

WHAT'S HAPPENING IN ASSESSMENT?

October 2009

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This document provides information on the assessment initiatives of the Australian Learning and Teaching Council.

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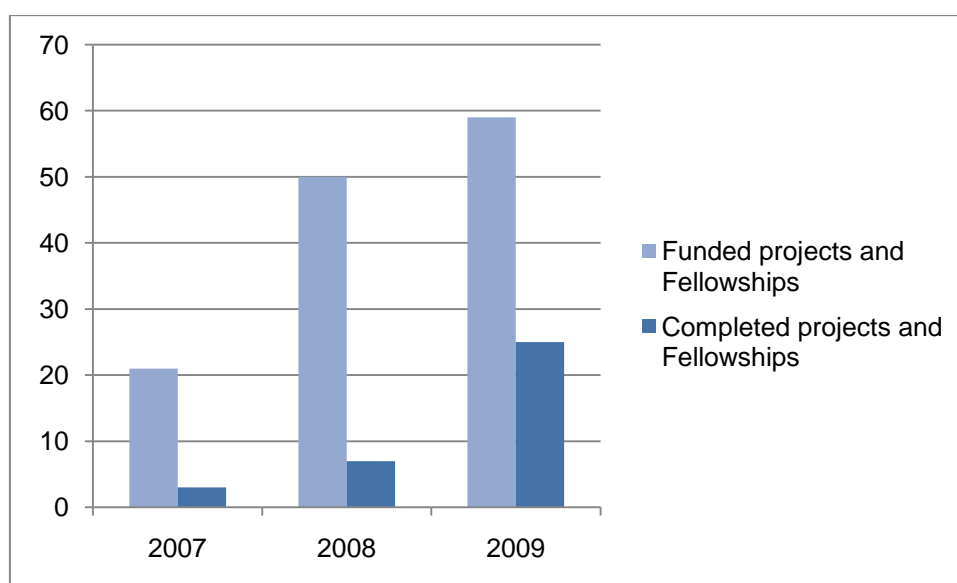
PREFACE

When the Australian Learning and Teaching Council (ALTC) started operations in 2005, academic standards, assessment practices and reporting were among the ALTC's designated responsibilities and priorities as determined by the ALTC Board. Over the years, the number of projects and fellowship programs focusing on assessment has grown substantially and this remains one of the priority areas which attracts a significant number of applications with each new funding round.

This report provides a brief background of each project and fellowship focusing on assessment, its outcomes or progress to date, the lead institution and the project leader. The 59 projects and fellowships are grouped according to disciplines to provide a sense of the issues being addressed and the people to approach for future collaborative research projects, on the premise that disciplinary collaboration is one of the more effective means of capacity-building. Within each discipline group, the projects and fellowships are ordered by their status, that is, completed, ongoing and newly funded. Potential applications could either build on recommendations arising from the completed projects and fellowships or put forward new ideas for future funding rounds.

In November 2008, the ALTC counted up to 50 funded projects and fellowships related to assessment. The 2008 *What's happening in assessment?* report included seven fully completed projects and fellowships. A further nine have been funded this year, and a substantial number of projects and fellowships have been completed. From the 59 projects and fellowships outlined in this report, 25 are completed to date.

The following chart displays the number of projects and fellowships pertaining to assessment funded by the ALTC and of completed projects and fellowships per year, since 2007:



OVERVIEW

The different projects and fellowships are arranged according to eight discipline groups: Architecture and Building; Arts, Humanities and Social Sciences; Business, Management and Economics; Creative and Performing Arts; Engineering and Technology; Health, Medicine and Veterinary Science; Law; and Science (there have been no assessment projects in Education and Human Services). Owing to the nature of assessment, which is applicable across all disciplines, the last section includes non-disciplinary projects.

Architecture and Building

The one project in this grouping developed a set of guiding principles for enhancing assessment practices and academic standards for structured work placement (*PP6-47*).

Arts, Humanities and Social Sciences

Three projects constitute this category and, respectively, address archaeology, social science and psychology. The archaeology project contributed to drafting a benchmark document representing cross-institutional approaches to the discipline standards and assessment (*PP6-53*). The project in the social sciences aims to strengthen links between assessment tasks and teaching outcomes by refining and evaluating a model for analysing and improving the quality of assessment tasks in the social sciences as well as other fields (*PP7-320*). The psychology project aims to align competencies and the curriculum in clinical psychology with best practice, to prepare new graduates to function in the current and future mental health service climate (*PP8-900*).

Business, Management and Economics

Two projects sought to ensure equivalency in quality assessment practices in accounting (*PP5-43* & *PP7-352*). For this purpose, the first one produced a manual explaining appropriate assessment practices for various categories of students, with examples of assessment. In the field of business education, one project promoted and supported strategic change in advancing graduate attribute development through engagement of staff and students in graduate attribute assessment (*PP7-322*). Another aims to take a strategic approach to building and assessing the development of generic skills as a key component of the business curriculum (*PP8-935*).

Creative and Performing Arts

Assessment of creative and performing arts could present a challenge, given the collaborative nature of assignments and the subjectivity resulting from the nature of the discipline itself. One project investigated best practice for group assessment, which is inherent in authentic assessment tasks in media and communication (*PP5-44*). Another project aims to build on this work, focusing its investigations on the definition, test, validation and regulation of academic standards, assessment and reporting practices for creative works produced by graduating film school students in 19 Australian film schools (*PP8-926*). Another produced a booklet of guidelines for the examination of higher degrees in dance (*PP6-45*). A recently funded project will analyse authentic Web 2.0 assessment scenarios



and criteria in the disciplines of interactive media, games and digital design (*PP9-1373*). Finally, a fellowship program concentrates on the effective use of assessment, analysing the learning environments that work for tertiary music performance students and staff, and is aiming to establish a process whereby performance teaching practices can be reshaped to support an effective learning environment; where feedback aligns to the expectations of what is being assessed; and where study results in valued graduate attributes (*Dr Heather Monkhouse, 2008 ALTC Teaching Fellow*).

Engineering and Technology

Six projects comprise this section. One project developed an advanced immersive learning environment for engineering students to deepen and enhance their knowledge and understanding of complex process systems (*CG6-21*). Another disseminated good practice in teaching, assessment and curriculum restructure to improve graduate attribute learning in engineering students, and developed a national leadership for changing the engineering curriculum (*CG6-23*). A recently funded project aims to promote active learning in first year science, technology, engineering and mathematics disciplines (STEM) to ease student transition and enhance learner outcomes, by the creation of extended learning experiences (*CG9-1112*). Spatial ability, which can be defined as the ability to visualise how objects appear at different angles and relate to each other in space, is an emerging need in engineering education. One project will therefore develop an online resource to assess and improve students' spatial ability (*CG7-524*). In order to provide automated formative and/or summative assessment of students' scripting skills, one project redeveloped and disseminated a software system (*PP6-29*), and another aimed to produce a collection of integrated software systems (*PP6-48*).

Health, Medicine and Veterinary Science

A total of 15 projects related to assessment in an increasingly diverse health education sector have been funded by the ALTC, addressing the need for skilled graduates in an industry in constant shortage.

Three projects sought to develop the capacity of speech pathology practitioners and academics. They particularly build on the development of COMPASS™, a competency-based assessment tool designed to assess the performance of speech pathology students in their placements. One project succeeded in integrating the tool within learning, teaching and assessment practices across 13 programs nationally and the national network extended to programs from New Zealand (*LE6-6*). Another succeeded in achieving the embedding of the tool into clinical education curricula across Australia and New Zealand, developing a model for ethical cross-institutional benchmarking of students' learning outcomes (*PP6-26*). The third project builds on the completion of the first two, to develop tools for benchmarking student progress collaboratively across higher education programs, through the application of innovative technology to inform and improve educational practice (*PP8-955*).

The emergence of e-learning environments within health education is addressed through four projects, which sought to improve students' communication, practical and professional skills by developing online assessment tools. One project developed clinical consultation skills using simulated client scenarios in veterinary education (*PP7-340*). Another project



studied the inclusion of interactive video analysis in five undergraduate professional programs (CG7-385). A third aims to elaborate a realistic computer-generated patient for assisting pharmacy students to practice communication, diagnostic and clinical skills in managing minor illnesses (CG7-431). The fourth developed online clinical assessment of practical skills for health professionals within web-based courses (PP8-893).

Two projects took work on existing schemes successfully implemented in one discipline, to extend their impact into a broader range of areas. One fellowship program extended 'Teaching on the Run', a modular staff development program proving to be a successful and sustainable platform for providing doctors with skills to teach and supervise students, to physiotherapy, nursing, veterinarians and multi- and inter-professional disciplines (*Professor Fiona Lake, 2006 ALTC Associate Fellow*). A newly-funded project aims to extend an effective blended learning initiative in a single discipline in the Bachelor of Medicine and Bachelor of Surgery into other critical areas of tertiary medical education (CG9-1068).

The need for development of a standardised national competency assessment tool constitutes the basis of two projects. One project concentrated on the need to elaborate standards of practice within the discipline of physiotherapy. The project developed a standardised instrument to assess clinical performance of physiotherapy students, to replace the 25 distinct assessment forms in use (PP6-28). In the discipline of nursing, one project aims to develop a nationally agreed competency assessment tool, to be used in undergraduate programs across Australia (CG7-523).

One project focused on supporting staff working with students with disabilities to improve these students' outcomes. This project sought to develop a process for implementing recommendations that increase usage of the resource 'Creating Accessible Teaching and Support for students with mental health conditions' (CATS) (CG7-543).

Another project aims to develop effective, collaborative, cross-disciplinary leadership frameworks which enhance the professional preparation of multidisciplinary mental health workforce (LE8-777).

Two fellowship programs focus on improving students' communication skills. One aims to enhance students' writing skills in health courses, through improving teaching and assessment practices (*Dr Roger Moni, 2007 ALTC Associate Fellow*). Another involves the development of curriculum initiatives around professionalism, lifelong learning and leadership skills; and practitioner-targeted exemplar materials in pharmacy, that are adaptable to allied health and nursing programs (*Associate Professor Ieva Stupans, 2009 ALTC Teaching Fellow*).

Law

The one project in this grouping explores the academic standards in graduate professional entry courses in accounting and law (PP9-1386).



Science

A number of projects sought to address the issue of the diminishing number of scientifically skilled graduates in Australia. One project developed an online assessment system to improve human biology students' evaluation, particularly in large classes (PP5-41). Another developed and strategically disseminated resources designed to enhance the assessment of learning in the biological sciences in Australian institutions (PP5-32). Two other projects targeted the need to provide assistance to educators to enhance their teaching and assessment skills, through the development of clear and user-friendly resources available to all academic staff (*Professor Helen MacGillivray, 2006 ALTC Senior Fellow*), and a web-based assessment tool (PP7-350). In the discipline of biological sciences, one project investigated current teaching practices to enhance students' learning of scientific inquiry skills (CG8-763).

Non-disciplinary

As assessment is a core learning and teaching issue across the disciplinary spectrum, many assessment-related projects address the question through a non-disciplinary approach.

To enhance assessment practices, one project studied the development and trial of a leadership capacity development framework (LE6-19); another concentrated on a sustainable and systematic leadership and organisational development model, an assessment policy framework and collaboration at all levels across disciplines (LE6-12). Three projects sought to influence change strategies in assessment policies, through building the capacity of course coordinators (*Professor Marilyn Goos, 2006 ALTC Associate Fellow*); developing a set of practical guidelines (PP8-874); and linking international research on the beneficial influence of assessment on student learning with Australian policy and practice (*Professor David Boud, 2007 ALTC Senior Fellow*). A recently funded project focuses on disciplinary epistemologies within curriculum, learning, teaching and assessment practice to deepen discipline-specific forms of thinking and reasoning (CG9-1114).

In response to the increased internationalisation of programs, one project aims to identify and promote good practice across disciplines and countries in processes associated with moderation of assessment from both quality assurance and quality control points of view (PP8-906).

The importance of e-learning is underlined by the number of projects funded by the ALTC. One project extended the work commenced by the Australasian Council on Open Distance and E-learning (ACODE) in the use of benchmarking to improve technology-mediated learning and teaching, through dissemination and training (G17-630). One fellowship program succeeded in promoting and advancing learning and teaching by enhancing approaches to e-assessment through the articulation of design principles and disciplinary examples of usage and effectiveness (*Professor Geoffrey Crisp, 2006 ALTC Associate Fellow*). The development of applications is the purpose of two projects: one developed an online tool to support peer assessment and review in large group work projects (PP6-49) whereas the other sought to create an advanced marking assistant software application to enable teachers to use best practice feedback and assessment methodologies (PP6-54).



Another project, funded in two stages, created the ReMarks PDF Markup Editor designed to support an electronic marking system. A recently-funded project aims to create a system implementation protocol to deliver a range of licensed simulation software across the sector (CG9-1135). Two other newly-funded projects take into account the changing nature of online technologies: one project investigates new directions for assessment and academic integrity following the emergence of Web 2.0 authoring tools (PP9-1350); and one fellowship program aims to exploit the internet's capacity for enhancing student learning, by investigating new methods of online learning (*Associate Professor Matthew Allen, 2008 ALTC Teaching Fellow*).

One fellowship developed a transition pedagogy for first-year students (*Professor Sally Kift, 2006 ALTC Senior Fellow*) and one project also focuses on students' early experiences by aiming to improve assessment practices and student learning outcomes (PP8-891).

Generic attributes are considered to describe the core outcomes of higher education. It is necessary for institutions to ensure that their graduates possess these attributes, highly valued by employers. One example is teamwork: the object of one project (CG7-531). Two others aimed to increase the integration and assessment of graduate attributes by reinvigorating the implementation process of graduate attributes across Australian institutions and establishing collaboration between discipline experts and strategic learning and teaching leaders across the country (G17-633); and by addressing key success factors of academic staff beliefs and attitudes towards graduate attributes and their impact on integration initiatives (G17-638).



1. ARCHITECTURE AND BUILDING

1.1 Generating academic standards in planning practice education (PP6-47)

Lead Institution: RMIT University

Partner Institution(s): Griffith University, La Trobe University

Project Leader: Dr Martyn Jones

Background

This project investigated the understanding of academic standards within the discipline of urban and regional planning. It focused on academic standards, assessment practices and student outcomes in planning practice education. The project design involved a national scoping and review of planning practice education and an empirical enquiry into the views and experiences of planning educators, planning practitioners and planning students. The design also included development and dissemination of models and materials for the enhancement of assessment practices and academic standards and strategies for achieving change.

