Learning and Teaching
Academic Standards Project

FINAL REPORT
The Learning and Teaching Academic Standards project (LTAS) was commissioned by the Department of Education, Employment and Workplace Relations (DEEWR) as one of a range of initiatives working towards the establishment of a new quality assurance regime in Australian higher education as outlined in Transforming Australia’s Higher Education System. The ALTC had funded a number of earlier initiatives which focused on developing better understandings of academic standards within a discipline-based approach and this project was a logical extension of the long-standing commitment by the ALTC to this area.

I wish to record my appreciation to the Board of the ALTC for their strong commitment to and enthusiastic support for the project, as well as to DEEWR for their support.

Special recognition, however, must go to the Discipline Scholars whose skills in working with each of their disciplines across the spectrum from academic to professional practice ensured the success of the project. Each scholar was supported by a project officer and reference groups of senior members of the discipline. The effectiveness of these teams is evidence of their belief in the value of defining and maintaining standards within their disciplines. This is evident also in the intention of all groups to progress further with the standards-setting agenda even after the formal life of the project has concluded.

Appreciation is also due to the members of the LTAS Project Steering Group for their unflagging support and good advice and to the project team at the ALTC, led by Emeritus Professor Christine Ewan, for their the outstanding work.

Because this project has been explicitly a team effort involving scores of people there is no attribution of authorship of this report. The various committee and reference group members are acknowledged in each Discipline Standard Statement Booklet but I would like to acknowledge in this foreword, the first cohort of Discipline Scholars who have contributed to this report. They are:

- Professor Iain Hay - Arts, Social Sciences and Humanities
- Associate Professor Mark Freeman - Business, Management and Economics
- Professor Jonathan Holmes - Creative and Performing Arts
- Professor Ian Cameron and Associate Professor Roger Hadgraft - Engineering and ICT
- Professor Amanda Henderson and Associate Professor Maree O’Keefe - Health, Medicine and Veterinary Science
- Professor Sally Kift and Professor Mark Israel - Law

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EXECUTIVE SUMMARY

The Australian Government is developing a new Higher Education Quality and Regulatory Framework which includes the establishment of the Tertiary Education Quality and Standards Agency (TEQSA). TEQSA will be a national body overseeing the regulation and quality assurance of tertiary education against agreed standards.

At the time this project was undertaken the standards framework was in development and comprised several elements. Two elements, relating to academic standards, required the involvement of academic communities and disciplines in defining learning outcomes to guide curriculum development, and designing assessment that assures graduates have achieved a threshold level of competence in the discipline.

Those elements are:
• qualification standards as embodied in the revised Australian Qualifications Framework, and
• learning and teaching academic standards comprising indicators of learning and teaching achievement and quality.

The Australian Government, both directly through a specific contract and indirectly through base funding of the Australian Learning and Teaching Council, funded a one-year demonstration project to inform the further development of Learning and Teaching Academic Standards (LTAS project).

The LTAS project aimed to define and describe threshold learning outcomes in selected specific discipline areas.

Threshold learning outcomes were defined in terms of minimum discipline knowledge, discipline-specific skills and professional capabilities including attitudes and professional values that are expected of a graduate from a specified level of program in a specified discipline area.

Six broad discipline groups participated in the demonstration project, others have proceeded during 2011. The six initial discipline groups were:
• arts, social sciences and humanities
• business, management and economics
• creative and performing arts
• engineering and ICT
• health, medicine, and veterinary science, and
• law.

A Steering Group chaired by a vice-chancellor and member of the ALTC Board and comprising senior members of the academic and professional communities and DEEWR was appointed to oversee the project implementation.

The principal objectives of the project were to:
1. engage discipline communities and institutions in the standards-setting agenda
2. define the appropriate level of detail and specificity for program/degree learning outcomes on a discipline-by-discipline basis
3. articulate the relationships between program/degree level threshold learning outcomes and existing professional or academic accreditation standards and express that relationship in an academic standards framework
4. achieve national agreement on a set of threshold learning outcomes for the disciplines
5. create a bank of peer-reviewed resources (for inclusion in the ALTC Resource Library) for reference, and
6. produce a final report comprising six discipline components and a summary report of ‘lessons learned’ for future implementation.

A project implementation team was appointed comprising:

- a project leader with experience in senior management in universities, higher education and accreditation in the professions and extensive experience in outcome based curriculum development and national education policy
- Discipline Scholars, with senior academic leadership experience, outcomes-based curriculum design experience and international recognition in their disciplines, to lead each of the discipline projects
- project officers to assist each of the Discipline Scholars
- discipline reference groups to support each discipline project, and
- support staff located at the ALTC to assist the project director and discipline groups.

The key deliverable for each Discipline Scholar was the production of a document of threshold learning outcomes for the specified discipline at an agreed level by the end of 2010. Those booklets have been published separately on the ALTC website and in booklet form.

Section 1 of this report describes the planning and implementation of the project and Section 2 its achievements, both in terms of meeting the objectives and in terms of impacts beyond those objectives. Section 3 summarises the lessons learned in terms that can be applied to subsequent work in this area. Those lessons have been incorporated into a revised ‘how to’ website for disciplines who subsequently conduct this work. Section 4 outlines aspects of a sustainable system for incorporating learning outcomes into quality assurance processes.

