Ethically, Environmentally and Socially Aware and Active
• Skilled Communicators
• Interpersonal flexibility and confidence to engage across difference
Implementation of the Plan

• Developed by Director, Deputy Deans and T&L specialists
• Faculties/departments developing own aligned plans, faculty teaching and learning committees
<table>
<thead>
<tr>
<th>Strategy</th>
<th>Action</th>
<th>Performance Measure</th>
<th>Expected Outcome</th>
<th>Person Responsible</th>
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<tbody>
<tr>
<td>6. Embed graduate attributes into academic programmes and curricula</td>
<td>6.1 Develop, refine and implement a comprehensive plan to improve graduate employment outcomes and critical citizenship</td>
<td>Graduate attributes developed in each Faculty and each discipline which are aligned to the UWC Charter of Graduate Attributes</td>
<td>Each Faculty and each discipline within Faculties to develop their own graduate attributes aligned to those of the university by end of 2011.</td>
<td>Directors of Teaching and Learning, DLL; Deputy Deans of Teaching and Learning, Teaching and Learning Specialists</td>
</tr>
<tr>
<td></td>
<td>6.2 Ensure that courses have an aligned curriculum programme with UWC Charter of Graduate Attributes.</td>
<td>Number of courses considered to be aligned in terms of graduate attributes</td>
<td>By end of 2012 60% of courses reviewed are aligned to UWC attributes (in moderation documents and departmental reviews)</td>
<td>HoDs; Deputy Deans Teaching and Learning; Teaching and Learning Specialists, moderators, review committees</td>
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<td>6.3 Capacitate UWC senior academics to embed graduate attributes in their programmes holistically through curriculum alignment</td>
<td>Number of Senior Academics in Departments and Faculties who have attended Teaching and Learning Retreats to align curricula</td>
<td>By 2011 10% of programmes show curriculum alignment with graduate attributes</td>
<td>HoDs, Director Teaching and Learning, Deputy Deans Teaching and Learning, Learning Specialists</td>
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<td>6.4 Establish institutional system to assess extent of embeddedness of graduate attributes in programmes</td>
<td>Electronic system assists with alignment of teaching activities, assessment tasks and graduate attributes</td>
<td>By end 2012</td>
<td>Registrar, expert in development of system, Quality assurance manager, Director of Teaching and Learning</td>
</tr>
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</table>
A case study of implementation – HOD Teaching and Learning retreats
Curriculum alignment

- Background and development of retreats
- Purpose, location and
- Reflective and experiential
- Concept mapping
- Curriculum alignment
- Ripple-down or cascading model

Diagram:
- Graduate Attributes
- Learning Objectives
- Assessment Criteria
- Learning Activities
- Assessment Tasks
- Measured against
- Demonstrates attainment of
- Evaluated using
- Prepare the learner for
- Achieved through
- Expands to specific
Concept Mapping

THE NATURAL WORLD

Thinking/seeing like a physicist
Nature of sci. knowledge - constructed, tentative

A modelling approach

What concepts/principles?
How to model & simplify?

What representations? (Diagrams, graphs, models)
Does my solution make sense?

INTRODUCTORY MECHANICS

Concepts

CH1

Momentum

displacement
velocity
acceleration

Linear 1-D

non-linear 2-D CH3

Why do objects move?
Forces

Newton's Laws of Motion

CH4

An external net force changes an object's momentum and energy

Conservation principle

Work, energy, thermodynamics, efficiency

CH5

CH6

What do flowers have?

What is global warming?

Why do I need solar energy?

Cheap solar cells?
Concept mapping

• I realised that the course that I was teaching was not just about learning Physics, it’s about learning to think like a Physicist and to see the world as a Physicist does. But the idea had been deeply implicit and the concept map enabled me to explicitly put that on paper. … Now I use that concept map in my introduction to the course for students to graphically represent that the course isn’t just about the physics content, it’s very much about a way of seeing the world and a way of problem-solving (Margo).
Concept mapping

• What I realise is that the ideas that I use in my teaching are actually threshold concepts, they are concepts that some people have never thought of or that they might resist very strongly. And so working in a small group with colleagues ... these ideas were so foreign and strange, it made me realise that I needed to unpack them a bit more and actually put that concept map on an overhead and go through it and talk about the connections, as opposed to taking for granted that I could talk more quickly and take people with me. I think it made me realise that I need to explain more. (Anna)
Deputy Dean from a Faculty

• The retreat was invaluable and quite humbling because you think you’ve been a teacher forever and you think you know what you’re doing. However going through this process made me aware that one needs to make things more visible and more conscious (Anna).
Number of HoDs participating in teaching and learning retreats

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<th>Jul-10</th>
<th>Nov-10</th>
<th>May-11</th>
<th>Oct-11</th>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>18</strong></td>
<td><strong>19</strong></td>
<td><strong>17</strong></td>
<td><strong>16</strong></td>
<td><strong>14</strong></td>
<td><strong>99</strong></td>
</tr>
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</table>

Table 4.1 Number of HoDs attending workshops in 2010/2011/12
Ripple-down model of T&L development

• Different models of roll-out in different faculties
  ▪ Formal set of workshops with assessment (e.g. CPD points)
  ▪ Departmental days away for curriculum alignment
  ▪ Spaces created by departments for engaging with T&L issues, e.g. regular meetings or workshops
  ▪ Processes driven by Deputy Deans/ T&L specialists or by departments themselves.
Teaching and learning faculty specialist

• ... as we have had more exposure to workshops and discussions [about graduate attributes], and with our series of workshops, we’re hoping to create communities of people talking across departments about issues around the curriculum, around competencies, around the professions (Patricia)
Institutional approach

Enabling Factors

• Part of academic work
• A culture of value for teaching and learning
• A new intellectual space for Teaching and Learning
• Collegiality and communities of practice
• Language to talk about teaching & learning
• Senior academics to drive implementation
• Support from senior management
Constraining factors

• Compliance – resentment
• Research/teaching and learning binary
• Teaching and learning scholarship seen as ‘less than’
• Resources
Conclusion

• Institutional approach to T&L at UWC where senior academics drive the process
• Retreats provide the opportunity for engaging in a conducive setting, a deep rather than superficial way, attention to needs, ongoing supportive and systematic follow-up
• Importance of conversion factors – personal, social and physical environment
Conclusion (contd.)

• Initiatives to enhance T&L institutionally should consider not only what resources are provided, but what lecturers needs are, and what conversion factors exist to acquire the functionings (valuable beings and doings of higher educators)

• Capability expansion of lecturers (and students) cannot be the responsibility of the pedagogical realm alone.

• It should be supported by other institutional policies, practices and social arrangements both nationally and internationally for maximum achievement of improvements in T&L
References

- Winberg, C. 2011. Five generations of academic development. Presentation to the Structure, Culture and Agency Professional Development National Research Foundation project research group meeting, Cape Peninsula University of Technology, Cape Town.
Publication