Outcomes

The project affirmed that the discipline places a high value on preparing students for professional practice. The project showed how practice is rendered a legitimate part of academic endeavour. Achieving practice capability is seen to encompass complex learning outcomes that are best fostered in learning which is situated in real world tasks. Generating academic standards and associated assessment practices suited to such learning outcomes requires a re-appraisal of familiar understandings and practices that are embedded in more conventional, class-based educational activities. The project developed a set of guiding principles for enhancing assessment practices and academic standards for structured work placement. These principles reflect a more conjoint and coherent approach between institutions and the planning industry. The professional accrediting body is seen to have a role in generating a sense of shared purpose between institutions and the planning industry in the development of student practice capability.

Project Completed: December 2008

<http://www.altc.edu.au/project-generating-academic-standards-2006>



2. ARTS, HUMANITIES AND SOCIAL SCIENCES

2.1 Benchmarking archaeology honours degrees at Australian universities (PP6-53)

Lead Institution: University of New England

Partner Institution(s): Joint Implementation Committee for Archaeology Teaching and Learning, Australian Archaeological Association

Project Leader: Associate Professor Wendy Beck

Background

The project aimed to enunciate a discipline-based standards framework, including levels of achievement and broad criteria for learning outcomes, through a benchmark document to be widely disseminated to stakeholders. The project team also aimed to involve teaching staff directly in an ongoing discussion on the standards building process.

Outcomes

The project brought together all 10 university providers of specialist archaeology education and the profession to implement and map cross-institutional approaches to archaeology standards and assessment. Representatives from these institutions all contributed to the drafting of the benchmark document which is publicly accessible on the website <http://www.australianarchaeologicalassociation.com.au/ANCATL>. It was agreed that all Australian institutions should investigate further collaborative practices such as joint teaching programs, particularly across specialist sub-fields, as well as the sharing of facilities or equipment where practicable. Although numerically the discipline is a comparatively small one in Australia, it is a field of practice with integral links to both industry and cultural heritage agencies, as well as a field with generalist humanities education outcomes. By ensuring that archaeology degrees have agreed standards and assessment approaches, educational goals can be made explicit to employers, the profession and the academy and the relationship between all stakeholders accordingly strengthened and enhanced. This will also ensure the transferability of degrees both nationally and internationally.

Project Completed: December 2008

<http://www.altc.edu.au/project-benchmarking-archaeology-honours-2006>



2.2 Quality assessment: linking assessment tasks and teaching outcomes in the social sciences (PP7-320)

Lead Institution: The University of Newcastle

Project Leader: Associate Professor Jenny Gore

Background

The project aims to strengthen links between assessment tasks and teaching outcomes by refining and evaluating a model for analysing and improving the quality of assessment tasks in the social sciences as well as other fields. The model was developed from work done by project leaders on quality teaching for school education. Core standards of the model dictate that assessment tasks must promote high levels of intellectual quality, scaffolding and significance. The application of these ideas in the tertiary sector requires further exploration. The project will develop a deep understanding and finely tune skills among participants in analysing and refining assessment tasks as a critical component of their teaching; and ultimately lead to a higher quality of teaching in universities.

Progress

Once first year course coordinators were identified and 17 participants had agreed to take part in the refinement of their assessment tasks, the project team started the initial development of the instruments. The model was completed for the analysis of the quality of assessment tasks in the school context. Project members held one-on-one meetings with the participants to discuss the quality of the assessment tasks. The pedagogical principles underpinning this project were discussed and feedback was provided on the quality of their tasks. Participants were also introduced to the model and feedback guided modifications to the model. Their feedback also acknowledges the viability and useful contribution the assessment practice guide had on their assessment practice. A preliminary analysis and reporting on the relationship between task quality and student outcomes was completed and presented at the Australian Association for Research in Education annual meeting (December 2008). The model refinement workshop was planned for Semester 1, 2009.

Project Commencement: August 2007

Project Completion: November 2009



2.3 Taking clinical psychology postgraduate training into the next decade: aligning competencies to the curriculum (PP8-900)

Lead Institution: The University of Queensland

Partner Institution(s): Griffith University, Macquarie University, James Cook University and Swinburne University of Technology

Project Leader: Associate Professor Nancy Pachana

Background

Given the evolution of clinical psychology in the last decade including allowing psychologists to bill under Medicare, the strong endorsement from the Commonwealth Government to increase the size of the overall cohort of clinical psychology graduates, and the imminent introduction of a national registration board, this project aims to align competencies and the curriculum in clinical psychology with best practice for new postgraduates, so that they are prepared to function in the current and future mental health service climate.

Progress

An initial face-to-face meeting with all partners took place in February 2009. Each institution has undergone a scoping and mapping exercise to collect information about: current competencies and practices; empirically-based best practice for the delivery of clinical services; and teaching and learning best practice for professional training. A conference of the team members and reference group was planned at The University of Queensland in August 2009. A regular project newsletter and a community networking site have been established to ensure availability and sharing of all resources. Survey instruments have been prepared to collect data from clinical postgraduate students and directors of clinical programs.

Project Commencement: September 2008

Project Completion: February 2011



3. BUSINESS, MANAGEMENT AND ECONOMICS

3.1 Assessing students unfamiliar with assessment practices in Australian universities (PP5-43)

Lead Institution: RMIT University

Partner Institution(s): CPA Australia, Singapore Institute of Management, Hong Kong Management Association

Project Leader: Professor Margaret Jackson

Background

Over the last 15 years, the profile of students enrolled in Australian accounting programs has changed dramatically. While professional bodies based their accreditation guidelines on the requirement of equivalency of content and assessment, it is unclear how assessment undertaken by students ensures equivalency. This project investigated the challenges relating to quality assessment practices in the context of accounting education in an international environment. A variety of assessment tasks to ensure equivalency of content and learning outcomes, irrespective of the location of an enrolled student, was identified and implementation strategies developed.

Outcomes

The project delivered a manual, *Inclusive assessment: improving learning for all*, for academics. It explained appropriate assessment practices for different categories of students and provided examples of assessment, designed to accommodate the diversity of student approaches to learning, particularly those students unfamiliar with assessment practices in Australian institutions. The manual is a valuable resource for academics accounting and accrediting bodies operating in Australian higher education. The mapping of generic accounting skills and graduate capabilities led to a clear understanding that generic skills must be developed across an entire program basis to determine where there are gaps and overlaps. As a result of the project's research, a variety of assessment tasks was introduced, end-exam marks/percentages reduced, more implicit assessment required and students are provided with earlier feedback and progressive learning opportunities.

Project Completed: December 2006

<http://www.altc.edu.au/project-assessing-students-unfamiliar-rmit-2005>



3.2 Facilitating staff and student engagement with graduate attribute development, assessment and standards in business faculties (PP7-322)

Lead Institution: University of Technology, Sydney

Partner Institution(s): Queensland University of Technology, The University of Sydney, The University of Queensland

Project Leader: Professor Tracy Taylor

Background

Graduate attributes are crucial to Australian business schools seeking to attain international accreditation with the European Quality Improvement System (EQIS) or the Association to Advance Collegiate Schools of Business (AACSB). The quality assurance process of AACSB requires each degree program offered by a business school to specify learning goals, and demonstrate how the curriculum supports a student's achievement of learning goals for key management-specific knowledge and skills. The aim of this project was to promote and support strategic change in advancing graduate attribute development in business education, through engagement of staff and students with learning and assessment processes that embed graduate attribute development. This process is supplemented where appropriate by using a pre-existing online assessment system, ReView. The system allows staff to engage with graduate attributes by developing criteria that assesses graduate attributes within the set assignments.

Outcomes

The project developed valuable resources. ReView was further developed and refined to meet the needs of the business schools. It proved to be a valuable resource for facilitating the improvement of teaching and learning (particularly assessment), course (unit of study) design and management. Video footage on how staff and students engage with graduate attributes, journal articles, and national and international conference presentations are key deliverables of the project. Staff awareness of graduate attributes increased as did establishment feedback mechanisms aligned with graduate attributes. Tutors' marking became more standardised, owing to course coordinators' monitoring and discussing tutor performance levels via the online software system, enabling greater understanding of standards. Substantial enhancement in the alignment of learning and teaching elements in several courses in business programs was achieved and the project has impacted on faculty policies. Valuable learning was enabled (at individual and group levels) about key concepts and there is an increase in awareness of the meaning and relevance of graduate attributes for learning and teaching, particularly at the course level. Another important outcome of the project is its leadership of a critical review and clarification of learning goals. A community of practice has developed around the project which has designed a process to aid the alignment and assurance of graduate attributes. These practices are applicable to the lead and partner institutions but also to a range of business and other disciplines nationally and internationally. Further projects should look at operating collaborations on multiple levels (e.g. policy makers, associate deans, and learning and teaching staff).

Project Completed: August 2009

<http://www.altc.edu.au/project-facilitating-staff-student-uts-2007>



3.3 Enhancing assessment feedback practices in accounting education: issues, obstacles and reforms (PP7-352)

Lead Institution: James Cook University

Partner Institution(s): RMIT University, The University of Adelaide, The University of Melbourne, CPA Australia, Accounting and Finance Association of Australia and New Zealand (AFAANZ)

Project Leader: Professor Brendan O'Connell

Background

The purpose of the project is to enhance student learning by identifying current and best practice in assessment feedback in accounting education, developing strategies to raise awareness of best practice in Australian institutions, and to embed best practice in accounting program nationally. This embedding will occur through a working group and the integration of feedback reforms into the accreditation requirements of the professional accounting bodies such as CPA Australia and AFAANZ, which are mandatory for accounting programs.

Progress

Ethics approval in lead and partner institutions was secured to conduct focus groups and administer surveys, with separate instruments being developed for students and staff. Reference group members provided input and feedback before pilot testing. The surveys were administered in the second half of 2008 at 12 institutions and 2,700 completed student surveys were returned. Academics in charge of those specific accounting subjects completed a staff survey. Responses from staff and student surveys will be compared to investigate differences in perceptions of feedback. The project website has been completed (<http://www.jcu.edu.au/feedbacc/>) and the possibility of providing academics with the ability to contribute examples of best practice to the website has been investigated. A holistic view of the assessment and feedback processes was summarised and presented at a forum session at the 2008 AFAANZ conference. Papers were submitted for possible inclusion in 2009 AFAANZ Conference; 12th Pacific Rim First Year in Higher Education Conference 2009; and CPA Australia Joint Universities Heads of School Forum, in June 2009.

Project Commencement: August 2007

Project Completion: February 2010



3.4 Embedding the development and grading of generic skills across the business curriculum (PP8-935)

Lead Institution: Macquarie University

Partner Institution(s): Edith Cowan University, The University of Tasmania, University of Southern Queensland, University of Canberra, Australian Catholic University and La Trobe University

Project Leader: Dr Leigh Wood

Background

This project builds on the scoping study 'Business as Usual?' completed in 2008, conducted by the Australian Business Deans Council Teaching and Learning Network (ABDC T&L) and led by Associate Professor Mark Freeman. One of the areas identified in the study was the need to assure the learning of generic skills in a discipline-specific context. This project aims to take a strategic approach to building and assessing the development of generic skills as a key component of the business curriculum and one that allows for variation between different business courses and institutional positioning. The project focuses on the development of appropriate assessment and feedback methods to facilitate generic skills development. It will also identify the standards for the chosen generic skills as students improve the skills from first through to third year.

Progress

Based on the students' perception of generic skills, a model was developed and will be adapted as a framework for the four generic skills and provide a template for the practice and assessment of other generic skills. Professionally-relevant modules were trialled at a national workshop, 'Building Business Professionals' conducted in April 2009, which -35 students from the seven partner universities attended. The workshop sets a model of practice that can be applied to the development programs for other generic skill sets. Standards and feedback mechanisms appropriate to the skills and to the level of students were developed during the workshop. The workshop materials, as well as project review, resources and exemplars of good practice are available on the ALTC Exchange, and the project website (www.graduateskills.com) and links have been disseminated via the ABDC T&L. Presentations were made to the ABDC T&L committee in July 2009; to the Accounting and Finance Association of Australia and New Zealand (AFAANZ) conference and will be made to the Australian Technology Network (ATN) assessment conference at RMIT in November 2009. Other projects in this area have been investigated and identified. A link was formed with the ALTC 'Graduate Attributes' project and outcomes were presented at the workshop. The eight learning modules developed on generic skills have the flexibility to be used outside a workshop context and will be further trialled at the seven partner universities as independent activities during Spring semester 2009. The standards and assessment aspects of the modules will be developed in cycle 2. Planning for assessment, dissemination and embedding was scheduled for August 2009 during a three day face-to-face meeting.

Project Commencement: July 2008

Project Completion: July 2010



4. CREATIVE AND PERFORMING ARTS

4.1 Assessing group work in media and communications (PP5-44)

Lead institution: University of Canberra

Partner Institution(s): The University of New South Wales, Macquarie University

Project Leader: Dr Greg Battye

Background

In the media and communication industry, teamwork is considered a valuable skill for graduates. Therefore, authentic assessment tasks require students to collaborate in groups, which, if carefully devised and managed, effectively foster both discipline-specific and generic professional attributes. The project aimed to investigate current best practice for group assessment in media and communications courses; identify common areas for improvement; construct and test tools and techniques for improving assessment; disseminate the results and products to the media and communications teaching community; and provide a forum for discussion, testing and feedback.

Outcomes

The project team collected information on best practice case studies in a range of disciplines (from various institutions) in the form of video interviews with staff and students, video footage of actual classes, course outlines and other course materials, and student work samples. The presence of student views in the video material conveys a particular level of credibility to the discussion of issues and principles. Given the feedback from trial users, the video material became the principal aspect of the website, which can be accessed at <http://creative.canberra.edu.au/groupwork>. This website has been widely disseminated; although it focuses on group work in media and communication, it is also adaptable to other disciplines. Taking part in the ED-MEDIA conference (Vancouver, Canada, July 2007) represented an opportunity to gather information from a large number of international stakeholders, and their feedback contributed in improving the usability of the website.

