Developing generic graduate attributes & tracking their acquisition at UTAS

Contents

Why the focus on generic graduate attributes?

Over recent years there has been an increased focus by universities on generic graduate attributes (also known as generic skills and generic capabilities). Graduate attributes have emerged as an important outcome of learning due to a number of factors:

- It is no longer sufficient for graduates to simply acquire disciplinary knowledge to guarantee them a job at the completion of their degree.

- Increasingly, employers expect their recruits to be able to function efficiently in an ever-changing work environment. In order to be able to do this, graduates must be able to solve problems, communicate effectively with clients and colleagues, work in teams, think critically, be creative and have sound information technology skills.

- These days, knowledge becomes very quickly dated. Graduates, in order to maintain their place in the employment market, must become flexible and adaptable to the changing conditions. They need to become lifelong learners, open to new ideas and new ways of learning and thinking.

- Graduates need to achieve and demonstrate to employers their acquisition of generic skills that can be applied in a number of contexts.

Many of our graduates also need to fulfil criteria for membership of professional organisations relevant to their chosen field. Many of our courses are accredited by professional organisations such as the Nursing Board of Tasmania (NBT), the Royal Australian Institute of Architects (RAIA), and the Institution of Engineers Australia (IEAust).

University of Tasmania response

The University has responded by identifying generic graduate attributes it believes are most relevant to student and community needs. These generic graduate attributes outline the overarching skills, knowledge, abilities and qualities that will be developed by students during their studies at the University of Tasmania— irrespective of course/discipline.

The University is committed to ensuring that students graduate with these attributes through the following processes:

- Adopting a set of generic graduate attributes (as outlined in the University Policy on Generic Attributes of Graduates of the University of Tasmania)

- Integrating the generic graduate attributes into the curriculum and evaluation/quality assurance processes

- Supporting students in the development, assessment and documentation of the achievement of graduate attributes throughout their study.

The information and resources below are to assist staff in implementing the Policy on Generic Graduate Attributes of the University of Tasmania.

The five generic attributes of graduates of the University of Tasmania

The University's [Policy on Generic Attributes of Graduates of the University of Tasmania](#) specifies five generic attributes of UTAS graduates. They act as a common set of outcomes expected of all graduates of the University. The development of these attributes will better prepare graduates for employment and life-long learning.

- *Knowledge*

    Graduates will have an in-depth knowledge in their chosen field of study and the ability to apply that knowledge in practice. They will be prepared for life-long learning in pursuit of personal and professional development.

- *Communication Skills*

    Graduates will be able to communicate effectively across a range of contexts.

- *Problem-solving Skills*

    Graduates will be effective problem-solvers, capable of applying logical, critical and creative thinking to a range of problems. They will have developed competencies in information literacy.

- *Global Perspective*

    Graduates will be able to demonstrate a global perspective and inter-cultural competence in their professional lives.

- *Social Responsibility*

    Graduates will act ethically, with integrity and social responsibility. This attribute is complex.

The full text of the University's policy is available at the link above.

University generic graduate attributes and professional accreditation

Many of our graduates need to fulfil criteria for membership of professional organisations relevant to their chosen field. Many of our courses are accredited by professional organisations such as the Nursing Board of Tasmania (NBT), the Royal Australian Institute of Architects (RAIA), and the Institution of Engineers Australia (IEAust).

The University's attributes will articulate with, and complement profession-specific attributes (skills competencies, capabilities). UTAS attributes are sufficiently generic to encompass most if not all professional requirements above and beyond technical competence and mastery of subject matter.

Professional requirements will need to be mapped against the University's attributes statements to determine these relationships (see 'Steps in embedding generic attributes into the curriculum' below).

The benefits of incorporating generic graduate attributes into the curriculum

The incorporation of generic graduate attributes into the curriculum has significant benefits for the University and its stakeholders:

- The identification of graduate attributes will focus the planning, implementation and evaluation of curricula by faculties and schools. Curriculum design, teaching and learning strategies, and assessment activities will reflect a commitment to supporting students achieve generic skills and capabilities as well as discipline-related knowledge and skills.