In brief, the project has achieved six sets of threshold learning outcomes (TLOs) developed in close consultation with the sector. The TLOs have undergone a number of feedback/refinement cycles and are:

- clearly articulated
- assessable
- written for a broad audience, including academics, students, parents and employers
- contemporary and forward thinking, and
- situated in a national and international context.

The supporting documentation in each set provides the necessary context for the TLOs to be read and understood. It includes information related to the:

- nature and extent of the discipline
- scope of the Standards Statement
- notes on the TLOs, and
- the relationship between the TLOs and other benchmark statements, most notably those developed overseas.

In addition to these booklets, widespread support and endorsement of both the product (TLOs and accompanying documentation) and the process by which they were developed has been achieved. Reference/advisory group members, most of whom are senior disciplinary leaders, eg chairs of peak academic bodies, chairs of councils of deans, chairs of employer groups, have endorsed or supported the product and process. Endorsement was also provided by the majority of discipline-specific professional bodies. Examples of explicit support for and implementation of the TLOs in practice are described in Section 2. Taken together they provide objective evidence of the impact of this project and of the willingness and capacity of discipline groups, at the highest levels, to engage in such a process and to carry it forward as positive reform in their disciplines.

A growing number of disciplines falling outside the scope of this demonstration project have also sought to become involved in the process. In particular, they have expressed interest in developing TLOs in their discipline and have sought support from the ALTC to conduct this undertaking, namely to be advised on the processes associated with the development of discipline-based TLOs. In response, a discipline Partner Pack was devised, which provides a
suite of documents and templates developed by the ALTC in the LTAS project. This Pack is available on the website.

As part of the shift towards outcomes-based quality assurance arrangements, it was envisaged that various stakeholder groups would need support in their standards-setting/regulation obligations, e.g., the assessment of academic standards, by having access to a variety of standards-related resources to use as reference points, examples, and so forth. Outputs from completed ALTC-funded projects and fellowships have been identified as an existing collection of resources suitable to assist stakeholder groups. Another collection of resources was identified during the LTAS project as the Discipline Scholars embarked on defining learning standards within their specific disciplines. Using these resources as a starting point, and leveraging off the ALTC’s existing IT infrastructure, a new resource library was developed. It is also described in Section 2.

Collectively, the outcomes of the LTAS project have laid some of the foundations necessary for the Government’s proposed reform agenda, particularly those related to the “new era of quality in tertiary education”. Specifically, this project has laid the foundations for:

• whole-of-program curriculum review and reform based on a national understanding of the core attributes required of a graduate in the discipline
• strengthened learning culture within the higher education sector
• integrated quality assurance arrangements satisfying multiple stakeholder groups including: academia, employer groups, professional associations and accreditation bodies
• holistic assessment practices suitable for assessing the full range of defined capabilities
• maintaining confidence in the quality assurance arrangements employed
• cultural change characterised by optimism and cross-sectoral collaboration
• comprehensive national benchmarking arrangements involving public and private providers and the ongoing engagement of international experts in discipline-based learning outcome definition, and
• a place for Australia in the global outcomes-based graduate mobility agenda with Tuning Europe, USA, Canada, Latin America, Lithuania, Russia, Africa, Asia and the Middle East.

None of the LTAS project’s demonstration disciplines began at a zero-base in their development of TLOs. Each had a number of sources to draw upon, including international reference points and various national competency/accreditation statements. Sources also resided in individual institutions where many had adapted their graduate attribute statements to the disciplinary level. They also resided in individual schools/departments where subject outlines and conversations with academics gave indications of learning outcome expectations. Most of these sources, however, were implicit and localised. The major outcome to note is that this project has made the localised and implicit explicit at the national level. Through the intensively consultative process undertaken, members of stakeholder groups were given the opportunity to share their assumptions with others and to have them discussed and debated at a national level. They were also able to share and provide feedback on local practices and underlying frameworks existing within the sector.

Factors critical to the success of the project are described in some detail in Chapter 3 but can be summarised as:

• the policy stimulus to engage in standards-setting for quality improvement as well as quality assurance
• clear and sincere commitment to discipline groups being responsible for setting their own standards
• senior discipline leader buy-in to reinforce the ownership of the standards-setting process
• clear parameters in which to set standards, e.g., four-six outcomes
• focus on outcomes first, allowing that to lead into other core issues such as assessment
• multi-stakeholder involvement including private providers, accrediting agencies, professional bodies, employers and recent graduates
• recurrent engagement with the discipline community at all levels
• consideration of international benchmarks
• a transparent and inclusive consultation process
• respect for expertise residing at the discipline level, and
• explicit use of existing networks.
Although important, the Government's policy stimulus was not the only factor in the success of the project. Disciplines did not undertake the project merely to satisfy emerging compliance obligations, ie to be used by TEQSA in some way. It became an organisational development exercise at the disciplinary level, with an opportunity to address other problematic and interrelated issues. The Government’s policy stimulated disciplines to make explicit their own standards, and encouraged them to take responsibility for the quality of graduates as a discipline rather than as a loose collective of academic departments. The opportunity was embraced by the participating discipline communities, and clearly contributed to the project's success.

