Embedding graduate attributes in modules/programmes

Adapted from a powerpoint presentations given at the UWC Teaching and Learning Retreat in May 2011 designed and presented by Dr Melvyn November, and in March 2012 designed and presented by Michael Rowe.

What are graduate attributes?

“The qualities, skills and understandings a university community agrees its students should develop during their time with the institution. These attributes include but go beyond the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. They are qualities that also prepare graduates as agents of social good in an unknown future” (Bowden et al., 2000)

According to the DoE Programme for Higher Education Transformation (1997), higher education’s role is to

- promote and develop social responsibility and awareness amongst students of the role of higher education in social and economic development through community service programmes
- produce graduates with the skills and competencies that build the foundations for lifelong learning, including, critical, analytical, problem-solving and communication skills, as well as the ability to deal with change and diversity, in particular, the tolerance of different views and ideas

According to the South African Qualifications Authority (SAQA), graduates need to be able to:

- Identify and solve problems in which responses demonstrate that responsible decisions using critical and creative thinking have been made
- Work effectively with others as a member of a team, group, organisation, community
- Collect, analyse, organise and critically evaluate information
- Use science and technology effectively and critically, showing responsibility towards the environment and health of others
- Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation

To this end, UWC has developed the Charter of Graduate Attributes.

Background to graduate attributes at UWC

Graduate Attributes are broadly understood to speak to what employers and the world of work beyond the university expect of graduates in terms of knowledge, skills and attitudes or dispositions, as well as higher education’s role and purpose in preparing graduates for this world and its expectations.

Components of employer expectations:

- Communication skills
- Technical ability and computer literacy
- Ability to find and access information
- Able to follow and construct logical argument
- General knowledge about local and global affairs
- Interest in ideas and desire to continue learning
- Appreciation of different cultural contexts

There are two tiers of graduate attributes (Barrie, 2004):

Tier 1 includes ‘complex interwoven aspects of human ability’ (Barrie, 2005:3). In UWC terms these translate into ‘generic’ attributes such as:

- Scholarship
- Citizenship and the social good
- Lifelong learning

Tier 2 includes clusters of personal skills and abilities. This translates into attributes such as being or having:

- 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

The UWC Charter of Graduate Attributes

GRADUATE ATTRIBUTE 1: SCHOLARSHIP

A critical attitude towards knowledge

UWC graduates should be able to demonstrate a scholarly attitude to knowledge and understanding within the context of a rapidly changing environment. UWC graduates should have the ability to actively engage in the generation of innovative and relevant knowledge and understanding through inquiry, critique and synthesis. They should be able to apply their knowledge to solve diverse problems and communicate their knowledge confidently and effectively

GRADUATE ATTRIBUTE 2: CRITICAL CITIZENSHIP AND THE SOCIAL GOOD

A relationship and interaction with local and global communities and the environment

UWC graduates should be engaged, committed and accountable agents of social good. They must aspire to contribute to social justice and care, appreciative of the complexity of historical contexts and societal conditions through their roles as professionals and members of local and global communities. They should demonstrate leadership and responsibility with regard to environmental sustainability.

GRADUATE ATTRIBUTE 3:
LIFELONG LEARNING

An attitude or stance towards themselves
UWC graduates should be confident lifelong learners, committed to and capable of continuous collaborative and individual learning and critical reflection for the purpose of furthering their understanding of the world and their place in it.

**GRADUATE ATTRIBUTES: 4-6**

Inquiry-focused and knowledgeable: UWC graduates will be able to create new knowledge and understanding through the process of research and inquiry.

Critically and relevantly literate: UWC graduates will be able to seek, discern, use and apply information effectively in a range of contexts.

Autonomous and collaborative: UWC graduates will be able to work independently and in collaboration with others, in a way that is informed by openness, curiosity and a desire to meet new challenges.

**GRADUATE ATTRIBUTES: 7-8**

Ethically, environmentally and socially aware and active: Should be critical and responsible members of local, national, international and professional communities. They should demonstrate a knowledge of ethical, social, cultural and environmental issues relating to their disciplines.

Skilled communicators: Should recognise and value communication as a tool for negotiating and creating new understanding, interacting with others, and furthering their own learning.

**GRADUATE ATTRIBUTE: 9**

Interpersonal flexibility and confidence to engage across difference: UWC graduates should be able to interact with people from a variety of backgrounds and have the emotional insight and imagination to understand the viewpoints of others. They should be able to work in a productive team, to lead where necessary and to contribute their skills as required to solving complex problems.

**Factors impacting student success and why we need Graduate Attributes**

There is a general and substantiated view that many students demonstrate a lack of preparedness for higher education. This is evidenced in the National Benchmark Tests as well as the role that system differentiation might have to play in addressing under-preparedness.