- Students will have a clear understanding of how the graduate attributes will be developed across subjects and the course as a whole, facilitating their subject choice, selection of appropriate learning experiences, and monitoring of their progress.

- The University's focus on learning experiences that satisfy more than technical accomplishment will communicate to students the value that the institution places on graduates' success upon leaving university.

- Students will be better prepared for the workplace as a result of the development of a broad range of capabilities such as problem-solving, critical evaluation and teamwork. This will enable them to function effectively in their chosen profession.

- Through developing generic attributes in its graduates, the University demonstrates its commitment to producing potential employees who possess the characteristics that employers want.

- Through the adoption of generic graduate attributes, the University is better placed to meet Government interests in producing a more competent workforce — professionals with a broad range of capabilities in addition to discipline-related expertise.

Steps in embedding generic graduate attributes into the curriculum

In order for the University's generic graduate attributes to have any meaning, they must be grounded in the courses and units on offer. This involves two inter-related steps:

Step 1: Development of course/discipline-specific exemplars

This involves translation of the generic graduate attributes into discipline/course-specific statements. The UTAS Policy provides a number of exemplar statements that can be adapted to reflect discipline/course emphases and interpretations, or otherwise augmented to encapsulate intentions.

Step 2: Actioning of course/discipline-specific exemplars

The course/discipline-related expressions of the generic attributes need to be translated into curriculum 'action'— into curriculum design, teaching and learning activities, and assessment. This in turn involves identifying which attributes are currently being addressed in course units, and how they contribute to the attainment of generic attributes across the course curriculum — a mapping exercise. This will reveal where further course development work is needed.

Unit level mapping

This involves, at unit level, mapping of intended learning outcomes against course level exemplar statements developed in step 1 above, to identify which attributes are being developed, and to what extent.
Note 1: Teaching and learning strategies that will contribute towards development of generic attributes need to be identified, as do assessment strategies to measure attainment.
Note 2: Not all generic graduate attributes are expected to be addressed in any one unit. However, it is expected that a few will be relevant.

For unit level mapping tools, see 'Tools to assist staff 'below.

Course level mapping

This involves identifying how each of the units contributes to the course with respect to attributes development so that, across the curriculum, all generic attributes are addressed.

As a result of the mapping process, gaps, overlaps and/or omissions in attribute development can be identified and rectified.

For course-level mapping tools, see 'Tools to assist staff' below.

The following diagram illustrates the hierarchy of attributes statements and who is responsible for their development.

Figure 1: Generic graduate attributes: Statements and responsibilities

Generic graduate attributes plus associated 'descriptors'	—	University (Senate)

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Course-level expressions of generic graduate attributes (the 'exemplars')	—	Faculty/inter-Faculty/School course (development) team