Project Completed: April 2008

<http://www.altc.edu.au/project-assessing-group-work-media-canberra-2005>



4.2 Dancing between diversity and consistency: evaluating assessment in postgraduate studies in dance (PP6-45)

Lead Institution: Edith Cowan University

Partner Institution(s): Queensland University of Technology, Deakin University, Tertiary Dance Council of Australia

Project Leader: Dr Maggi Phillips

Background

Focusing on postgraduate examination processes in dance, this project aimed to formulate guidelines for best practice in Australian doctoral and masters examinations, encompassing the two primary modes of investigation, written and multi-modal theses. Among its objectives, the project aimed to articulate the desired objectives of higher degrees in dance; define clear and flexible guidelines of evaluation to account for the diversity of dance knowledge; provide examiners with benchmark indicators against which to make their assessments; and codify a set of best practice principles for the examination of dance, especially where investigations involve practice-based or performance elements.

Outcomes

The project team conducted extensive interviews with supervisors, examiners, research deans and candidates to determine expectations, experiences and existing protocols. The team organised community forums in association with Ausdance (The Australian Dance Council) to gauge the prevailing views of the profession and university intersection. The principal outcome of the project, 'Guidelines for Examination', was published as a booklet and is available on the project's website (www.dancingbetweendiversity.com). The booklet includes fundamental definitions and guidelines for dance-specific variations to the Australian Council of Deans and Directors of Graduate Studies' publication on doctoral studies; discursive papers on various issues encountered in the research; and an extensive bibliography for future research in the area. The website includes initial exemplar video clips to give examiners and candidates a springboard for ideas related to the documentation of practice components. It also includes a database of Australian dance theses which the project team plans to maintain on an ongoing basis.

Project Completed: December 2008

<http://www.altc.edu.au/project-dancing-between-diversity-ecu-2006>



4.3 Assessing graduate screen production outputs in 19 Australian film schools (PP8-926)

Lead Institution: Murdoch University

Partner Institution(s): Griffith University, Flinders University, University of Technology, Sydney, RMIT University, The University of Melbourne

Project Leader: Dr Josko Petkovic

Background

Screen production programs are commonplace and the sector has grown rapidly in the last 30 years in Australian institutions. Yet, academic regulations have not been adjusted to accompany rapid growth. Assessment continues to be based on the established paradigms of scholarship and on empirical, scientific and written conventions. Producing image-based texts does not fit neatly into the conventional paradigms of scholarship and assessing image-rich products has been viewed for years as a subjective process, further complicated by the group nature of screen production. This project will broadly build upon the work done

in assessing group work in media and communication. Investigation will focus on the definition, test, validation and regulation of academic standards, assessment and reporting practices for creative works produced by graduating film school students in 19 Australian film schools.

Progress

A website has been established (<http://wwwmcc.murdoch.edu.au/nass/altc/index.html>). The Australian Screen Production Education and Research Association (ASPERA) has been mobilised through the project team, with staff from member institutions represented among the 30 assessors required. Representatives from cognate creative arts group were contacted, with collaborative events put in place. Ongoing links have been established with other ALTC projects, led by Dr Paul Thomas (Curtin) and Associate Professor Su Baker (Victorian College of Arts and Music (VCA) – The University of Melbourne) as well as, on an international level, with a like-minded group in the UK. The project team has made personal contact with Mark Thomas, Director of the Research Policy and Funding Section of the Department of Innovation Industry Science and Research (DIISR) and Professor Andrew Wells, Executive Director of the Humanities and Creative Arts Committee of the Australian Research Council (ARC) for a better understanding of image-based scholarship. A limited test sample of five productions took place with assessment groups in Victoria and NSW. Their results were consistent with the project's research hypothesis. Consultations and test-runs are underway with the remaining states in preparation for the main test in August/September 2009. The project held its first conference, titled "Diegetic Life Forms and Diegetic Logic: Assessing Image-based Scholarship" at The Victorian Colleges of Arts and Music on 6 July 2009.

Project Commencement: August 2008

Project Completion: November 2010



4.4 Using assessment effectively: learning environments that work for tertiary music performance students and staff

Institution: The University of Tasmania

Fellow: Dr Heather Monkhouse

Type: 2008 ALTC Teaching Fellow

Background

This fellowship builds upon Dr Heather Monkhouse's 2007 UTAS Teaching Fellowship. Having audited current music assessment procedures nationally, this fellowship program will establish a process whereby performance teaching practices can be reshaped to support an effective learning environment; where feedback aligns to the expectations of what is being assessed; and where study results in valued graduate attributes. In this environment, staff and students have meaningful descriptions of the purpose of assessment/learning tasks, performance standards and assessment criteria, grade descriptors, and transparency regarding the school's formative, ongoing and eventual expectations. Interviews and group discussions will be conducted with staff and students, related art focus groups and with a national discipline-specific focus group established earlier. A national online repository of case study narratives will be established on the ALTC Exchange.

Progress

Literature review and background administration, such as ethics approval and survey questions, to set up the discipline focus group are underway. Initial changes to assessment policies followed a survey of students for their thoughts on their major study, and feedback from these students was sought for discussion. The fellow has reviewed the assessment tasks and criteria for music and the School of Art and will complete a review of the related disciplines (languages, nursing, law, architecture). The program will be set up on the ALTC Exchange and heads of schools from music institutions around the country are invited. Interviews for case narrative studies will also be undertaken. The production of a draft 'Guide to Assessment Practice' at the UTAS Conservatorium of Music is underway. The fellowship was presented at UTAS Teaching Matters 2008 and an abstract for the ASME (Australian Society of Music Educators) Conference (Launceston, July 2009) was submitted. This paper will be the basis of a journal article.

Commencement: August 2008

Completion: December 2009



4.5 Remix, mash-up, share: authentic Web 2.0 assessment scenarios and criteria for interactive media, games and digital design (PP9-1373)

Lead Institution: Murdoch University

Partner Institution(s): Curtin University of Technology, RMIT University, University of Canberra

Project Leader: Dr Ingrid Richardson

Background

The proliferation of Web 2.0 applications and services has had a significant impact on university learning environments. However, much of the teaching and learning literature and research projects in this area have focused primarily on the integration of blogs, wikis and social networking systems into pedagogical practice. This project will focus on the emergence of a type of content production that is collaborative and shared and comprises the re-use and remixing of existing media content, or the blend and aggregation of existing services and applications. The project will explore, in particular, the development of authentic assessment practices and criteria in the disciplines of interactive media, games and digital design.

Progress

The project has only recently commenced, with formal agreements in place since August 2009. In the first phase of the project, the team will focus on the creation of an initial basic web interface for the archiving of research material. This web interface will evolve to include all the project material as the project progresses. A two-day workshop will be held in Perth to bring together the project leader and four institutional project coordinators to brainstorm Web 2.0 ontology, assessment scenarios and exemplars.

Project Commencement: August 2009

Project Completion: May 2011



5. ENGINEERING AND TECHNOLOGY

5.1 Development, deployment and educational assessment of an advanced immersive learning environment for process engineering design and operations (CG6-21)

Lead Institution: The University of Queensland

Partner Institution(s): Curtin University of Technology, Monash University, The University of Melbourne, The University of Sydney

Project Leader: Professor Ian Cameron

Background

With the demise of most industry cadetship programs, the opportunities for students to gain insight into the structure and performance of engineering systems, and an appreciation of the design and operational issues in complex process systems have diminished. This project developed an advanced immersive learning environment for engineering students to deepen and enhance their knowledge and understanding of the design, operations and risk management of complex process systems. It augments standard university course activities. The environment provides virtual access on the desktop to major industrial operations and serves also for improved industrial operator training.

Outcomes

Using an early prototype first developed at The University of Queensland, a partnership between Australian Chemical Engineering departments and two industrial collaborators has successfully developed two immersive environments which provide a wide range of learning challenges for first year to final year students. The Virtual Reality environments (VR) allow instructors to demonstrate the industrial outworking of complex engineering principles and provide an information-rich environment for development of numerous learning activities for students. The key features and outcomes of the system include: navigation systems to various activities and within the 3D plant environment; and a series of activities and resources that include how the plant works, explore the plant, plant diagrams, activities centre, safety first, and search the database. The systems are being used at an increasing number of institutions and industrial partners, resulting in a broadening the user base across the engineering sector. The innovative aspects of this project have been recognised through major international awards at the European Symposium on Computer Aided Process Engineering (Lyon, France – Jun 08) and the Petronas Award for Education and Training, The Institution of Chemical Engineers Global Awards for Innovation (Birmingham, UK – Oct 08). Owing to the heavy emphasis in process engineering on mechanical engineering and supporting structures, it is feasible for educators to use the VR environment in such discipline areas. This extension will be pursued with colleagues at the partner universities with copies being made available to those disciplines.

Project Completed: March 2009

<http://www.altc.edu.au/project-development-deployment-educational-ug-2006>



5.2 Teaching and assessing meta-attributes in engineering: identifying, developing and disseminating good practice (CG6-23)

Lead Institution: University of Wollongong

Partner Institution(s): The University of Queensland, RMIT University, The University of Sydney, Engineers Australia

Project Leader: Dr Anna Carew

Background

The Engineering Meta-Attributes Project (EMAP) was funded to investigate and disseminate good practice in teaching and assessing graduate attributes in engineering. In particular, the project aimed to achieve in-depth understanding of student perspectives on the teaching, learning and assessment of systems thinking (a design-relevant meta-attribute). Another project objective was the development of guidelines and exemplars of the auditing, mapping and improvement of graduate attribute teaching and assessment at program level.

Outcomes

The project's two main outcomes are dissemination of good practice in teaching, assessment and curriculum restructure to improve graduate attribute learning in engineering students; and development of national leadership for change in engineering curriculum. The dissemination outcome was achieved through the delivery of nine workshops and seminars on graduate attributes or engineering curriculum review. These events attracted about 140 participants in total, representing about eighteen institutions. In addition, five presentations were delivered at both Australian and overseas institutions. The project team also developed and disseminated two heuristics: a poster on graduate attribute assessment called 'Engineering graduate capabilities continuum: a continuum of learning outcomes'; and a poster on 'Engineering curriculum review: process overview' which shows curriculum review as a process in eight stages, with three ongoing themes. The latter poster was translated into Spanish by a group of Chilean universities. National leadership on graduate attributes in engineering has taken two directions: development for embedding graduate attribute teaching and learning in engineering at subject or unit level; and development of capacity for program level curriculum redevelopment. The project report documents examples of the EMAP Leadership Team members' activities that suggest participation in the project has influenced their trajectory and capacity for achieving change in engineering education.

Project Completed: May 2009

<http://www.altc.edu.au/project-teaching-assessing-metaattributes-uow-2006>



5.3 LinuxGym: a sustainable and easy-to-use automated developmental assessment tool for computer scripting skills (PP6-29)

Lead Institution: University of Technology, Sydney

Partner Institution(s): The University of Sydney, The University of New South Wales

Project Leader: Dr Andrew Solomon

Background

The project team recognised the problem that for IT students, learning scripting skills requires considerable practice and feedback. As the typical institution's student to staff ratio offers little scope for providing the necessary feedback, tertiary degrees have produced only a small percentage of graduates with the necessary scripting skills. LinuxGym software, originally trialled in the alpha version at the University of Technology, Sydney, enables automated formative assessment of coding skills. The goal of this project was to re-develop the LinuxGym software to make it available to all institutions. Another goal was the creation of a broad set of exercises which could be drawn upon by academics around Australia. The third goal was a clear definition of industry standards, with the long-term aim of a certification exam to align Australian institutions' curricula closely with industry needs.

Outcomes

The project team collaborated to re-develop LinuxGym as both an installable virtual machine and a publicly accessible web service upon which lecturers are able to create classes, allocate students a set of exercises and view their marks. With the assistance of the Linux Professional Institute, based in the UK, a survey was conducted to clarify which scripting skills are needed in industry and the results have influenced the focus of the LinuxGym library. The LinuxGym web service has also been made available to the public as an individual learning tool (<http://www.linuxgym.com>). The project team concluded that while the uptake of LinuxGym by institutions was less than anticipated, the significant improvement in the students' learning experience, increase in the material covered and decrease in the teacher's workload indicates that a few changes to LinuxGym will rapidly increase its uptake.

Project Completed: November 2008

<http://www.altc.edu.au/project-linuxgym-sustainable-easytouse-uts-2006>



5.4 Improving the formative and summative assessment of novice computer programmers (PP6-48)

Lead Institution: University of Technology, Sydney

Partner Institution(s): Monash University, Queensland University of Technology, The University of Sydney, University of Southern Queensland

Project Leader: Dr Raymond Lister

Background

This project will produce a collection of integrated software systems to provide automatic formative and summative assessment of computer programming ability. Subsequently, in every year, over 1500 students across the five participating institutions will benefit from these systems. Dissemination workshops in Brisbane, Sydney and Melbourne will have prepared academics at other institutions to use these systems.

Progress

The project involved the development of two tools: the environment for learning to program – ELP (QUT) and Reflect (Sydney University). Presentations and meetings were held for ELP in Brisbane (May 07); for Reflect in Melbourne (Nov 07); and at the Australasian Computer Education conference in Wollongong (Jan 08). The changes recommended to the systems delayed their deployments. A new programmer has been working on an AJAX version of ELP to enable students and teachers to use the tool through the web with no client side requirements other than a recent web browser. This development allows the tool to be easily used for assessment by multiple organisations. A new version of the Reflect tool has been created to improve on identified weaknesses such as authoring environment, security features and the speed at which the tool runs in earlier versions. The configuration of the set up has also been reorganised so Reflect can be offered as a service to other institutions instead of requiring their own versions. A version of Reflect has also been developed to allow the tool to run as a Moodle plug-in.

Project Commencement: December 2006

Project Completion: November 2009

5.5 Assessing and improving spatial ability for design-based disciplines utilising online systems (CG7-524)

Lead Institution: The University of Newcastle

Partner Institution(s): Southern Cross University, La Trobe University, Edith Cowan University, Michigan Technological University USA

Project Leader: Mr Ken Sutton

Background

Spatial ability is an emerging trend for design and can be defined as the performance of tasks that require mental rotation of objects, the ability to understand how objects appear at



different angles and how objects relate to each other in space. Spatial ability is fundamental to the various aspects of design cognition. This project will develop an online resource for educators and students, consisting of a psychometric instrument to assess spatial ability, interactive learning tasks to improve spatial ability, a remediation module for poor performers and specific learning tasks to address gender differences in spatial ability. This resource will collectively assess and help to improve design students' spatial ability.