There is, concurrently, a view regarding the lack of preparedness of academic staff, as well as the nature and organization of teaching and learning in higher education, and the conceptualization of the educational process, particularly in terms of the appropriateness of content and assessment methods. This is particularly important for creating a conducive environment for students to attain graduate attributes.

Further, there is a need to professionalise academic staff and recognise the status and importance of teaching and learning. Caught up in this is the nature and extent of funding of higher education, and limited infrastructural support for flexible delivery of quality services including in the evenings, over weekends and in vacation periods.
So why embed graduate attributes?

Both the previous IOP at UWC (2004-2009) and the HEQC audit emphasised the need to develop graduate attributes as part of an overall teaching and learning strategy and approach.

At an institutional, faculty and disciplinary level:

- Curricula should be aligned to these attributes to ensure the coherence of teaching, learning activities and assessment tasks
- All programmes and services (for example Student Support and Development, DLL and HR) would need to support the development of graduate attributes
- Institutional culture needs to be conducive to enabling the development of graduate attributes

Outcomes from embedding graduate attributes

- Enhance employability and responsible citizenship
- Academic programmes and curricula are streamlined, aligned with graduate attributes, learning outcomes, associated assessment criteria, learning activities and assessment tasks
- Institutional programmes and culture facilitate the development of graduate attributes
- Informed by feedback from the workplace and relevant professional bodies

Curriculum Alignment and graduate attributes

Graduate attributes
(What are the overarching attitudes, skills and dispositions for UWC students?)

Learning Outcomes
(What do I want my students to be able to do at the end of this module?)

Assessment Criteria
What do I need to see to know they can do it?

Teaching and Learning Activities
(What will they be able to do, to know, how will their thinking and behaviour change as a result of the teaching/learning experience?)

Assessment Tasks
(How can I get them to show me those things?)

Assessment Strategy
(How can all my tasks be ‘combined’ to fit the time and cover all outcomes?)

Evaluation
(What do I need to do to improve student learning?)
Graduate attributes are embedded in all the aspects of curriculum alignment that flow from them – all teaching, learning and assessment should aim to develop different, appropriate attributes in students and provide students with opportunities to both acquire and develop the relevant knowledge, skills and dispositions related to their field of study and practice.

Curriculum alignment tables: an example of showing how attributes can be embedded and recognised

<table>
<thead>
<tr>
<th>UWC Graduate Attributes</th>
<th>Learning outcomes</th>
<th>Teaching/Learning activities</th>
<th>Assessment tasks and criteria</th>
<th>Practical</th>
<th>Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inquiry-focused</td>
<td></td>
<td>Class discussion and in-class exercises</td>
<td>Oral presentation</td>
<td>NA</td>
<td>See portfolio assessment manual</td>
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<tr>
<td></td>
<td></td>
<td>Tutorials exercises</td>
<td>Tutorials questions</td>
<td>NA</td>
<td>See portfolio assessment manual</td>
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<tr>
<td></td>
<td></td>
<td>Assignments</td>
<td>Text and exam</td>
<td>NA</td>
<td>See portfolio assessment manual</td>
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<tr>
<td></td>
<td></td>
<td>Pre-reading exercises</td>
<td>Assignments (including computer simulations)</td>
<td>NA</td>
<td>See portfolio assessment manual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peer problem-solving activities in lectures</td>
<td>Pre-reading exercises</td>
<td>NA</td>
<td>See portfolio assessment manual</td>
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<td>See portfolio assessment manual</td>
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</tbody>
</table>

Graduate attributes: Activity

Using your copy of the Charter of Graduate Attributes, choose one attribute, and develop a teaching activity aimed at developing it.

The activity should include learning outcomes, a teaching strategy, relevant content, an assessment task and an evaluation of the activity (30 min)

Share your activity with a colleague or friend, explaining how each of the above components will lead towards the development of the attribute you chose (2 min each). Use their feedback to further refine and develop your activity, and other further activities.

Example activity

ATTRIBUTE:

Critically and relevantly literate: be able to seek, discern, use and apply information effectively in a range of contexts
ACTIVITY:

Assignment: many online sources are inappropriate for academic work. The point of this activity is to identify criteria that you can use to determine the quality of the online sources you choose. We will use Wikipedia as an example.

Provide reading that establishes criteria for the evaluation of online sources

Provide a given Wikipedia page and ask students to evaluate it using the criteria they derive (“Submit a short essay explaining why you would, or would not, use this Wikipedia article for your studies”)

Learning outcome: be able to use criteria to determine the credibility of online sources

Content: articles to derive criteria, Wikipedia page

Activity: essay (with drafting)

Assessment: provide students with rubric

Evaluation: ask for student feedback on assessment task