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• Learning outcomes (LOs) • Statement on how LOs and assessment relate to course-level exemplar statements	—	Unit coordinator/teaching team
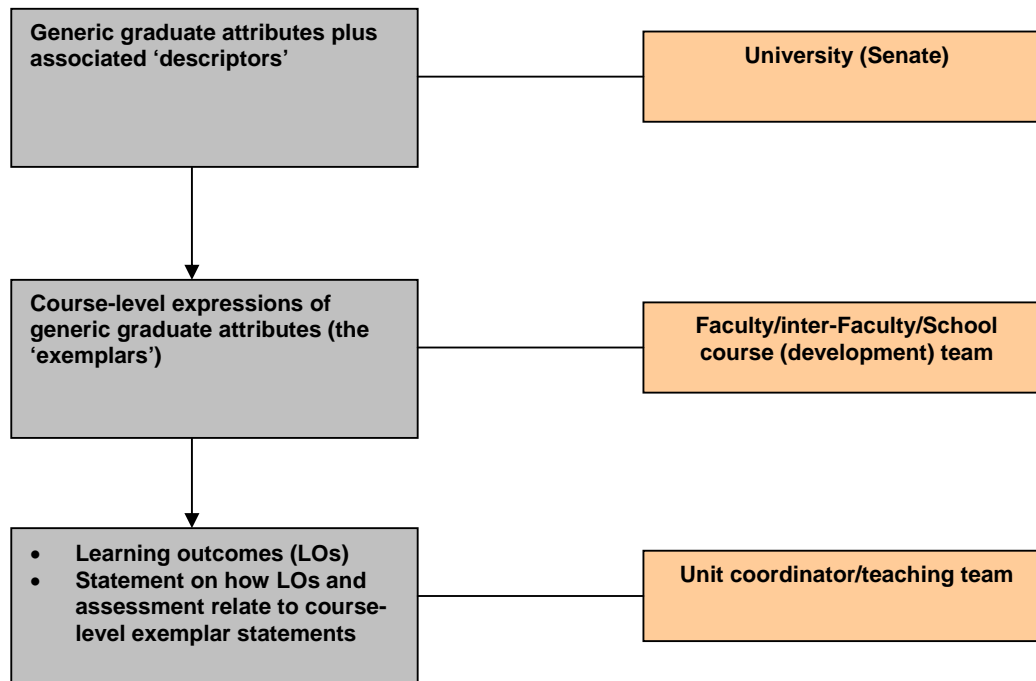
Tools to assist staff

The following tools can assist unit teaching staff, course coordinators and course committees in embedding graduate attributes into the curriculum.

A. Tools to assist the course coordinator/committee

Three tools for incorporating generic graduate attributes are provided to assist staff in reviewing existing courses or developing new courses.

Course level mapping tools (2)
➢ Generic Attributes Overview Map [WORD]
(adapted from University of South Australia) – for mapping where a unit contributes to development of the five UTAS generic graduate attributes. This tool provides the opportunity to examine where the University's generic graduate attributes sit within a course and a summary of unit level mapping activities (see 'Tools to assist the unit coordinator' below).

➢ Generic Attributes Exemplars Map [WORD] – for mapping how each unit contributes to the development of a particular UTAS generic attribute.

See A guide to using the course mapping tools [WORD].

The purpose of both tools is to ensure that the full suite of generic graduate attributes is addressed across the course curriculum.

Course Exemplars Development tool

This tool is for developing course/discipline-specific exemplars statements based on the UTAS generic graduate attributes.

See Developing course/discipline-specific expressions of UTAS generic graduate attributes [PDF] for background information on using this tool, and links to the tool.

B. Tools to assist the unit coordinator

Unit Mapping tool

Unit level mapping not only provides the opportunity for identifying the generic graduate attributes covered within a unit, but also how the attributes, learning outcomes and assessment link together. Use this Unit mapping tool [WORD] to tie the various elements of your unit together.

Learning outcomes and graduate attributes

Advice on writing learning outcomes and linking generic attributes to outcome statements is provided at:
http://uniweb.its.utas.edu.au/dev/calt/tlben/orientation/writing-ga.html

Teaching and assessing graduate attributes

The UTAS cases that follow and experiences at other universities show that a variety of teaching approaches and learning experiences will assist in developing generic graduate attributes.

They also show that assessment practices should align with course/unit goals and outcomes and teaching and learning practice.

Assessment and graduate attributes

The University's *Guide to Assessment Practice* provides detailed information on assessment approaches and provides good practice guidelines. The guide is available at http://www.assessment.utas.edu.au

Case studies

A number of UTAS teaching staff have provided information on the integration of generic graduate attributes into their units of study. The case studies describe how the attributes articulate, to varying degrees, with the learning outcomes and how the attributes are assessed.

Heightening student awareness of graduate attributes development

Students need to be made aware of the links between teaching/learning activities engaged in and their development of graduate attributes. It is helpful if students are provided with the following:

- A copy of the Generic Graduate Attributes as set out by the University

- A statement about the graduate attributes for the specific course/unit students are studying, and

- A unit outline that clearly indicates the graduate attributes associated with the unit's learning outcomes and assessment tasks.