Progress

An educators network and interest group for spatial ability and spatial learning was established in February 2008 and consists of 42 members from various institutions. Several workshops have been held and a 5-factor model of spatial ability, based on theoretical and empirical evidence has been developed. Three sister projects/lead-in studies were conducted to test experimental procedures and to evaluate potential test items. This led to the development and trialling of a computer-based test of special ability, conducted at UON with 98 participants (42 skilled, 56 unskilled), using 3D Ability Test (3DAT online). Recruitment commenced for a similar test, with skilled participants only. Websites have been established: the project website (<http://psych.newcastle.edu.au/SpatialProj/index.html>), the online psychometric test (3DAT online) (<http://psych.newcastle.edu.au/spatialtest/index.html>) and a weblog (<http://spatialproject.blogspot.com/>). Newsletters have been produced and distributed across the network regularly, and are also available from the project website. Papers have been presented at the Australian Association for Engineering Education conference (December 2007), at the UniServe Science Annual Conference (October 2008), at the 5th Biennial International Conference on Technology Education Research on the Gold Coast (November 2008) and at the Australian Association for Engineering Education Conference in Yeppoon, QLD (December 2008).

Project Commencement: October 2007

Project Completion: November 2009

5.6 IS-IT learning? Online interdisciplinary scenario-inquiry tasks for active learning in large, first year STEM courses (CG9-1112)

Lead Institution: The University of Queensland

Partner Institution(s): Purdue University

Project Leader: Associate Professor Lawrence Gahan

Background

The massification of higher education and the blow-out of student-to-staff ratio have posed significant challenges in maintaining the standards of science, technology, engineering and mathematics (STEM) education. The broad goal of this project is to promote active learning in first year STEM disciplines to ease student transition and enhance learner outcomes through the provision of learning experiences that are interactive, interdisciplinary, contemporary and challenging. The theoretical framework is underpinned by the creation of IS-ITs which are extended learning experiences, based on real-world problems, progressing over a period of time, integrated with lectures and scaffolded by strategic activities placed



within peer-assisted study sessions. Students will be assessed on the process of active learning rather than reaching the 'right answer' and this assessment will contribute a significant component of the summative assessment.

Progress

The project has only recently commenced, with formal agreements in place since May 2009. In the first phase of the project, reference group members will be surveyed to identify perceptions and expectations. The team will design and pilot the first suite of 10 scenarios in response to reference group recommendations, the effectiveness of the tasks will be reviewed, and further modifications made.

Project Commencement: May 2009

Project Completion: May 2011



6. HEALTH, MEDICINE AND VETERINARY SCIENCE

6.1 COMPASS™ directions: leading the integration of a competency based assessment tool in speech pathology learning and teaching (LE6-6)

Lead Institution: University of Wollongong

Partner Institution: The University of Sydney, Charles Sturt University, Flinders University

Project Leader: Associate Professor Alison Ferguson

Background

This project aimed to enhance learning and teaching by integrating a newly developed competency-based assessment tool COMPASS™ within the curricula of speech pathology professional education programs nationally. The project also aimed to enhance learning and teaching for the development of clinical competence in the discipline and to build the leadership capacity of academic and clinical speech pathology educators to develop the research base for future enhancement of learning and teaching.

Outcomes

The project succeeded in effectively integrating the tool within learning, teaching and assessment practices nationally. The academic leaders reported that all nine Australian institutions offering speech pathology were using COMPASS™ in their 13 speech pathology professional education programs for the assessment of the major practica contributing to the determination of professional entry-level competence. All programs had integrated the tool and its associated concepts within curricula related to clinical processes. In addition, some programs have begun to cross-map the tool's generic and occupational competencies against university graduate attributes/outcomes more generally across the curricula. The project was significant in involving a national network of speech pathology programs in institutions across Australia. Over the period of the project, this network grew to include programs from New Zealand. The professional association Speech Pathology Australia is continuing its strong support for COMPASS™ through continued funding for an online version of the tool. This support has resulted in a rapid national uptake of the tool, which is seen to be highly beneficial to the ongoing development of mutual recognition of professional qualification agreements being pursued internationally.

Project Completed: May 2008

<http://www.altc.edu.au/project-compass-directions-leading-uon-2006>



6.2 Benchmarking clinical learning in speech pathology to support assessment, discipline standards, teaching innovation and student learning (PP6-26)

Lead Institution: The University of Sydney

Partner Institution(s): Flinders University, Charles Sturt University, The University of Newcastle

Project Leader: Associate Professor Michelle Lincoln

Background

The purpose of the project was to build the capacity of speech pathology academics to monitor and improve the quality of their teaching, assessment, work-integrated learning programs and, ultimately, graduates. This project capitalised on the introduction of COMPASS™, a competency-based assessment tool, across all speech pathology programs in Australia and New Zealand in 2006/2007. COMPASS™ has been found to provide a valid and reliable assessment of speech pathology students' performance in workplace settings and to provide a sound, interval-level measurement of students' degree of workplace competency. This measurement functionality was identified as a unique opportunity for academics to develop a pool of data on student performance in practicum which can be used to inform their learning and teaching decisions. Benchmarking COMPASS™ data within and across topics incorporating practicum and across institutions was identified as a strategy to monitor and improve program quality. The project aimed to embed COMPASS™ within speech pathology curricula nationally; develop threshold performance standards of student learning outcomes from clinical education subjects within institutions; establish and trial policies and procedures for cross-institutional benchmarking of student clinical competency; and establish research projects investigating approaches to learning and teaching in clinical education.

Outcomes

The project succeeded in achieving the embedding of COMPASS™ into clinical education curricula. Programs were supported to use the measurement functionality of COMPASS™ to establish internal benchmarks of student performance. Through an ongoing collaborative process, the participating programs developed a model for ethical cross-institutional benchmarking of student learning outcomes that was successfully trialled in the later stages of the project. As a result of project activities a whole discipline now has an assessment tool in common across Australia and New Zealand. A community of practice has been established in which to explore learning, teaching and research opportunities resulting from the adoption of COMPASS™, and to contribute to ongoing quality improvement within these programs.

Project Completed: June 2008

<http://www.altc.edu.au/project-benchmarking-clinical-learning-speech-pathology-sydney-2006>



6.3 Development of Clinical Assessment of Physiotherapy Skills (CAPS): a standardised and valid approach to assessment of clinical competence in physiotherapy (PP6-28)

Lead Institution: Griffith University

Partner Institution(s): Monash University, La Trobe University, Curtin University of Technology, The University of Sydney

Project Leader: Ms Megan Dalton

Background

The purpose of this project was to develop a standardised instrument to assess clinical performance of physiotherapy students. Specifically, the project team aimed to develop a competency-based assessment instrument to evaluate the performance of physiotherapy students in the workplace; investigate and refine the psychometric properties of the instrument; and investigate the viability of using the instrument as a measure of physiotherapy competency in the practice environment.

Outcomes

The project achieved its primary goal of developing an instrument to assess practice competencies of physiotherapy students. Representatives of all institutions with entry-level physiotherapy programs had input into instrument development and refinement. Instrument validation included Rausch analysis that indicated desirable scale properties, factor analysis that indicated a single dominant underlying construct and positive student and educator feedback regarding instrument suitability. Inter-rater reliability was established using two interdependent ratings of 30 students. At the conclusion of the project, eight institutions had adopted the Assessment of Physiotherapy Practice (APP) as their sole method of assessment of physiotherapy practice and a further three are planning to adopt the instrument within the next twelve months. This project has delivered important benefits for physiotherapy education in developing a single instrument with known validity and reliability to replace the 25 distinct assessment forms in use formerly. In addition, the instrument provides an opportunity for national discussion about measurable standards of practice.

Project Completed: September 2008

<http://www.altc.edu.au/project-development-clinical-assessment-2006>



6.4 Curriculum development and assessment to enhance communication and life skills for veterinary students (PP7-340)

Lead Institution: Murdoch University

Partner Institution(s): The University of Sydney, The University of Queensland

Project Leader: Dr Jennifer Mills

Background

'Communication' and 'people skills' are identified by the Royal Veterinary College as day-one competencies required by veterinary graduates (RCVS 2001). However, new veterinary graduates feel communication skills are lacking in their education. This collaborative study sought to inform the emerging veterinary communication curriculum through developing clinical consultations using simulated client scenarios; addressing the human-animal bond; assessing the needs of clients, students and their attitudes to animals; and developing strategies to enhance and report competencies in professional life skills (using e-portfolio). Assessment of both the curriculum and changes in student competencies were essential parts of the project, with a collaborative sharing of experiences and outcomes with staff at all Australasian veterinary schools. While the initial focus is on the undergraduate curriculum, there is scope for this work to be extended to postgraduate awards for health professionals.

Outcomes

The project has shown that client simulations are a very valuable educational tool in enhancing student's consultation skills. As few as two simulation exercises, focused on tasks which students have not undertaken previously, can significantly increase their confidence levels. The client simulations and other communication skills can be successfully integrated into existing units in earlier years to relate this experience to the students' level of technical knowledge. Client simulations can be supported effectively by appropriate training programs for facilitators and simulated clients, and by exposing students to grading rubrics for essential communication skills. A web-based module on the human-animal bond was developed and can be accessed online at www.bayeraccelerate.com.au. A series of tutorials which focused on developing empathy and an ethical, shared decision-making approach were developed to discuss challenging client consultations. The use of e-portfolios was explored and is being developed as a means for students to record their progress, skills, reflections and evidence of abilities for the purposes of accreditation and showcase for future employment. There were a number of unanticipated benefits from this project, including the establishment of a 'Scholarship of Teaching and Learning' group within The University of Queensland School of Veterinary Science. The work supported by this project generated a critical mass of people working in this area and they now come together with monthly meetings about all matters relating to teaching and learning scholarship. Team members working on this project were also approached by one of the largest veterinary clinic groups in Australia with a request to provide staff development opportunities in communication and life skills for veterinarians.

Project Completed: September 2009

<http://www.altc.edu.au/project-curriculum-development-assessment-murdoch-2007>



6.5 Interactive video analysis to develop learning and assessment of university students' practical and communication skills (CG7-385)

Lead Institution: The University of Notre Dame Australia

Project Leader: Associate Professor Beth Hands

Background

Objective and authentic assessment of practical skills in the tertiary setting is a challenge. The project aimed to study the inclusion of interactive video analysis as a teaching and assessment tool to improve student learning and the assessment of practical and professional skills in five undergraduate professional programs. The study built on past concepts of experiential learning through micro teaching and introduced a new paradigm of interactive assessment of a range of practical clinical and teaching skills for in five different undergraduate programs: Physiotherapy, Health and physical education, Education, Nursing and Counselling degrees (PHENC).

Outcomes

Participants in this project included academics and students enrolled in first semester units requiring the learning and assessment of practical skills from physiotherapy, health and physical education, education, nursing and counselling degrees. Lecturers in each unit implemented the video analysis software in a way best suited to their needs. In most cases, experimental and control groups were formed, based on unit tutorial groups. The project team concluded that the video analysis strategy has potential as a teaching and formative and summative assessment tool. Both lecturers and students affirmed the value of video analysis in critically evaluating performance. However, many technical problems relating to university-wide software availability, video storage and student access to the footage were encountered. Information about the PHENC project, key findings, conference presentations, the final report and relevant contact details are available on the project website: www.videointeractlearn.edu.au

Project Completed: April 2009

<http://www.altc.edu.au/project-interactive-video-analysis-develop-notre-dame-2007>



6.6 Application of clinical staff development model (Teaching on the Run) to allied health and multi-professional audiences and to rural and remote settings

Institution: The University of Western Australia

Fellow: Professor Fiona Lake

Type: 2006 ALTC Associate Fellow

Background

Clinicians in a range of health professions are responsible for teaching and supervising students while they work in clinical settings. 'Teaching on the Run', a modular staff development program, is a successful and sustainable platform for providing doctors with skills to teach and supervise students. Increasingly, it is recognised that health care should be delivered and therefore taught in multidisciplinary groups. This fellowship aimed to extend Teaching on the Run to: a) allied health areas (physiotherapy, occupational therapy); b) mixed allied health and medical audiences (medical, nursing, occupational therapy, physiotherapy); and c) allow it to run in a sustainable way with remote and rural multi-professional audiences by using a self-directed model with non-expert facilitators. This approach can be used to drive change as to how medical and allied health clinicians consider ways in which they may cooperatively provide clinical training and supervision and determine the competence of their students.

Outcomes

The fellowship focused on physiotherapy, nursing, veterinarians and multi- and inter-professional groups, which were slightly different from those proposed in the original aims because of people's availability and the urgent need for staff development. Through identifying a disciplinary lead, reviewing literature and available resources, modules and materials (slides, case scenarios, videos, and role plays) were developed to run local workshops. 23 workshops were organised during the fellowship, with positive feedback (52% rated the workshops as excellent and 46% as good). Further workshops are being developed to address current needs. Dissemination and collaboration are continuing, with Curtin University (inter-professional focus, Faculty of Health Sciences, Margot Brewer and Sue Jones, ALTC grant), WA Department of Health (nursing education), Queensland Health (nursing education), Megan Dalton (physiotherapy, ALTC project), the Rural Clinical School and country health services (inter-professional and nursing), and Murdoch University (Veterinarian School). A project website has also been established (<http://totr.meddent.uwa.edu.au/go/totr>).

Fellowship completed: April 2009

<http://www.altc.edu.au/altc-associate-fellow-fiona-lake>



6.7 Development of a computer-generated digital patient for teaching and assessment in pharmacy (CG7-431)

Lead Institution: The University of Newcastle

Partner Institution(s): Monash University, Charles Sturt University

Project Leader: Dr David Newby

Background

The project's main outcome will be the development and testing of a realistic computer generated patient for assisting pharmacy students to practice communication, diagnostic and clinical skills in managing minor illnesses. The target audience for the program is pharmacy practice departments within 17 pharmacy programs in Australia and overseas. The program will be tested in three disparate pharmacy schools to ensure that the software is applicable to a range of teaching environments. The software will have potential application across any discipline where interviewing skills are required.

Progress

The project group has been divided into the IT team (led by Professor Jin) and the clinical team (led by Dr Newby). An external reference committee was established, which at its first meeting in February 2009, identified gaps in the software and provided suggestions for further development. Clinical scenarios for the virtual patient have been developed; with conditions (cough and cold, constipation and gastro-oesophageal reflux disease) selected as they were taught at the three partner institutions at the time of the evaluation phase. For each of these conditions, three scenarios of differing complexity were developed. A prototype of the 3D head has been developed and tested. A short film showing it in action can be found at http://silica.csu.edu.au/staff/cs/rxu/videos/talk_head.wmv. The development of the reasoning algorithm is ongoing and the team is almost ready to commence alpha testing of the software. Local pharmacists have assisted in 'teaching' the virtual patient the different ways questions can be asked. The project was accepted for presentation at the Monash Pharmacy Education Symposium in Prato, Italy in July 2009, as part of a technology showcase. The project will host a half-day workshop preceding the Australasian Pharmaceutical Science Association (APSA) conference in December 2009. A publication on software development is also underway.

