Understanding Graduate Attributes in a Changing World

Griffith University, 8 October 2005

Simon Barrie
Institute for Teaching and Learning
The University of Sydney
Introduction: A changing world

• The world our graduates need to thrive in is one that is characterised by change and uncertainty

• Knowledge?
• Skills?
• An attitude to Being?
How have universities sought to articulate such purposes?

• **Graduate Attributes:** These are the qualities skills and understandings that a university community agrees its students should develop during their time with the institution and consequently shape the contribution they are able to make to their profession and society….They are qualities that also prepare graduates as agents of social good in an unknown future.

  (Bowden et al 2000)
Statements of generic graduate attributes

• Have potential to articulate newer forms of knowledge espoused by the academic community

• However, rarely gone beyond a limited articulation of knowledge and skills

• What impact have such ideas had on the sorts of educational experiences our students engage in?
Curricula Outcomes

- The rhetoric of policy has not necessarily been matched by the sorts of experiences universities offer to students nor the outcomes their graduates evince.
Why haven’t university communities engaged in an effective way in creating learning experiences for students that achieve these sorts of outcomes?

- [Graduate attributes initiatives in the UK] have had little impact so far in part because of teachers' scepticism of the message, the messenger and its vocabulary and in part because the skills demanded lack clarity, consistency and a recognisable theoretical base. Any attempt to acquire enhanced understandings of practice through which to inform staff and course development initiatives requires conceptualisation and development of models of generic skills.  
  
  (Bennet et al 1999, p 90)
A research based approach to policy and curriculum development

• This research sought to explore how academics understood generic graduate attributes in the context of the courses they taught

• Use this conceptualisation of graduate attributes to engage in policy formation and curriculum development.

• Why this approach?
Why this approach?

• Understanding the different opinions held by members of the university community as to the place of such outcomes amongst the more familiar university learning outcomes and teaching strategies is a necessary precursor to any review of existing policy and meaningful and effective lasting curriculum development.
What was found through this engagement with the academic community?

- A hierarchy of four increasingly complex understandings of the nature of graduate attributes as outcomes.

- Related to these understandings of outcomes were six different understandings of the process of teaching and learning such attributes.

- Certain outcomes were associated with certain processes (Barrie 2003).
Conceptions of Graduate Attributes

• Academics understand graduate attributes in terms of:

  • Precursor Attributes
  • Complementary Attributes
  • Translating Attributes
  • Enabling Attributes
Precursor Attributes

• Generic graduate attributes (GGA) are necessary precursor skills and abilities that are separate to discipline knowledge and learning however they are vital precursors to such (mode 1) learning.

• Most students are expected to have these undifferentiated foundation skills (like English language proficiency or basic numeracy) on entry and any consideration of such skills at a university level would be remedial only.

• As such, these attributes are seen as largely irrelevant in the context of the courses these academics teach.

• This additional remedial curriculum (an additional foundation skills course or a series of remedial workshops or similar support) should be provided by other non-disciplinary teachers.
Complementary Attributes

- GGA are higher (university) level, additional generic outcomes (mode 2) that usefully complement or round out (mode 1) discipline knowledge.

- Functional, atomistic, personal skills that, while an important addition to disciplinary learning, are quite distinct from other university learning outcomes.

- Addressed by the inclusion of an additional unit (or units) of study in a course, an additional series of lectures or workshops within an existing unit, or through the inclusion of a particular learning task to address the development of these attributes. This additional GGA curriculum is part of the usual curriculum for all students.

- GGA do not interact with discipline knowledge and the attributes are essentially generic, although different attributes might be more or less important in the context of different disciplines.
Translating Attributes

• GGA are important university learning outcomes that allow students to make use of & apply discipline knowledge. (Mode 2 knowledge)

• These understandings position graduate attributes as clusters of personal attributes, cognitive abilities and skills of application.

• While still separate to discipline knowledge, graduate attributes are no longer seen as independent of this knowledge. Instead, the graduate attributes interact with, and shape, discipline knowledge (for instance through the application of abstract or context specific discipline knowledge to the world of work and society), and are in turn shaped by this disciplinary knowledge.
Translating Attributes.....

• Because of the relationship between graduate attributes and knowledge in the different disciplines, in these strategies attributes are differentiated by the discipline context.

• Rather than being generic, graduate attributes are specialised and differentiated forms of underlying generic abilities which are developed to meet the needs of a specific discipline or field of knowledge.

• Because of the intimate relation to discipline knowledge these attributes are usually developed within the context of usual classes, either as part of the usual course content, through the usual teaching processes of that content or (from a student centred perspective), through the students' engagement in the course.
Enabling Attributes

• GGA are not seen as parallel learning outcomes to discipline knowledge, but as abilities that sit at very heart of discipline knowledge and learning.

• Rather than clusters of attributes, graduate attributes are understood as interwoven networks of these clusters.

