Integrating generic skills into the curriculum

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Abstract
Generic skills are defined as those which are achievable, worthwhile and essential for all undergraduate students regardless of their course of study. Generic skills are seen as relevant, useful and durable. They underpin education and provide a basis to support lifelong learning. They revolve around such skills as problem solving, critical thinking, effective communication, teamwork and ethical practice. They are not a replacement for discipline specific skills, rather they should compliment students' acquisition of technical skills and professional knowledge.
What are generic skills?

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Why integrate?

A curriculum-integrated approach offers students the opportunity to develop generic skills and knowledge within the process of learning the content of their chosen discipline. Through teaching methods employed by academic staff and assessment tasks set for students, a broad cross section of skills can be offered (and often assessed). Provision should be made for a developmental progression throughout a student’s course of study and not concentrated on the first or final years of study as is often the case.

Whilst integration is the most effective means of students acquiring generic skills, there will always be a need for development opportunities outside the formal curriculum. For example the types of workshops already offered by the Library, ITS and Learning Development.

What are the generic skills required of a Wollongong graduate?

The Generic Skills Working Party, which was commissioned by the University Education Committee earlier this year, as part of their brief, were asked to develop a detailed list of skills which would be considered generic to all disciplines.

The list of Competencies and Attitudes, arrived at by the Working Party (see below), is essentially not too different from the University’s Attributes of a Wollongong Graduate. The main difference is that the attributes were condensed into six key skill areas which were then unpacked in an effort to describe types of outcomes and performance criteria that could be applied by academic staff to their subject and overall course development, implementation and evaluation.
Competencies and attitudes

1. Is equipped for continued learning, intellectual development and critical thinking.
   - is information literate, that is, has the ability to access, locate, critically analyse, interpret, evaluate and use information
   - observes, describes, documents, interprets, makes decisions
   - articulates, justifies, argues, negotiates and distinguishes fact from opinion
   - challenges assumptions and takes risks in developing responses
   - discusses, applies, reflects on and evaluates their learning
   - critically consumes and evaluates information
   - takes initiative and innovates, is self directing
   - matches needs to resources
   - reasons logically
   - demonstrates willingness to learn
   - demonstrates positive orientation to career and life long professional development
   - appreciates statistics as they apply to her/his discipline

2. Has coherent and extensive knowledge in a discipline.
   - develops a command of existing knowledge in a chosen discipline
   - identifies and devises a series of questions about an issue or phenomenon that would be adequate to initiate a research project
   - willingness to explore the existing body of knowledge
   - explores issues with existing knowledge, including written and oral analysis
   - understands the principles, laws and formulae to use knowledge to solve academic problems
   - knows how to update knowledge and where to do so
   - understands not only the theory of the discipline but also the practical implications and applications of the acquired knowledge
   - appreciates their discipline in a wider social context

3. Communicates ideas and information clearly and fluently.
   - formulates clear concise questions based on information needs
   - organises and synthesises information, in a logical format, for various applications
   - summarises current understandings, explains the main ideas in the field, articulates the current controversy in the discipline
   - uses all forms of expression to communicate knowledge to others — spoken, written, graphic and other non-verbal forms appropriate to the context
   - understands the importance of audience and the relevant registers

4. Works with others and in teams.
   - interacts effectively with other people both on a one to one basis and in groups, to achieve a shared goal
   - develops leadership skills in order to undertake leadership roles
   - understands and responds to the needs of clients
   - develops people management strategies
   - values the opinions of others and appreciates their diversity
demonstrates a commitment to principles of equity
demonstrates the ability to compromise and negotiate
engages in and receives constructive criticism and argument

5. Solves problems and makes decisions.
- critically evaluates information sources
- identifies, responds to and devises solutions to problems
- demonstrates understanding of the research process and recognises when more information is required
- initiates research and projects and accepts responsibility for outcomes
- applies problem solving strategies in situations where the problem and the desired solution are clearly evident and in situations requiring critical thinking
- identifies ethical dimensions of a problem or issue

6. Uses and applies technology.
- is computer literate, i.e. has the ability to use effectively a personal computer, associated peripherals and generic software to find, store, retrieve and manipulate data
- gathers information from a variety of media
- applies technology, combining the physical and sensory skills needed to explore and adapt systems
- applies the most appropriate technologies to the situation

The Generic Skills Working Party will be revising this list in light of the revised Attributes of a Wollongong Graduate, recently published in the University Strategic Plan 1997–2005.

The Working Party was also asked to investigate the current strategies for addressing generic skills across the University. However, in order to undertake a thorough investigation, a research project will need to be implemented in 1998. In the interim however, as a means of raising the issue at a campus level, and gaining a ‘snap shot’ of how academic staff are dealing with generic skills in their curricula, the Working Party conducted a Workshop on August 1st. Participants of the Workshop included representatives from most faculties, support units such as CEDIR, Learning Development the Library and the student body.

The Workshop aimed to:
- gain a sense of what is currently happening on campus through personal reflection and group discussion;
- provide opportunities to discuss the list of Competencies and Attitudes produced by the Generic Skills Working Party;
- share ideas on how to further the integration of generic skills into individual subjects, courses or programs;
- identify barriers and solutions to integration; and
- make recommendations for future support and development.