Project Commencement: October 2007

Project Completion: June 2010



6.8 The development of an undergraduate nursing competencies assessment tool for use across Australian universities (CG7-523)

Lead Institution: University of Wollongong

Partner Institution(s): The Council of Deans of Nursing and Midwifery (Aus & NZ), Curtin University of Technology, Queensland University of Technology, University of Technology, Sydney, University of South Australia

Project Leader: Professor Patrick Crookes

Background

This project aims to develop a nationally agreed competency assessment tool, to be used to assess undergraduate nursing students across Australia. The tool will encompass the regulatory competencies mandated by the Australian Nursing and Midwifery Council (ANMC) and employer competencies. The project will clearly articulate the competencies required by ANMC and devise an agreed list of technical nursing skills which all new nursing graduates could be assessed against.

Progress

The ANMC Professional Reference Group has been providing support for the project. Literature reviews of technical skills, competency and competency assessment have been completed. A Delphi survey, organised to seek national input into skills, has involved 500 participants, including from rural and remote areas. 97% of the Australian institutions contacted for their current undergraduate nursing Competency Assessment Tools (CATs) have provided the information, and data analysis is underway. Nine nominal groups have been conducted to assist in the development of a draft Australian Nursing and Midwifery Council (ANMC) assessment tool, which, along with exemplars, were to be circulated to the Reference Group in July 2009. The project was presented at stakeholder meetings with ANMC and the Council of Deans and Midwifery, at the international conference of the Global Alliance for Nursing Education Scholarship (Toronto, Canada – Oct 2008), and at the 13th National Nurses Education Conference (Sydney, Sept 2008). Interest in the project has been received from the Health Workforce Task Force (HWTF) Simulation Learning Environment working party, the Chief Nursing Officers group, the Area Directors of Nursing (DONs) in NSW, VIC & QLD, the Chief Executive Officer – Australian Nursing & Midwifery Council, the Council of Deans of Nursing & Midwifery (Australia & New Zealand), the Chair of the UK Council of Deans (Dame Jill McLeod Clarke). UTS, VU, Melbourne and ACU have indicated they will mandate the use of the assessment tool. A project website is currently under development.

Project Commencement: October 2007

Project Completion: March 2010



6.9 Creating accessible teaching and support initiatives for students with mental health conditions (CG7-543)

Lead Institution: The University of Tasmania

Partners Institution(s): The University of Adelaide, Central Queensland University, Swinburne University of Technology, University of Ballarat, Australian Catholic University, Flinders University, The University of New South Wales, Monash University, La Trobe University, Macquarie University, The University of Melbourne

Project Leader: Mr Tony Payne

Background

In 2003 the Australian Universities Teaching Committee (AUTC) funded a consortium of institutions to identify strategies for supporting students with vision impairment and to improve access to information about teaching practices, resulting in improved outcomes for students and institutions across the sector. This project extends the work of the previously funded project, Creating Accessible Teaching and Support for students with mental health conditions (CATS) by developing a process for implementing recommendations that increase usage of the resource, thereby improving outcomes for students with disabilities through support for the staff in institutions who work with them.

Progress

The Self Review and Planning Tool and related processes for facilitation and implementation within an institution-wide context have been developed. The tool was trialled at UTAS and redeveloped from a paper-based system to an online interactive tool. Discussions regarding the possible customisability of the tool are continuing. CATS promotional video has been produced and a dedicated web address has been authorised (www.cats.edu.au, previously www.adcet.edu.au/cats). Presentations were held from July to September 2009 in various institutions: Monash University, La Trobe University, Macquarie University, University of Ballarat, Deakin University, and UTS for the Disability Education Australia Network professional day. Further presentations are planned for the Teaching Matters conference (Hobart, November 2009) and for the Equal Opportunity Practitioners in Higher Education Australasia conference (Sydney, December 2009.)

Project Commencement: November 2007

Project Completion: March 2010



6.10 Developing cross-disciplinary leadership capacity for enhancing the professional education of multidisciplinary mental health workers (LE8-777)

Lead Institution: Griffith University

Partner Institution(s): University of the Sunshine Coast

Project Leader: Dr Shirley Morrissey

Background

There is a critical need to respond to changes occurring in mental health service delivery and for the continuing professional development of mental health practitioners for leadership among university educators who are engaged in the professional education of mental health workers. Such leadership is not likely to emerge spontaneously from uni-disciplinary professional training programs for future mental health workers. The overarching aim of this project is to develop effective, collaborative, cross-disciplinary leadership frameworks for university learning and teaching which enhance the professional preparation of the multidisciplinary mental health workforce. Cross-disciplinary leadership frameworks suitable for large metropolitan and for regional institutions are investigated.

Progress

Three rounds of workshops have been held at both universities (Griffith and USC). Participants acknowledged the existence of significant structural barriers to cross-disciplinary education in mental health and therefore committed to a collaborative approach. The stakeholders supported structural flexibility to allow better preparation for university students for their first mental health placement. A newsletter summarising the information gathered during the first year of the project was distributed to the stakeholders. A project reference group, consisting of individuals with experience in the mental health sector and/or in the implementation of ALTC projects has been established, as well as an industry advisory group, gaining the participation of a diverse range of industry representatives in the project. Both groups have met twice, with all participants expressing keen interest in the project. The project was presented at the Royal Australian and New Zealand College of Psychiatrists' (RANZCP) National Conference in Adelaide, at the USC Vice-Chancellor's Colloquium on Teaching and Learning, and at the Griffith University Celebrating Teaching Day. More presentations are planned during the second year: at the 35th International Conference of the Australian College of Mental Health Nurses (October 2009); at the 44th Annual Conference of the Australian Psychological Society (October 2009); at the Better Health Conference (Sydney, April 2010); and at the Innovate & Educate Conference (Brisbane, March 2010)

Project Commencement: September 2008

Project Completion: August 2010



6.11 An integrated system for online clinical assessment of practical skills (eCAPS) for web-based courses (PP8-893)

Lead Institution: The University of Queensland

Partner Institution(s): The University of Melbourne, The University of British Columbia (Canada)

Project Leader: Professor Doune Macdonald

Background

Given the increasing presence of e-learning environments within health education, initiatives such as eCAPS are needed to evaluate and demonstrate the effectiveness of web-based courses within the higher education sector. The project will develop, implement and evaluate online clinical assessment of practical skills (eCAPS). eCAPS is focussed on learner-oriented and authentic assessment of practical competencies for health professionals within web-based courses. eCAPS will utilise a system of integrated online technologies (e.g. virtual patients, web-based video interactions) to enable genuine reciprocity of information and materials between learners and instructors.

Progress

The asynchronous video assessment tasks have been implemented in the first semester online sports medicine courses by developing tailored 'expert' video-materials and producing a coordinated set of web-based instructional and exemplar video-materials for addressing several practical/clinical issues identified in the pilot implementation of eCAPS. Collaboration has been established with the Centre for Educational Innovation and Technology headed by Professor Phillip Long in order to refine the technological aspects of eCAPS, and involved utilising for the preliminary field-testing a compact, easy to use and relatively cheap USB video camera (flip cam). The internal evaluation of the video materials thus recorded by students as part of their assessment tasks has commenced and is ongoing. This represents a solid basis to explore and further adapt the authentic assessment of practical competencies as part of eCAPS. Discussions with internal and external stakeholders resulted in identifying successful learner-instructor interactions and 'clinical' authenticity of the video materials produced and assessed to date. This will contribute to a functional model for the development and online assessment of practical skills in the contemporary e-learning programs. The project was presented at the Blended Learning conference (UQ, 2008 & 2009) and at the 2009 Queensland Health Conference for Medical Education Officers and Directors of Clinical Training. Upcoming presentations include the Teaching and Learning Week (UQ) and the Australian Technology Network Assessment in Different Dimensions Conference.

Project Commencement: August 2008

Project Completion: July 2010



6.12 Establishing infrastructure and collaborative processes for cross-institutional benchmarking of student clinical performance in speech pathology (PP8-955)

Lead Institution: The University of Sydney

Partner Institution(s): The University of Queensland, La Trobe University, The University of Newcastle, James Cook University, Flinders University (from November 2009)

Project Leader: Dr Sue McAllister

Background

This project builds on the successful completion of the two earlier projects: COMPASS™ and Benchmarking clinical learning in speech pathology. This project will develop tools for benchmarking student progress collaboratively across higher education programs through the application of innovative technology and will facilitate the collaborative use of this information to inform and improve educational practice. This process will assist those professional disciplines such as physiotherapy and nursing which have begun preliminary work in this area to develop national competency assessment tools. It will encourage other disciplines to consider taking up these challenges at a national level.

Progress

The project steering committee has developed formal terms of reference and has been contributing expertise in benchmarking and competency development. A project reference group has been formed and six representatives from institutions not represented on the project were nominated. This provides a broad consultation base and point of contact; the representatives are from Australian, New Zealand and Asian institutions. An evaluation plan has also been established. A better understanding of the benchmarking database design was gained in commencing the process. This included conceptual development; development of a consensus-based requirement statement on the database functionality; finalisation of a specifications document in collaboration with Portal Australia (database developer); trial and revisions of the database. Three universities have subscribed to COMPASS™ Online so far, with other interested institutions to join. Communication and negotiations with Speech Pathology Australia (SPA) have been ongoing. A face-to-face meeting at the Australian Pacific Education Collaboration – Speech Language Pathology (APEC – SLP) in May 2009 was held, prior to the national Speech Pathology Australia (SPA) conference. A project update newsletter was produced in September 2009.

Project Commencement: September 2008

Project Completion: April 2011



6.13 A programmatic approach to developing scientific writing embedded in Health courses

Institution: Griffith University

Fellow: Dr Roger Moni

Type: 2007 ALTC Associate Fellow

Background

Health graduates need proficient writing skills, adaptable to diversifying professional and social contexts, communication modes and purposes. These graduates need to be both scholarly thinkers and effective communicators if they are to contribute to the high quality human capital underpinning recent reforms in Australian higher education. The teaching and assessment of writing in undergraduate health degree programs at Griffith University, and nationally, needs to be more effectively integrated within and across programs. This fellowship will collate 2008 institutional data about the teaching and assessment of writing, and writing competencies of health undergraduates, and use these baseline data to identify required types of writing, build a model(s) to embed the teaching and assessment of writing within and across health programs, and sustainably enhance the teaching and assessment of writing by engaging and supporting staff from other institutions in professional development around the model(s).

Progress

The fellowship program has been delayed owing to the Fellow's change of employment. The literature review of theoretical approaches, teaching and assessment practices of scientific writing is an ongoing process. A synoptic audit of references to 'writing' in all Australian institutions has been completed. The Fellow has completed an audit of records of writing assignments and assessment from 2008 course profiles. The collection of effective samples of writing assessment from course coordinators across health group continues. A workshop has been organised to engage health pro vice-chancellors and deans (L&T; Academic; Research), heads of schools, program convenors, year coordinators and the reference group (composed of key staff across three campuses). Survey questions for students, staff and employers have been elaborated; these will be refined and ethics approval will be sought. Semi-structured interviews with selected representatives of each stakeholder group will then be conducted. A consultant has provided formative evaluation and made recommendations on specific issues to be investigated with staff.

Commencement: February 2008

Completion: October 2009



6.14 Supporting student transition to a futures-orientated professional identity

Institution: University of South Australia

Fellow: Associate Professor Ieva Stupans

Type: 2009 ALTC Teaching Fellow

Background

In Australia, allied health and nursing curriculum is intended to address requisite knowledge, skills and attributes defined through professional competencies. Previous work by the fellow in pharmacy curriculum has indicated a lack of all but superficial level notions of professionalism and no obvious references to leadership or lifelong learning. The intent of the fellowship is to develop curriculum initiatives around professionalism, lifelong learning and leadership skills. The work is situated within a discipline context but will develop a framework for staged achievement which can be adapted to other allied health and nursing programs. Fellowship activities will include seeking views of industry, academics and students, forums in South Australia, mapping of curriculum, collaborative development of teaching strategies and interstate workshop-style dissemination, with the intent that a national context for the program is developed.

Progress

The fellowship has only recently commenced with formal agreements in place since August 2009. In the first phase of the project, the fellow will complete a literature review and initial conversations with teaching and learning scholars. University of South Australia's pharmacy curriculum will be mapped. Meetings, forums and workshops will then be conducted to gather feedback from stakeholders. A staged framework of aligned learning outcomes, teaching and learning arrangements and assessment opportunities will be developed. Practitioner targeted materials will be developed through work with University of South Australia.

Commencement: August 2009

Completion: December 2010



6.15 The Medici project: developing a multi-disciplinary, sustainable resource for blended learning initiatives in tertiary medical education (CG9-1068)

Lead Institution: The University of Adelaide

Partner Institution(s): Flinders University, Monash University, The University of Notre Dame, The University of Western Australia, University of Western Sydney, University of Wollongong

Project Leader: Mr Edward Palmer

Background

This project aims to extend an effective blended learning initiative in a single discipline in the Bachelor of Medicine and Bachelor of Surgery (MBBS) into several other critical areas of tertiary medical education. The project will develop modules for six medical disciplines, each consisting of five scenarios plus assessment material. The modules will have input of specialist clinicians writing to the Australian Curriculum Framework, and a specialist review of the material by medical practitioners in a workshop environment advocated by the Australian Medical Council. The result will be a fully evaluated, mature and innovative learning tool disseminated across the tertiary sector nationally, combined with a fully detailed formative assessment strategy. In addition, methods of sustaining the quality and appropriateness of the content provided as part of the blended learning package will be investigated in order to ensure that the resources developed in 2009 can remain topical and useful for student learning past the duration of the project and well into the future. The resources will be developed using a software platform termed *Medici* developed at The University of Adelaide.

Progress

The project has only recently commenced, with formal agreements in place since May 2009. The first phase of the project will be a formative assessment, based on the current surgery module, to develop assessment questions for each new module and distribute these for control group use, specialist peer-review workshops and external review feedback. Further modifications will be made.