• These interwoven attitudes and capabilities give graduates a particular perspective or world-view (ie a way of relating to the world, or to knowledge, or to themselves). (Mode 3 knowledge)

• GGA provide the skeleton to discipline knowledge and are learnt as an integral part of that knowledge.
Enabling Attributes……

• They might be learnt in the context of discipline knowledge as an integral element of students' experience of engaging in their courses, or through students' engagement in the broader experience of participation in the university community.

• From this perspective, graduate attributes have the potential to outlast the knowledge and contexts in which they were originally acquired. Moreover they provide a framework for engaging with the world and with ongoing learning of new knowledge.

• As such the generic attributes transcend the disciplinary contexts in which they were originally acquired.
A hierarchy of complementary approaches

• A hierarchical approach with **Enabling** strategies subsuming and being supported by **Translating** strategies, which in turn are supported by **Complementary** and **Precursory** strategies.
Benefits of such a hierarchical conceptualisation

• Conceptual basis for thinking about GGA
• Acknowledge mode 3 outcomes from a university education while articulating mode 2 outcomes and recognising the role of mode 1 knowledge
• Based on how the academic community actually thinks about these attributes
• Contribution of the different types of initiatives already in place can be recognised
• Can provide organising principle for range of layered or staged development processes
Policy Revision

• revised to reflect the hierarchical nature of these outcomes
• The over-arching graduate attributes articulate the university’s mission to foster mode 3 knowledge and the distinctive nature and outcomes of a research-intensive undergraduate experience
• The revised policy also articulates a conception of graduate attributes as university level outcomes related to, & developed in discipline context
• The policy also recognises that stand-alone 'generic skills' initiatives provide valuable foundation level support
Revised Policy

• The revised policy identified three overarching (Mode 3, Enabling Conception) attributes:

  • **Scholarship**: An attitude or stance towards knowledge
  • **Global Citizenship**: An attitude or stance towards the world
  • **Lifelong Learning**: An attitude or stance towards themselves
Scholarship: An attitude or stance towards knowledge

- Graduates of the University will have a scholarly attitude to knowledge and understanding. As Scholars, the University’s graduates will be leaders in the production of new knowledge and understanding through inquiry, critique and synthesis. They will be able to apply their knowledge to solve consequential problems and communicate their knowledge confidently and effectively.
Global Citizenship: An attitude or stance towards the world

• Graduates of the University will be Global Citizens, who will aspire to contribute to society in a full and meaningful way through their roles as members of local, national and global communities.
Lifelong Learning: An attitude or stance towards themselves

- Graduates of the University will be Lifelong Learners committed to and capable of continuous learning and reflection for the purpose of furthering their understanding of the world and their place in it.
Each of these three overarching attributes can be understood as a combination of five overlapping clusters of (mode 2) skills and abilities

1. Research and Inquiry
2. Information Literacy
3. Personal and Intellectual Autonomy
4. Ethical, Social and Professional Understanding
5. Communication
A different way of conceptualising the same attributes
A process of engagement? The Working Group

• Conceptual model provides a framework & language for engagement
• Disciplinary (translation level) interpretation
• Engaged in consultation - staff, students, professional accrediting groups, disciplinary employer groups
• Engaged in audit - staff & student experience
• Engaged in collaborative inquiry & curriculum development projects
Research and Inquiry: Graduates of the University will be able to create new knowledge & understanding through the process of research & inquiry

• be able to identify, define and analyse problems and identify or create processes to solve them
• be able to exercise critical judgement and critical thinking in creating new understanding
• be creative and imaginative thinkers
• have an informed respect for the principles, methods, standards, values and boundaries of their discipline and the capacity to question these
• be able to critically evaluate existing understandings and recognise the limitations of their own knowledge
Research and Inquiry at the Conservatorium of Music:

• be able to identify, define and analyse problems in written work, composition, teaching and performance and identify or create processes to solve them
• be able to exercise critical judgement and critical thinking in creating new understandings in relation to music analysis, music composition, music education, music history, music technology, and music performance
• be creative, imaginative and independent thinkers in their musical endeavours
• have an informed respect for the principles, standards, values and boundaries of current music knowledge, pedagogy and performance practice.
• be able to question critically and to evaluate current music knowledge and compositional, pedagogical and performance practices, acknowledging global and historical diversity and recognising the limitations of their own knowledge
What would ‘communication’ look like in your discipline?

• ?

• ?

• ?

• ?
Challenges for developing engagement?

- Time
- Discipline teachers foregrounded
- Learning outcomes & Assessment
- Coordination across subjects
- Coordination across university (foundation)
- Student focused to achieve engagement
- Focus on broader university experience
- Assessment … again
Applications & Implications for Griffith’s Generic Attributes & Engagement initiatives?

• Engagement initiative

• Generic attributes
A curriculum revolution?

• The endeavour by universities to foster the development of generic capabilities in their students constitutes ..... a significant challenge to conventional teaching and learning arrangements. (Bowden et al 2000 p 10)