What have faculties done to date?
The Workshop was essentially interactive. However, prior to discussions, participants were asked to complete a worksheet which posed questions about their implementation of generic skills. Although only a sample of the wider University community, their ‘jottings’ have provided some useful feedback on the current state of generic skills integration.

All participants, with one exception only, answered in the positive to the opening question: *When developing your subjects or courses do you attempt to integrate the University Attributes of Wollongong Graduate?*

A representative summary of participant responses now follows:
- The focus on specific skills and attributes varies greatly amongst faculties.
In science and engineering subjects, technology based skills and problem solving are highlighted more so than other generic skills.

Within humanity based subjects communication skills, teamwork and research skills are emphasised.

Technical skills are perceived to be more easily assessed while ethical and cultural attributes are considered the most difficult to evaluate.

Academic staff on the whole felt they paid most attention to critical thinking, teamwork, communication skills and problem solving.

Several students were of the opinion that academic staff focussed exclusively on developing their discipline knowledge rather than generic skills.

Computer and statistical literacy seems to receive the least attention due largely to the lack of resources (labs) and deficiencies in many academics' own knowledge and skills.

Generic skills are often taught implicitly. Generic skills could be taught explicitly by identifying these skills in subject descriptions and assessments.

There is a need to focus on learning rather than teaching with an emphasis on the process of learning and not having to always be 'right'.

A tendency exists to focus upon easily assessable skills such as library, computer, team work and communication skills while others are neglected.

There is a need for academic staff to collaborate with each other and support staff, to develop clear guide lines, policies and practical resources.

It should be acknowledged that the responses also revealed there to be some very innovative and progressive initiatives occurring in pockets across the University. At the same time it was also mentioned that staff responsible for the latter did not always receive adequate support from their colleagues and/or department heads. A number of these initiatives have been reported in previous editions of Overview.

Progressing integration

When working parties are formed, there is the potential for a lot of rhetoric followed by a lengthy report and then little action. One method of ensuring that this does not occur, is to firstly identify the issues and secondly allocate responsibilities to key personnel.

The responsibilities that the Working Party have attributed to each of the personnel (below) will be presented in the report to the UEC on October 20th. Once approved by the UEC the key personnel will then be responsible for ensuring the integration process progresses beyond the rhetoric.

1. Appointment of a Project Officer: Tertiary Literacies

Cath Milne, has been appointed to the position of Project Officer Tertiary Literacies for a limited term of three years and will commence duties on the 9th of December (see page 56).

Her main responsibilities will be to:

- promote the integration of generic skills information literacies to FECs
- ensure policies and guidelines are established, adopted and documented
- systematically review (in conjunction with FECs and course coordinators), courses from a generic skills point of view and recommend to FECs any changes which could be made
- assess the skills required of academic staff to progress the integration of generic skills, at the Faculty and/or department level
- develop and deliver appropriate training in conjunction with support staff
- liaise with appropriate units to ensure University infrastructure is capable of supporting new approaches to teaching and learning
- form an interest group with the aim of sharing ideas, conducting annual forums etc
- further develop the Information Literacy Web site, for example, include a bibliography of significant
references, provide links to generic skills and information literacy programs both on and off campus
- ensure that official University publications, both print and web, are kept up to date and any changes are reflected in these.

2. Role of Faculty Education Committees
An expected outcome of the Working Party was to provide a set of guidelines, including practical solutions, on how to assist Faculty Education Committees oversee the incorporation of generic skills into subject matter. These solutions include:
- encouraging academic staff to develop their own generic skills by organising non-threatening supportive workshops
- identifying mentors within the Faculty and support peer coaching and team teaching
- systematically reviewing courses from a generic skills point of view in conjunction with the Project Officer: Tertiary Literacies, course coordinators, and support staff. This should be set by UEC as a standard 5 year rolling cycle to mesh with the policy on course development
- introducing a 'course validation' process to ensure attention is being paid to the integration of generic skills
- encouraging academic staff to involve students in the course planning process if this does not this already occur
- explicitly informing students of the objectives of their courses and the reasons for subjects being taught, delivered and assessed in certain ways
- clearly outlining what skills students are expected to acquire through their own initiative and in their own time
- working with support units to ensure that the facilities and services students require are available.

3. Role of Support Staff
University support staff usually refer to all non-academic staff. However, for the purposes of this document support staff includes the Project Officer: Tertiary Literacies, Learning Development, CEDIR, the Library, Careers and ITS. The role of these identified staff include:
- participating in FECs to work with academic staff providing support in their areas of expertise
- providing opportunities for students to acquire generic skills outside of the curriculum through individual consultation, weekly workshops, self-paced programs and interactive media
- participating in teaching and learning forums and committees to keep informed about current developments in generic skills integration
- being proactive in providing appropriate ideas, support and resources
- collaborating on funding projects that will benefit students.

Conclusion
**Collaborate, share and support**

The integration of generic skills into curricula will only progress smoothly and successfully if everyone is willing to work together at all levels; department, faculty and University. This implies that academic and support units, administrative and technology services as well as students need to work together sharing responsibilities and initiatives.

A full report from the Generic Skills Working Party, once approved by the UEC, will be available from participants of the Workshop, Deans and Chairs of FECs.