Project Commencement: May 2009

Project Completion: May 2011



7. LAW

7.1. Graduate professional entry courses in accounting and law (PP9-1386)

Lead Institution: RMIT University

Partner Institution(s): Curtin University of Technology, Queensland University of Technology

Project Leader: Professor Margaret Jackson

Background

There are a growing number of graduate entry courses being introduced by Australian institutions which are designed to allow graduates to enter a new profession, notably in accounting and law, but also in other disciplines such as architecture and physiotherapy. Focusing on courses offered in accounting and law disciplines, the objective of this project is to explore whether a masters level degree that meets the requirements for entry into a profession applies different academic standards from those applied in an undergraduate degree that also meets the same professional entry requirements, and to articulate what the different standards are or should be.

Progress

The project has only recently commenced, with formal agreements in place since July 2009. In the first phase of the project, the team will focus on a literature review which will cover Australian academic standards associated with undergraduate and postgraduate courses, historical developments in accounting and legal education in Australia, the United States and United Kingdom in particular, and discipline-specific literature on the development of graduate capabilities and generic skills. It will also examine the Australian Qualifications Framework and the different characteristics of learning outcomes in undergraduate and postgraduate courses.

Project Commencement: July 2009

Project Completion: August 2011



8. SCIENCE

8.1 Online assessment feedback as an instrument of reflective learning practice in human biology (PP5-41)

Lead Institution: The University of Western Australia

Partner Institution(s): Curtin University of Technology, Edith Cowan University

Project Leader: Dr Jan Meyer

Background

The project team developed an online assessment system for the improvement of evaluation of human biology students' higher level learning and skill development. The project team sought to address the challenge of teaching large classes by developing a system which will provide a more sophisticated online dialogue with students and improved individual feedback mechanisms. The assessment system extends the aspects of human biology that can be assessed online (including laboratory exercises); provides analytical tools (including sets of exemplars and remedial materials); administers richer, more analytical feedback; and embeds reflective practice and self-performance assessment into the feedback component of the online assessment system. The project team collaborated with partner institutions who have implemented the online assessment tool, in an effort to share evaluation and feedback and make improvements to the system.

Outcomes

The project team implemented the developed online assessment system within large classes across three institutions. The system has successfully administered assessment questionnaires to large students classes; integrated feedback mechanism into the system 'Test Banks' and unit assessments; provided an instrument for guiding students' reflective practice; and has provided feedback comments that are context-specific (ie according to the conceptual errors made). The project team extended the capacity of the system to incorporate online assessment of short answers and calculations (and provide feedback for these), as well as interactive diagrams, and extended the program usage within more human biology units across the three institutions.

Project Completed: November 2007

<http://www.altc.edu.au/project-online-assessment-feedback-2005>



8.2 Enhancing the assessment of learning in Australian higher education: biological science (PP5-32)

Lead Institution: The University of Melbourne

Partner Institution(s): The University of Sydney

Project Leader: Professor Richard James

Background

The discipline of biological science encompasses long standing fields such as zoology, botany and anatomy, along with the more recently defined fields of biochemistry, ecology, genetics, developmental biology and others. Students often take highly general first year programs, later branching into more specialised sub fields. As the number of undergraduate students attracted to science declined steadily in the last decade, there has been a growing concern regarding the qualifications and capacity of teachers, and that of curricula to effectively prepare and enthuse young people for careers in the sciences (Harris et al., 2005). The purpose of this project was to develop and strategically disseminate resources designed to enhance the assessment of learning in the biological sciences in Australian institutions. The project involved fieldwork on assessment issues, and studies of current approaches and best practice in eight Australian institutions.

Outcomes

The primary deliverable for this project was a website (www.bioassess.edu.au) displaying ideas and resources for university educators in the biological sciences to enhance assessment. The website is available to the community of biological scientists via the UniServe Science website and delivers several outcomes including a detailed compilation and synthesis of the core learning outcomes in the biological sciences; a rich dataset on contemporary assessment issues based on the views of practitioners; and a set of examples of best practice in biological sciences assessment in a range of institutional and program settings, including across year levels and fields. The project has also raised awareness of the biological sciences sector about innovative and successful assessment practices through half-day roundtables in each state and two dissemination seminars. A further outcome of the project was the capacity-building dimension within the discipline. The half-day roundtables in each state, in addition to the two dissemination seminars, provided academics the opportunity to discuss assessment issues; consider best practice; analyse the question of academic standards; and establish ongoing communication channels for discussion of these ideas and best practice.

Project Completed: July 2007

<http://www.altc.edu.au/project-enhancing-assessment-learning-melbourne-2005>



8.3 Teaching and assessment of statistical thinking within and across disciplines

Institution: Queensland University of Technology

Fellow: Professor Helen MacGillivray

Type: 2006 ALTC Senior Fellow

Background

This fellowship program aimed to combine research with collaboration and development of a suite of user-friendly writings and resources to provide windows, pathways and interfaces to help all academic staff. No matter what their discipline or level of teaching, the aim is to facilitate access through digestible, modularised papers and links to resources accredited by internationally respected statistical educators. The aim is to provide help to all staff to develop and enhance their teaching and assessing of statistical thinking within their contexts and within the practical constraints of their academic responsibilities and commitments. The outcomes of the project are focused on Australian higher education contexts and staff, but link with, and are a valuable contribution to, international endeavours in statistical education.

Outcomes

Beyond the research and conference papers, this fellowship involved examining where statistical education is at and where it should develop. Feedback and collaborations resulting from the dissemination activities undertaken furthered the developments. Teaching materials and resources were revised. A website of datasets, prepared from student free-choice data investigation projects with notes and teaching comments, has been developed. A second website focusing on teaching tips is underway. A DVD, four invited papers and two invited book chapters have been finalised. Another ten papers are in preparation, or have been scoped, each with a different collaborator. Advice and input on writings, proposals or reports has also been provided. During the project, the fellow visited 16 institutions in six different countries; gave 17 seminars and two public speeches; and conducted five workshops and one forum, entitled 'Building Networks in Statistical Education', held for statisticians and statistical educators from Australia and New Zealand (QUT, February 2009). The fellow also attended four conferences, including the 6th Australian Conference on Teaching Statistics (OZCOTS) (Melbourne, July 2008) held for the first time as a satellite conference to the Australian Statistical Conference; and sat in on 13 different courses. These activities involved working with 21 collaborators. The fellowship program has already made significant contributions to building networks and understanding to bridge the many divisions in the worlds of statistics and statistics education; the fellow intends to pursue this further during her presidency of the International Association for Statistical Education.

Completed: March 2009

<http://www.altc.edu.au/altc-senior-fellow-helen-macgillivray>



8.4 Diagnostic assessment for biological sciences — development of a concept inventory (PP7-350)

Lead Institution: The University of Queensland

Partner Institution(s): The Australian National University, The University of Natal, The University of Oporto

Project Leader: Dr Tony Wright

Background

This project targets student learning in the molecular life sciences by developing a tool for educators to research their teaching. The project will develop a set of clearly articulated key concepts which underpin undergraduate studies and convert these into a rigorously validated web-based assessment tool, the concept inventory, which tests these concepts. Educators from a range of disciplines will be able to use the concept inventories to enhance teaching and learning, developing an increased awareness of student thinking and learning. The inventory is intended to influence pedagogical practice and improve educators' pedagogical content knowledge. The underlying rationale for developing the concept inventory for the biological sciences is the exponential growth in knowledge in the biological sciences during the past few decades and the associated changes of the nature of science teaching and learning.

Progress

A set of 'big ideas' – which are unique to the molecular life sciences and which capture thinking by experts in the field – constitutes a theoretical framework for the project. Each 'big idea' is accompanied by a concept map linking key concepts with propositional statements. A small set of adaptive questions was developed around chemical equilibrium to allow the team to trial some of the tools to be used in the full project. The first edition of the molecular life sciences concept inventory has been produced and tested with 400 students. Question sets were developed for concept areas in six modules composed of 100 items. This final inventory was shaped by applying Rasch analysis and the advice of the evaluator. A website has been developed (www.lifescinventory.edu.au) to which the test will be linked at the completion of the initial validation and of the online delivery process. The analysis of the final set of questions is underway and mapped back to the original concepts to ensure content validity and concept coverage. The concept inventory will be available in a number of different formats in terms of delivery and feedback, to suit instructors' needs and to enable wide usability. The project was presented at the American Society of Biochemistry and Molecular Biology workshop (ASBMB – Monash, December 07); at the Federation of European Biochemical Societies/International Union of Biochemistry and Molecular Biology (FEBS/IUBMB – Athens, June 08); at the ATN Assessment Conference (Adelaide, November 08); and at the American Society of Biochemistry and Molecular Biology Meeting (New Orleans, April 09). Papers were published in *Australian Biochemist* and in *ASBMB Today* (September 08); and equilibrium questions were translated into Portuguese. Further meetings of the international team have occurred, in the USA and in Brisbane.

Project Commencement: May 2007

Project Completion: December 2009



8.5 Educational technologies: enhancing the learning of scientific inquiry skills for biological sciences in Australian universities (CG8-763)

Lead Institution: The University of Melbourne

Partner Institution(s): The University of Queensland, La Trobe University, Monash University

Project Leader: Dr Kristine Elliott

Background

Concerns are growing in Australia that there will be insufficient scientifically skilled graduates to meet future demand given the shortage of skilled science teachers and the few students choosing to study science at university. This project team will investigate in current teaching practice the use of educational technologies and determine how scientific inquiry skills, generic problem-solving and life-long learning skills are taught in order to identify the implications for generating skilled graduates.

Progress

Once the human research ethics approval was obtained from the University of Melbourne, the recruitment of 30 educators for interviewing began. Interview protocols and questions were developed, trialled with team members, and refined. The team consulted Bradley Shrimpton (an independent expert in qualitative evaluation of education technology from the Centre for Program Evaluation, Melbourne Graduate School of Education) to determine appropriate recruitment, sampling and interview strategies. Team members attended a half day qualitative research workshop in December 2008. The project and its intended outcomes have been publicised to bioscience educators, educational technologists and academics at the ComBio 2008 Conference (Canberra, September 2008), and the ASCILITE 2008 Conference (Melbourne, Nov-Dec 2008). An abstract has also been submitted for The 3rd Science Learning and Teaching Conference (Heriot-Watt University, Edinburgh – June 2009).

Project Commencement: July 2008

Project Completion: November 2009



9. NON-DISCIPLINARY

9.1 Distributive leadership for learning and teaching: developing the faculty scholars model (LE6-9)

Lead Institution: University of Wollongong

Partner Institution(s): University of Tasmania, Flinders University

Project Leader: Dr Geraldine Lefoe

Background

This project investigated the development and trial of a Leadership Capacity Development Framework (LCDF) for teaching and learning in higher education. The primary aim of the project was to assess the relevance and validity of the LCDF in developing leadership capacity. Four Australian institutions were involved in the project. In the first stage, the LCDF was trialled in two institutions similar in size, regional positioning and current mission. In the second stage, two additional institutions trialled a refined LCDF using a 'cascade approach' whereby the facilitators and participants from the first stage institutions mentored and supported the second stage institutions. During the second stage, the LCDF was again evaluated and validated by participants.

Outcomes

Participant evaluations indicated that the factors critical to the success of the LCDF included: formal leadership training and professional development activities; authentic learning activities that are situated in real contexts; engagement in reflective practice and opportunities for dialogue about leadership practice and experiences; and activities that expand current professional networks. A distributive perspective of leadership underpinned the implementation of the LCDF. In the context of this project, this manifested in the strategic development of potential leaders across multiple levels of the university. Project participants (scholars) were at various stages of their career and assumed a range of leadership roles and responsibilities in their faculty, the institution and the national arena. The project found that distributive leadership is most successful if the leadership roles and responsibilities are negotiated rather than delegated; distributive leadership harnesses individual strengths and abilities appropriate to the leadership required, irrespective of formal position; and a distributive approach provides an opportunity to take a leadership role, ascertain capability, and further develop these aptitudes before acquiring a formal leadership role. The LCDF has been organised into five domains: Growing, Reflecting, Enabling, Engaging, and Networking (GREEN). The project report, 'GREEN Report', and the associated practical activities facilitated throughout the project, 'GREEN Resources' are available on the website <http://www.uow.edu.au/cedir/DistributiveLeadership>.

Project Completed: September 2008

<http://www.altc.edu.au/project-distributive-leadership-learning-uow-2006>



9.2 Leadership and assessment: strengthening the nexus (LE6-12)

Lead Institution: Macquarie University

Project Leader: Dr Marina Harvey

Background

The four main goals of the project were: the development and implementation of a sustainable and systematic leadership and organisational development model for the enhancement of assessment practice across higher education institutions; the development of a transparent and coherent policy framework for assessment and feedback at all levels (unit, program, department and division); the fostering of 'Leaders of Effective Assessment Practice' (LEAP) in various disciplines and at all levels within the institution; and the establishment of a community of practice in higher education assessment and feedback across the sector.

Outcomes

The achievement of project outcomes was supported by the use of the LEAP model to combine the synergies of distributed leadership with participatory action research. The project approach provided for systematic development of leadership capacity across the 13 participating departments with a process of regular reflection and supportive collaboration in developing and implementing context specific strategies. When the project commenced the approach to assessment across the campus was not consistent and practice tended to follow unchallenged precedent. The project's self-selected participants or Action Research Enablers (AREs) initiated a new dialogue around engaging assessment and succeeded in changing the culture around assessment (for example, from a norms-based approach to a standards-based approach). The project's AREs have achieved recognition across the institution for their leadership capacity in assessment and have been invited to lead assessment change in formal and informal, distributed and hierarchical roles. The sustainability of this leadership role is evident in the ongoing role of AREs on an institutional assessment working party where they lead new policy development and review.

Project Completed: September 2008

<http://www.altc.edu.au/project-leadership-assessment-macquarie-2006>



9.3 Supporting student peer assessment and review in large group work projects (PP6-49)

Lead Institution: University of Technology, Sydney

Partner Institution(s): Queensland University of Technology, Curtin University of Technology

Project Leaders: Mr Richard Raban and Mr Andrew Litchfield

Background

The project's purpose is to further the educational design and dissemination of an online tool – TeCTra (Team Contribution Tracking system) – to support and facilitate self-and-peer assessment of individual contributions in large group work projects. The online tool supports group work processes through facilitating self-and-peer assessment by providing quantitative and qualitative feedback, evaluation, reflection, and review opportunities.