Learning Connection at the University of South Australia suggests that the best way to promote the value of graduate attributes is in the everyday teaching and learning arrangements. This can be done in a number of ways:

- Discuss the graduate attributes your unit will cover in relation to the activities and tasks students are expected to undertake as part of their learning in the unit. Make explicit the connection between these activities and the skills/behaviours related to the attributes students will be developing.

- Spend time reinforcing the relationship between the graduate attributes of the units and program and the expectations of employers and professional associations.

- Ensure that the assessment tasks provide opportunities for students to demonstrate the generic graduate attributes.

Students can greatly benefit from this approach because it allows them to understand the developmental process involved in acquiring graduate attributes. It also provides them with a sense of their own responsibility in the process of learning and a greater awareness of how other experiences can contribute to the development of graduate skills. This approach also empowers students in the employment market, providing them with clear evidence of their achievement of graduate skills and capabilities relevant to their chosen profession.

Students providing evidence of achievement of graduate attributes

Graduates need to be able to provide clear evidence of their achievement of graduate attributes if they are to compete successfully in the job market. This means being able to track their development over the course of the students' time at the University. To do this they need the information and tools necessary to record and assess their progress and experiences in attaining the graduate attributes.

Actions students should be encouraged to take

Recommendations from the UTAS 2003 investigation into tracking generic graduate attributes are that:

1. Faculties and Schools should orient students, at an early stage in their courses, to the need for career planning, tracking graduate attributes and what is required to succeed in the workplace, using the services of the Career Development and Employment Service and the Flexible Education Unit [now Centre for the Advancement of Learning and Teaching], where appropriate.

2. Students should take responsibility for mapping/tracking their development of graduate attributes.

3. Students should be encouraged to make use of the portfolio-building facilities already available on WebCT- *Career Map*.

Tracking & portfolio tools

Student Services and the Centre for the Advancement of Learning and Teaching are exploring possible ways of further assisting students to identify and incorporate their development of graduate attributes into their portfolios, including the use of portfolio-building software. However, if students are to be motivated to use portfolio-building tools, there needs to be some reward or incentive. Otherwise, expensive tools might be developed for use only by a minority of enthusiastic students.

Assessment is an obvious incentive. For schools where portfolio-building already is incorporated into some units it would be possible to incorporate a focus on the University's Graduate Attributes. Other schools might consider the possibility of portfolio-building as a teaching strategy. Victoria University of Technology has adopted the incentive of requiring all students to produce a portfolio as a condition of graduation.

What we want to do is to help students recognise and explain the contribution their course units have made to their development of graduate attributes. The first requirement in fulfilling this aim is to demonstrate to students, in unit outlines and within units, exactly how specific graduate attributes are addressed and developed. Once that level of transparency has been reached, in-house development of a module within *Career Map*, with the specific aim of helping students to incorporate course-related graduate attribute development into their portfolios might be an appropriate way forward.

Self Assessment of Generic Capabilities
Griffith University has developed a question booklet for students organised around their graduate attributes. Faculties/Schools/Disciplines may find this a useful design for developing a recording mechanism for their students. For more information go to
http://www.gu.edu.au/centre/gihe/griffith_graduate/sagc.pdf

What are other universities doing?

Links to what other Australian universities are doing in the area of graduate attributes:

Wollongong University
http://www.uow.edu.au/student/attributes/

University of Canberra
http://www.canberra.edu.au/uc/policies/acad/generic.html

University of New England
http://www.une.edu.au/tlc/aso/gamanual.php

University of Sydney
http://www.itl.usyd.edu.au/GraduateAttributes/

University of Queensland
http://www.uq.edu.au/hupp/index.html?page=25095

University of South Australia
http://www.unisanet.unisa.edu.au/gradquals/

Griffith University
http://www.gu.edu.au/centre/gihe/griffith_graduate/

University of Technology Sydney
http://www.iml.uts.edu.au/learnteach/enhance/design/statement.html

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