**Assessment tasks**

Teaching staff can choose from a wide range of different types of assessment tasks to assess student learning outcomes. Some examples are: exams (including multiple choice questions); essays; debates; case studies; written memos; projects; portfolios; artefacts; and oral presentations. Many assessment websites exist. Boud’s ‘Assessment Futures’ may be of value to staff rethinking their course assessment ([http://www.iml.uts.edu.au/assessment-futures/](http://www.iml.uts.edu.au/assessment-futures/)). He provides assessment examples by discipline at [http://www.iml.uts.edu.au/assessment-futures/subjects/examples/business-example.html](http://www.iml.uts.edu.au/assessment-futures/subjects/examples/business-example.html).

**Integrative assessment tasks**

Generally, *integrative assessment tasks* are designed to help students see the connections between the knowledge, skills and graduate attributes that they study across a program.

Crisp suggests that any program should have four different assessment tasks, ‘diagnostic’, ‘formative’, ‘summative’ and ‘integrative’. Their different outcomes and rewards need to be clearly explained to students. The first three tasks facilitate and test current learning whereas integrative assessment tasks “enhance future learning” (2012, p.33):

…”by providing activities that define and track strategies that students use to assess their own learning abilities and problem solving capabilities, the quality and standards of student responses and how students might adapt their learning to future scenarios.

Crisp’s assessment framework (Ibid.) is useful whatever type of integrative assessment you choose. There are numerous examples from many disciplines in the literature, but common integrative tasks include those listed below, with brief exemplars:

**Capstone projects**

While the AQF does not limit these with a definition, some suggested capstone project outcomes are decision making, critical thinking, collaborative/professional relationships, oral and written communications and problem solving (Moore, Odom & Weid (2011). Synthesising and connecting are critical to these but often neglected in practice. In a leadership education context these authors used Gardner’s ‘5 minds for the future’ framework to design a capstone assignment to help student develop these new ways of thinking (2008, p.3, in Moore et al., p.125) as well as achieving the decision making, critical thinking, and written communications outcomes.

Dunlap (2005, p.81) recommends “involving students in authentic and real problem-solving activities throughout their academic programs” rather than leaving it to the end. She used a problem based learning (PBL) based approach with guided reflective journals to help computing science students integrate knowledge and experience and found significantly increased perceived ‘self efficacy’, based on a pre and post administered Self Efficacy Scale.

**Portfolios**

Portfolios are “a purposeful compilation and reflection of one’s work, efforts and progress” (Milman, 2005, in Bhattacharya & Hartnett, 2007, TIG19). Electronic portfolios or e-Portfolios “add ‘a mechanism for documenting growth and achievement of professional knowledge and skills” (ibid.). Some software systems are regarded as more effective than others (Fielke & Quinn, 2009). Portfolios can be used as a course to integrate learning from other program courses, or as a capstone requirement. For example, an e-portfolio is used as part of one Engineering Internship course in which students' full-time work in industry is assessed for academic credit. Two of the four assessment items involved the e-Portfolio, the Internship e-Portfolio and the Internship Report. Student outcomes are “Apply knowledge of engineering in similar and/or new situations; Assess when new knowledge is required and demonstrate competency in obtaining and applying this knowledge; Integrate existing and new technical knowledge for industrial application; Demonstrate…“
relevant Stage 2 Engineers Australia technical competencies; Discuss the concept of lifelong learning through critical reflection of work experiences and processes” (Kane, Blackmore & Compston, 2011).

Research-based projects
A project should help a student “to become more accomplished at systematically documenting (and reviewing what can be learnt from) observations, experiences, reflections and insights when engaged in an ongoing task or activity” (Sharp, 2007). Projects may form an alternative to a piece of scholarship such as a dissertation, but still involve independent research and inquiry. They may be “wider in their:
- conception (e.g. collaborative projects as part of a research group; consultancy projects);
- function (e.g. synthesising capstone projects; preparatory projects for transition into a profession);
- form (e.g. student group projects);
- location (e.g. employer and community based projects); and/or
- how they are disseminated (e.g. through exhibitions, undergraduate research conferences and other forms of public engagement)” (Healey).

A minor thesis
A minor thesis is an ideal assessment task for some students to demonstrate that they can integrate concepts, ideas and actions in a relevant area. Sanzon, Myran & Clayton (2011) argue “for research efforts that are fully integrated into practice, through university scholars who can integrate research and practice into purposeful efforts that produce useable knowledge”. For example, a nursing student could prepare a report on a practical problem but would need to base this in a theoretical framework, as well as demonstrate advanced information retrieval and report writing skills.

Reflection
“Critical reflection and integration processes differentiate work-integrated learning from work experience programs” (Orell, 2011, p.7). Reflection involves critiquing assumptions to determine whether any belief, often acquired through cultural assimilation in childhood, remains functional for us as adults. We do this by critically examining its origins, nature and consequences, often through problem solving (Mezirow, 1994).

Benefits include encouraging metacognition, critical thinking, can be enhanced by collaboration, making sense of events, encouraging the examination and evaluation of assumptions and beliefs, the potential to enhance creativity and improving cognitive ability (Bhattacharya & Hartnett, 2007, T1G-20). These authors offer a rubric to guide teachers and students as to the elements of quality reflection and to help assess it. Effective reflection requires scaffolding and support. Critical reflection requires encouraging students to develop on a continuum from ‘thinking critically to understanding themselves critically to ‘acting critically (Barnett, 1997, p.4).

Innovative approaches
New technology such as Virtual Realities (VR) simulations can address a lack of funding or work placement opportunities. In one game and problem-based virtual engineering environment, “successful task completion was rewarded with knowledge acquisition, and users confronted typical plant operation issues and deposited concepts tools into a knowledge bank linked to a user-generated concept map” (Cameron, in Orell, 2011, p 39). Using new technologies for individual and collaborative learning is pedagogically complex (Dillenbourg & Jarman, 2007). Other examples replace written reports and/or individual class presentations with poster presentations, so students could review their internship and reflect on their learning experiences and development of capabilities (McNamara, Larkin & Beatson, 2010). Multidisciplinary assessment criteria are included.
Alverno College (USA) aligns curricula throughout its programs, towards a “goal of graduating learners who can integrate and apply, adapt and transfer what they have learned to settings these learners have not yet fully experienced or even imagined (Mentkowski & Sharkey, 2011, p.100).

References


Healey, M. insight.glos.ac.uk/tli/activities/ntf/.../Mick%20Healey%20Presentation.ppt