Outcomes

A stable and thoroughly-tested online tool was developed, ready for wider national and international dissemination. User manuals were developed to support the students in using the tool and the academics in managing groups and projects. Documentation on full administration and technical support was produced to facilitate the hosting of the tool on any local server. A website was implemented for dissemination and assistance to the community of users' purposes. Paper presentations, workshops and posters at academic conferences, including the acceptance of a paper at the Australian Technology Network (ATN) Assessment conference in November 2009, were organised as dissemination activities. On an international level, TeCTra was presented at seminars at Edinburgh University and Strathclyde University.

Project Completed: September 2009

<http://www.altc.edu.au/project-supporting-student-peer-assessment-uts-2006>

9.4 Encouraging benchmarking in e-learning (GI7-630)

Lead Institution: University of Southern Queensland

Partner Institution(s): Australasian Council on Open, Distance and E-learning

Project Leader: Professor Alan Smith

Background

The project aimed to extend the work commenced by the Australasian Council on Open Distance and E-learning (ACODE) in the use of benchmarking to improve technology-mediated learning and teaching. ACODE has developed benchmarks that describe good practice and explicate standards of performance. These have been trialled in seven Australian institutions and have been externally reviewed. This project aimed to support the



dissemination of the benchmarks and training in the use of the benchmarks to assess university performance and improve practice.

Outcomes

Five benchmarking workshops were held throughout Australia in 2007, with 73 participants representing 34 institutions, the Vocational Education and Training (VET) sector and two consultants in higher education. Follow-up surveys were then undertaken. These workshops were highly effective in creating awareness of the benchmarks and in guiding participants through their use. The institutional challenges, time and commitment required explain the limited use of the benchmarks on the short term. A workshop was also conducted for Innovative Research Universities of Australia staff. Linkages were made at an interdisciplinary level and internationally to the Open University of the UK (Professor Denise Fitzpatrick) and the IMS Global Consortium. The ACODE website (www.acode.edu.au/projects_resources.php#benchmark) gathers all materials and outcomes of the project and includes details of all benchmarks.

Project Completed: June 2009

<http://www.altc.edu.au/project-encouraging-benchmarking-elearning-usq-2007>

9.5 Building assessment leadership of course coordinators

Institution: The University of Queensland

Fellow: Professor Merrilyn Goos

Type: 2006 ALTC Associate Fellow

Background

The fellowship's aim was to build the capacity of course coordinators at The University of Queensland to effectively implement the university's assessment policies, especially in relation to criterion referenced assessment (at UQ the term "course" refers to a course of study that may be called a "subject" or a "unit" in other institutions.) Preliminary research indicates that UQ academics new to the role of course coordinator have few formal opportunities to prepare for this role, despite the considerable influence they exert over the nature and quality of curriculum, teaching, and assessment. This is also the level at which assessment is most strongly articulated and experienced by students. Because assessment occurs at the level of the course, this fellowship met a unique need that is not addressed by other ALTC projects or fellowships with an assessment focus at the level of the program (degree) or higher. Working with course coordinators – rather than a range of individual staff members not in this role – was considered likely to be an effective and efficient way to provide professional development that leads to sustainable change in assessment practices.

Outcomes

In mapping the territory by analysing data gathered from surveys and interviews of course coordinators, students, and senior university managers on their understanding and



experience of assessment practices and policies, a number of mismatches between the goals and expectations of these groups was revealed. The next phase concentrated on building a community of assessment practice. This involved implementing a pilot professional development and mentoring program for seven pairs of course coordinators representing various disciplines across six faculties. The mentoring model recognises professional learning as essentially a self-directed activity while balancing academics' need for agency with their accountability to the institution. A university-wide assessment network was also established and will be maintained in a follow-up project that builds on the fellowship program. In its final phase, the fellowship developed institutional strategies for embedding and sustaining good assessment practice. This involved: gaining funding for an internal teaching and learning project to extend the mentoring model to middle managers (School Teaching and Learning Committee Chairs); using the data from the fellowship program to inform review of UQ assessment policies and link with an ALTC-funded priority project on assessment policy and impact on practice; and disseminating the findings across the higher education sector nationally and internationally. The main factors contributing to the success of the fellowship were identified as leadership characteristics (credibility, team building, communication, and advocacy) and the use of strategic links with policies and structures to frame project goals, select participants and gain institutional endorsement.

Fellowship completed: May 2008

<http://www.altc.edu.au/altc-associate-fellow-merrilyn-goos>

9.6 Articulating a transition pedagogy to scaffold and to enhance the first year student learning experience in Australian higher education

Institution: Queensland University of Technology

Fellow: Professor Sally Kift

Type: 2006 ALTC Senior Fellow

Background

This fellowship focused on the national learning and teaching priority of enhancing the first year experience (FYE) of Australian higher education students. A curriculum focus on the FYE was adopted and the program's aim was to develop a guiding philosophy for intentional First Year (FY) curriculum renewal – a transition pedagogy – that carefully scaffolds and mediates the FY learning experience for contemporary heterogeneous cohorts; and to articulate a set of guiding principles for a transition pedagogy. A case study approach was utilised to explore good practice exemplars of customised FY curriculum design across a representative range of disciplines and institutions. The development of expert commentaries and frameworks around perspectives identified as critical for successful FY learning engagement, such as early formative assessment; academic preparedness; graduate attributes; diversity; sessional staff engagement; and career connections would provide the research-led evidence base for a theoretical framework that better informs and



supports program designers, FY teachers and academic managers in their individual reconceptualisation of customised FY curriculum design.

Outcomes

A major fellowship outcome has been the articulation of a research-based transition pedagogy (Kift & Nelson, 2005), framed around the identification of six FY curriculum principles that stand out as supportive of FY learning engagement, success, and retention across disciplines (transition, diversity, design, engagement, assessment, and evaluation and monitoring). Several discipline case studies exemplifying intentional FY curriculum design for transferable implementation have been developed. A set of expert commentaries on the FY curriculum case studies has been collected from a range of perspectives considered critical to a transition pedagogy. An extensive dissemination strategy has been undertaken and includes the fellowship expert seminar of national and international collaborators and fellowship evaluator (QUT, 2008); the WA Fellowship Forum on First Year Curriculum Design (2008); and the FYE Curriculum Design Symposium featuring Professor Vincent Tinto (2009), complete with the production of a DVD learning and teaching resource (http://www.fyecd2009.qut.edu.au/resources/fyecd2009_movie.jsp). The project features on the ALTC Exchange (<http://www.altcexchange.edu.au/first-year-experience-and-curriculum-design>) and a fellowship website is under construction (www.fyhe.qut.edu.au/transitionpedagogy). A number of strategic links were also established between this fellowship and other ALTC Fellowships and projects

Fellowship completed: April 2009

<http://www.altc.edu.au/altc-senior-fellow-sally-kift>

9.7 Raising the profile of diagnostic, formative and summative e-assessments

Institution: The University of Adelaide

Fellow: Professor Geoffrey Crisp

Type: 2006 ALTC Associate Fellow

Background

This fellowship aimed to promote and advance learning and teaching by enhancing approaches to e-assessment through the articulation of e-assessment design principles and disciplinary examples of e-assessment usage and effectiveness. It aimed to identify academic staff presently engaged in the use and development of e-assessment tasks, foster a community of practice around the use of e-assessment in Australia and New Zealand, and to build relationships between Australian academics using e-assessment and colleagues overseas, particularly those in the UK where substantial resources have been allocated to enhancing e-learning and assessment practices in general. The fellowship covers the initial stage of a program that will build the networks required for longer-term relationships to be established, and whilst having a number of specific deliverables that will enhance assessment practices in the short term, was designed to enable future projects to be



developed. The use of technology will not, by itself, necessarily improve student outcomes with respect to assessment.

Outcomes

A simple model for diagnostic, formative and summative assessment tasks linked with learning activities was needed to achieve demonstrable improvements in learning outcomes, and therefore was developed and used throughout this fellowship. Examples of e-assessment questions, more interactive and requiring students to use additional resources to construct their responses, were prepared to meet teachers' requirements of using of constructed responses to assess relational and extended abstract responses. A more convenient approach to a personal response system was demonstrated (freely available on CSIRO website, <http://www.votapedia.com>) and involved the use of mobile phones. The website created as part of the fellowship activities (<http://andy.services.adelaide.edu.au/moodle>) contains discipline examples of interactive assessments under the ALTC project section. Meetings with international experts in learning, teaching and assessment, and workshops and presentations in Australian, New Zealand and UK institutions were conducted.

Completed: March 2008

<http://www.altc.edu.au/altc-national-teaching-fellow-geoffrey-crisp>

9.8 Computer aided feedback and assessment system (PP6-54)

Lead Institution: University of South Australia

Project Leader: Mr Martin Freney

Background

The project aims to create an efficient, easy-to-use 'Advanced Marking Assistant' software application that will enable teachers to use best practice feedback and assessment methodologies. As a result of receiving higher quality feedback and assessment via innovative online mechanisms, students will benefit from improved learning outcomes.

Progress

Key stakeholders were consulted via questionnaires and feedback led to modifications on the Computer Aided Feedback and Assessment System (CAFAS) to ensure easy assessment and flexibility in terms of accommodating various institutions' policies and assessment practices. The user interface has been developed and improved. The beta version of the software was trialled in two industrial design courses and, after fixing serious issues and errors, the alpha version programming tasks were completed. A 'help' resource has been developed to assist new users to learn the system effectively, and includes video tutorials. An authentication system called 'Shibboleth' was chosen to enable users external to University of South Australia to access the tool. Until its implementation, an interim solution has been developed to ensure access for academics from other institutions. Academics at The University of Adelaide and Flinders University were contacted for the



potential trial of the tool in their institutions. A website was created (<http://www.unisanet.unisa.edu.au/cafes/index.asp>) and a presentation was held at the E-learning Symposium at RMIT in December 2007

Project Commencement: December 2006

Project Completion: December 2009

9.9 The Remarks PDF Markup Editor (PP7-542)

Lead Institution: University of New England

Partner Institution(s): Deakin University, Monash University, University of Western Sydney

Project Leader: Professor Stephen Colbran

Background

This project aims to provide a solution for institutions to overcome problems related to poor feedback and engagement with students, which directly impacts on enrolments, attrition, future alumni operations, course experience questionnaires' outcomes and Commonwealth learning and teaching performance funding. This requires a comprehensive system wide approach to electronic marking and archival requirements. ReMarks – a new type of software known as a Feedback Management System – is a multilingual enterprise level software development project with a clear focus on building student feedback and engagement through the assessment process.

Progress

Stage 1 of the ReMarks project has been completed in July 2009. It focused on the creation of a PDF editor enabling cross-platform mark up of student electronic assessment submission. The project also delivered ReMarksXML, which is a Word add-in designed for marking. Both ReMarksPDF and ReMarksXML provide detailed text, image, and audio feedback to students and assessors, either on the fly or after moderation. Training films and a manual to help integrate the products into the education sector have also been developed. A website was established (www.remarkspdf.com) as well as a social networking site (www.remarks.ning.com). Road show presentations with senior management and IT managers were held in 26 institutions.

Stage 2 of the project, which aims to further the outcomes from Stage 1, has recently commenced, with formal agreements in place since July 2009. Trials will be conducted at five institutions, which will involve changes necessary to improve the software. The project will also develop the dimensional model and associated database to enable reporting, using different business intelligence systems used by institutions. Tracking and mapping of learning outcomes such as graduate attributes in the university sector and competencies in the TAFE sector will also be conducted. The team will continue to implement the e-submission and assessment allocation system.

Project Commencement: November 2007

Project Completion: July 2010



9.10 Developing and disseminating team skills capacities using interactive online tools for team formation, learning, assessment and mentoring (CG7-531)

Lead Institution: The University of Queensland

Partner Institution(s): RMIT University, The University of Melbourne, The University of Western Australia, University of Southern Queensland, University of Technology, Sydney

Project Leader: Dr Lydia Kavanagh

Background

Teamwork is one of the key graduate attributes valued by employers. This project seeks to further develop and disseminate a successful and innovative teaching resource with applicability across the higher education sector. It aims to assist students to achieve graduate outcomes associated with teamwork, enhance the student experience and improve student retention. The resource is designed to achieve these three outcomes by improving the functionality and performance of student teams engaged in group projects through a process that supports a range of team management stages. Extensive trials to date, mainly at The University of Queensland, have indicated that the process has applicability in all identified fields of study and is highly transferable across fields of study and across institutions. Preliminary evidence suggests that the process improves student satisfaction. This innovation provides a structured, proven, quality-assured process for the development of the graduate attribute of teamwork without the need for extensive and expensive infrastructure.

Progress

The process automation is almost complete with the development and trial of a system of intentional team selection, which will be disseminated. WebPA – the online peer assessment tool used for anonymous student reflection prior to mentor meetings, and peer assessment and calculation of assessment – has been completed and disseminated to institutions for trial (University of Canterbury (NZ), University of Tasmania and, on a test basis, The University of New South Wales). Design of an online student training manual is underway, including development of audio-visual material and programming of the beta version of the online learning module. The steering group held a midterm workshop regarding the Proactively Ensuring Team Success (PETS) process development and dissemination. PETS manuals (online and hardcopy) have been developed and will be finalised. A Blackboard™ website containing all working documents and material, including workshop report, for members to access has been established. Presentations of the project were conducted at the Australasian Association of Engineering Education Conference (Melbourne, December 2008) and at the European Pharmaceutical Students' Association Faculty Teaching and Learning Showcase 2008 (UQ, October 2008). The team has also been collaborating with the University of Loughborough (UK), with the PETS process disseminated to the WebPA project team (<http://webpaproject.lboro.ac.uk/>).

Project Commencement: July 2007

Project Completion: April 2010

9.11 Integration and assessment of graduate attributes in curriculum (GI7-633)



Lead Institution: The University of Sydney

Partner Institution(s): Griffith University, The University of Queensland

Project Leader: Associate Professor Simon Barrie

Background

A project which aims to support the integration and assessment of graduate attributes in curricula is one response to an issue of significant concern to the higher educational community. Generic attributes are considered to describe the core outcomes of higher education. Although educational policies have affirmed the need to focus on their development, little convincing evidence of authentic curriculum integration or of impact on students' learning has been produced. The project will address simultaneously the two questions of: integration (what curriculum development practices are most effective in providing opportunities for students to develop graduate attributes?) and assessment (what framework(s) for the assessment of generic graduate attributes facilitate appropriate, efficient and effective methods of assessment of these higher-order outcomes?) The project aims to reinvigorate the implementation of graduate attributes across Australian institutions and establish a collaboration of discipline experts and strategic learning and teaching leaders across the country, who will be well-informed and well-resourced to tackle the problems of embedding and integrating the assessment of generic attributes.

Progress

The Graduate Attributes Project (GAP) identified a framework of eight interacting elements, which impact on institutions' efforts to foster curriculum renewal to achieve graduate attributes (conceptions, stakeholders, implementation, curriculum, assessment, quality assurance, staff development and student centred). A series of issues papers on each element of the GAP framework was produced as a resource to support graduate attribute implementation. In developing a scholarly community, 300 members of institutions' communities were brought together over the course of three rounds of symposia. The first round concentrated on the key graduate attributes contacts units to support the development for the framework; the second round focused on connecting the members of 24 ALTC project teams to develop some common understandings, share ideas and forge collaborations; and the final round brought interested local networks in five states into a national GAP network which was linked to a network of Scottish institutions, to share resources and developments, as a precursor to developing new collaborations. 90 collaborative expressions of intent were generated at these events and the international network linkages continue to develop. A website was established to disseminate the results and presentations, including the GAP issues papers, 79 posters reporting on local graduate attribute initiatives shared amongst the graduate attribute community in Australia and in Scotland, and 19 publications and papers (<http://www.itl.usyd.edu.au/projects/nationalgap/introduction.htm>).

Project Commencement: July 2007

Project Completion: November 2009



9.12 Graduate attributes across the disciplines (GI7-638)

Lead Institution: Initially, Central Queensland University. Since April 2009: RMIT University

Partner Institution(s): Murdoch University, The University of New South Wales, until April 2009: RMIT University

Project Leader: Initially, Professor Alex Radloff. Since April 2009: Associate Professor Barbara de la Harpe

Background

The project addresses the well established need for institutions to ensure that their graduates possess the attributes valued by employers and needed for lifelong learning. It aims to increase institutional success in the integration and assessment of graduate attributes by addressing a key success factor, namely, academic staff beliefs and attitudes about graduate attributes and the impact of these on the integration initiative. The project will have 18 institutions working together to share and compare information on academic staff beliefs and attitudes, and engage the sector as a whole in considering how best to support academic work in this area. The ultimate aim is to offer a systematic approach to supporting and assuring the rigour, quality and ongoing improvement in practice in relation to this common curriculum issue.

Progress

The project successfully transferred from CQU to RMIT in April 2009 with significant additional support from the new lead institution. The transfer of the new website has also been concluded (www.rmit.edu.au/bfactor). The planning phase was completed with the appointment of an external evaluator, Dr Allan Goody. A survey has been implemented across 16 participating institutions to measure academic staff beliefs and attitude about graduate attributes. The preliminary analysis and report is completed, with further analysis of survey data remaining. Four state-wide workshops, in which L&T leaders from participating institutions explore survey findings and identify graduate attribute strategies best suited to each institutional context, were planned in June 2009, followed by meetings with deputy vice-chancellors to discuss the surveys and workshop outcomes and to explore strategies.

Project Commencement: October 2007

Project Completion: November 2009



9.13 Assessment policy and impact on practice (PP8-874)

Lead Institution: The University of Queensland

Project Leader: Associate Professor Julie Duck

Background

Assessment is a crucial part of the sector's learning and teaching endeavours. It shapes how students learn and determines what students need to learn. As a result, institutions have sought to embrace these views through change to institutional assessment policies to align content, intended outcomes, pedagogies and assessment practices. The broad goal of the project is to develop a set of practical guidelines for reviewing and analysing assessment policies in Australian institutions. The main purpose is to reflect on assessment policy review and analysis as a process and develop a framework for review of learning and teaching policy that will find practical use across the sector.

Progress

The team developed a full set of recommendations for changes to existing assessment policy and a set of guidelines for good practice to complement the full range of assessment policies at The University of Queensland. Three workshops were conducted for the internal reference groups comprising the chairs of 32 school-based teaching and learning committees, seven associate deans (teaching and learning), representatives from the Teaching & Educational Development Institute and relevant central senior administrative staff. In addition to an extensive historical review, these efforts resulted in gaining a clearer picture of the convergent issues relating to assessment; the persistent and recurring issues and contributing factors; and the perception of the role and policy among stakeholders and how it is perceived to shape or limit present assessment practices. The team commenced two pilot studies in the Law School and the Bachelor of Marine Study programs on alternative approaches to assessment with the aim of using the results to inform proposals for changes to assessment policy. Eight focus groups, with three groups of stakeholders directly involved in the design, implementation, evaluation and completion of assessment, were held at The University of Queensland (March 2009). A Blackboard™ site was set up for the project team and for chairs of school teaching and learning committees to make available all collected raw materials and data.

Project Commencement: August 2008

Project Completion: July 2010



9.14 Enabling commencing students' success with early assessment: best practice resources and interventions to facilitate self-regulation (PP8-891)

Lead Institution: Griffith University

Partner Institution: The University of Newcastle

Project Leader: Professor Keithia Wilson

Background

Commencing students' early experiences of university directly influence their ongoing learning outcomes and persistence. Students' performance on assessment is perhaps most influential in this regard. This project aims to improve higher education assessment practices and student learning outcomes by documenting typical student concepts of, approaches to, and concerns with, different types of early/first assessment tasks, and developing best practice recommendations for helping staff prepare and debrief students on these tasks. The project will also develop, implement and evaluate resources to support commencing students' academic success with first university assessment; and contribute to practical knowledge about how to enhance university students' capacity for academic self-regulation around challenging assessment tasks.

Progress

Focus groups have been conducted over 15 university courses to sample students' experiences of a wide range of assessment types, such as multiple-choice, essay, oral presentation, group work, before and after each assessment item. A conceptual framework of the assessment lifecycle has been developed to code the data from the focus groups and to inform the design of study guides. A diverse sample of individual students has been identified to provide individual case studies of early assessment experiences. Students' appraisals will be validated via a broader survey based on the themes derived from the focus groups and will be presented to staff and student panels.

Project Commencement: September 2008

Project Completion: November 2010



9.15 Moderation for fair assessment in transnational learning and teaching (PP8-906)

Lead Institution: University of South Australia

Partner Institution(s): Curtin University of Technology, Southern Cross University and Taylor's University College (Malaysia)

Project Leader: Associate Professor Gavin Sanderson

Background

In 2005, the then Department of Education, Science and Training identified transnational education (TNE) as “the delivery and/or assessment of programs/courses in a country other than Australia by an Australian-approved provider, where delivery includes a face-to-face component”. TNE is reasonably new and is predicted to grow quickly in the immediate future. The project is designed to identify and promote good practice across disciplines and countries in processes associated with moderation of assessment from both quality assurance and quality control points of view.

Progress

The project team created and regularly updates a Wiki page that represents a central point for all project related information and collaboration, including literature review (<http://altc-tne-moderation.wikispaces.com/literature+review>). After obtaining ethics approval and preparing the survey instruments, the trial commenced in April 2009. An online survey was created using TellUs2, with links to each institution, and went live in August 2009 (<http://www.unisanet.unisa.edu.au/TellUS2/SurveyForm.asp?ID=6550>). A map of staff experiences in a variety of transnational programs is being developed with interviews commencing across all partner institutions in June 2009. Preliminary discussions and research have been conducted with IT staff at the University of South Australia regarding the toolkit design and structure. The project was presented as a poster at the Higher Education Research and Development Society of Australasia conference (HERDSA) 2009, and abstracts were submitted for papers at The Observatory on Borderless Higher Education (OBHE) Global Forum Malaysia (Oct 09) and at the Australian International Education Conference (AIEC) (Oct 09). The roundtable proposal has been accepted for the Australian Technology Network (ATN) Assessment Conference (Nov 2009) and written feedback will be requested from participants. The project is also represented on the ALTC Exchange (<http://www.altcexchange.edu.au/group/moderation-fair-assessment-transnational-learning-and-teaching>).

Project Commencement: July 2008

Project Completion: October 2010



9.16 Student assessment for learning in and after courses

Institution: University of Technology, Sydney

Fellow: Professor David Boud

Type: 2007 ALTC Senior Fellow

Background

This fellowship addresses the question: 'how can assessment enhance learning in and after courses?' It links international research on how assessment can have a beneficial influence on student learning with Australian policy and practice, through a multi-stage process: an international and national team of expert collaborators identifies key ideas and practices with a sound empirical base; selected groups of university teachers and managers work with these ideas and practices to identify fruitful initiatives for implementation in the overall Australian and local institutional contexts; and they then collaboratively identify strategies to bring about change in assessment at national and institutional level. The program focuses on disciplines with, typically, large classes and disadvantageous staff to student ratios, such as business and law.

Progress

This fellowship has focused on assessment for learning in the longer term, which involved a more strategic analysis of priorities for assessment development and an emphasis on promoting, rather than measuring, learning through assessment in carefully selected practices. Extended meetings were conducted with the three members of the international team to identify key issues for assessment for learning practices. The development of strategies for assessment practice and implementation is ongoing with discussions between the national team of collaborators, who agreed the main issues to address were not of a disciplinary nature. A website has been developed and will be refined throughout the fellowship (www.assessmentfutures.com). The documentation of approaches impacting on practice has been undertaken and integrated as part of the development of the content of the website. It takes the form of sets of principles with rationales, sources and examples of applicability. Events are being organised, split into two one-day events in each location. One of these events will be for senior decision-leaders and the other will be open to all academics, for a wider potential dissemination of the ideas and practices.

Commencement: July 2008

Completion: November 2009



9.17 Investigating the theory (and practice) of pedagogic resonance: making disciplinary thinking visible within university classrooms (CG9-1114)

Lead Institution: The University of Queensland

Partner Institution(s): Griffith University, The University of Sydney

Project Leader: Dr Mia O'Brien

Background

While disciplinary epistemologies shape higher-order thinking and intellectual engagement, they can be elusive and challenging for students to grasp and navigate. This project will focus on raising awareness of the role of disciplinary epistemologies within curriculum, learning, teaching and assessment practice to deepen discipline-specific forms of thinking and reasoning. It will also provide a methodology that enables disciplines to investigate, analyse and develop elaborate understandings about relevant disciplinary epistemologies in ways that facilitate enhanced approaches to, and understandings of, teaching and learning practice.

Progress

The project has only recently commenced, with formal agreements in place since August 2009. Over the two-year timeframe, the project team will produce research, resources and recommendations for practices that are scalable and transferable, for dissemination across the sector. The team will aim to increase understanding of and enhance the practice of embedding disciplinary knowledge in curriculum and assessment design, and in teaching and learning practice.

Project Commencement: August 2009

Project Completion: November 2011

9.18 eDST: Decision support tools for multi-disciplinary applications in higher education (CG9-1135)

Lead Institution: University of New England

Partner Institution(s): University of Tasmania

Project Leader: Professor David Cottle

Background

This is a pilot project conducting a need analysis and scoping study investigating a technological solution that will support enhanced e-learning and teaching performance with the aim of producing graduates with better workplace competencies. The project aims to create a system implementation protocol to deliver a range of licensed simulation software across the sector through collaboration with key industries to gain access to sector-relevant simulation tools that would otherwise be cost prohibitive to acquire for single students or single institutions.



Progress

The project has only recently commenced, with formal agreements in place since May 2009. In the first phase of the project, the team will establish a steering committee and associated workgroups, develop a detailed project plan and evaluation framework, identify key stakeholders and start conducting their meta-evaluations.

Project Commencement: May 2009**Project Completion:** January 2011**9.19 Web 2.0 authoring tools in higher education learning and teaching: new directions for assessment and academic integrity (PP9-1350)****Lead Institution:** The University of Melbourne**Partner Institution(s):** Monash University, RMIT University**Project Leader:** Dr Kathleen Gray**Background**

Increasingly, Web 2.0 authoring forms are easy to access and to use, and are proliferating. In academic research circles, they are being implemented as new forms of students' learning activities. However, in higher education, these forms raise significant challenges for academic integrity and other aspects of educational quality in assessment because of the unique co-constructed, connected and mixed nature of the media. This project will engage a range of institutions, staff and students in collaborative activities to give shape and direction to improve teaching, tutoring and marking practices across institutions and disciplines, locally and nationally. It will focus on the scope of assessment policy and procedures; the emphasis of library and learning skills support; the educational design of assessment activities; the management of student records; and the provision of educational technology services to support the Assessment of Student Web 2.0 Authoring (ASW2A).

Progress

The project has only recently commenced, with formal agreements in place since July 2009. In the first phase of the project, the team will integrate the experiences of up to 100 Australian teaching academics (across seven technologies and a range of disciplines) where standards, practices and reporting issues pertaining to ASW2A are concerned. A combination of web-based surveys and structured phone interviews will be used for data collection. Results will be summarised in an issues-and-approaches discussion paper for consideration at a full-day national roundtable. Participants at the roundtable will collaborate to review the issues paper and make recommendations for ASW2A improvements. Proceedings will be documented as good practice guidelines.

Project Commencement: July 2009**Project Completion:** January 2011

9.20 Improving student educational outcomes in online learning, using Web 2.0 concepts and a knowledge-networking approach – Learning in Networks of Knowledge (LINK)

Institution: Curtin University of Technology

Fellow: Associate Professor Matthew Allen

Type: 2008 ALTC Teaching Fellow

Background

The Learning in Networks of Knowledge (LINK) fellowship program will develop, trial and assess new methods of learning via the internet. It assists the re-invigoration of university-level online learning by updating techniques and underlying pedagogic approaches to take account of the changing nature of internet today. To successfully exploit the internet's capacity for enhanced student learning, the fellowship focuses on the pedagogic challenges of creating a student experience centred on knowledge production in a networked environment, with an emphasis on assessing students' learning through ongoing participation while providing effective cognitive scaffolding within which their learning occurs. LINK aims to help Australian institutions adjust to the new possibilities for internet education today. It involves a sophisticated trialling of new ideas about learning via the internet utilising the most recent forms of online knowledge activity, to produce broadly applicable pedagogic methods expressed as examples and guidance material for other academics across the sector.

Progress

This fellowship began by developing a methodology and literature reviews. Other activities have included the design of curricular innovations and plans for implementation, and surveys of students. The focus is on discovering, analysing and promoting an array of knowledge networking tools unknown to most academics. Six workshops have been organised in five capital cities. Papers and workshops have been accepted by international conferences, a further three abstracts are being prepared for conferences in 2010. The production of a website is also underway.

Commencement: January 2009

Completion: March 2010



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