The LTAS project has identified conditions under which threshold learning outcomes can be developed and 'owned' by discipline communities. One of the deliverables for the LTAS project was, through consultation, to highlight and evaluate opportunities for sustainable incorporation of TLOs into the new quality assurance regime. Section 4 sets out suggestions for a sustainable process for developing, maintaining and monitoring disciplinary-based academic standards.

In sum, this project has succeeded beyond expectations in the level of engagement of discipline communities that it has achieved. It has earned acceptance both as a successful project and for the new quality assurance framework. It has credibility, high national visibility and an extraordinary level of active stakeholder involvement at a senior level. This success, however, carries a risk. Failure to follow through on the commitment made by the professional and academic bodies and peak industry groups will create a credibility gap. At risk is the loss of goodwill from major stakeholders which will be essential to their future involvement in the higher education quality assurance framework.
1. Background and Implementation

1.1 Policy background

The LTAS project developed in the context of a number of related initiatives in higher education in recent years. Of these, the four most relevant are: (1) the Australian Government’s recently proposed reform agenda for higher education and research, (2) the Review of Australian Higher Education, (3) international attention to academic standards, and (4) the ALTC’s development of discipline-based project networks. Each of these initiatives is outlined below as background to the project.

The Government’s reform agenda

The Australian Government’s higher education reform agenda, presented in Transforming Australia’s higher education system, proposes to “transform the scale, potential and quality of the nation’s universities and open the doors of higher education to a new generation of Australians” (p 5). It is a phased ten-year agenda including, at least, ten landmark reforms to “boost Australia’s national productivity and performance as a knowledge-based economy” (p. 9).

The Government’s summary of these reforms is presented in Box 1, with the sixth on this list, ‘A new era of quality in tertiary education’, relating most directly to the LTAS project. Arising from Recommendation 19 of the Review of Australian Higher Education (Bradley Review), this reform announces the establishment of:

(a) a new national body for regulation and quality assurance, the Tertiary Education Quality and Standards Agency (TEQSA)
(b) a standards-based quality assurance framework, and
(c) new quality assurance arrangements.

TEQSA has been allocated $57 million over a four-year period starting 2009–10 and will build on the foundations established by the Australian Universities Quality Agency (AUQA). TEQSA will serve a number of national quality assurance functions. Its broad purpose is to “enhance the overall quality of the Australian higher education system”.

The scope of the proposed standards framework is broad and emerging. However, its general aim was described in Transforming Australia’s Higher Education System as follows: “The framework will establish minimum standards that higher education providers are required to meet in order to be registered and accredited, as well as academic standards” (p 32). At the time the LTAS project was undertaken, the framework comprised five areas: (1) Provider Registration Standards, which contains a more specific sub-set of Provider Category Standards, (2) Qualification Standards, (3) Information Standards, (4) Teaching and Learning, and (5) Research Standards. It is the fourth of these areas – Teaching and Learning – that relates to the LTAS project. This area of the framework deals with “benchmarks for teaching and learning quality assurance”.
The Government’s proposed reform agenda

The Government is proposing a phased ten-year reform agenda for higher education and research to boost Australia’s national productivity and performance as a knowledge-based economy.

Key reforms include:

- **Real action for real participation – attainment, access and engagement:** transforming access to higher education through a major package designed to radically improve the participation of students from low socio-economic backgrounds (low SES) in higher education, and enhance their learning experience.

- **A growing higher education sector:** promoting greater diversity and quality within the tertiary sector by phasing in a new system to allocate funding on the basis of student demand; support to encourage more students to choose teaching and nursing and to study overseas; and support for the renewal of student services and amenities.

- **A sustainable tertiary education sector:** providing funding certainty and creating a more sustainable higher education sector through higher indexation of teaching and learning grants.

- **Sustainable investment for research:** ending historic funding cross-subsidisation by increasing funding for the full cost of university research, and enabling universities to strive for research excellence in areas of strength.

- **Transforming Australia’s tertiary education infrastructure:** a massive upgrade of university and TAFE infrastructure to meet the teaching and learning requirements of students, teachers and researchers now and into the future.

- **A new era of quality in Australian tertiary education:** establishing the Tertiary Education Quality and Standards Agency (TEQSA), which will provide the foundation for enhancing quality and accreditation in higher education.

- **Income support for students:** landmark reforms to student income support which will redirect assistance so that it reaches the most needy students to boost both their higher education participation and attainment.

- **A fair deal for Australia’s regions:** reviewing regional tertiary education provision with a review of regional loading, encouragement to explore new models of delivery and access to new structural adjustment funding for the sector.

- **Improving tertiary pathways:** building stronger connectivity between the higher education and vocational education and training sectors.

- **A new relationship between government and educators:** a relationship built on mutual respect, trust and agreed funding compacts.

_Transforming Australia’s Higher Education System (p. 9)_

The new quality assurance arrangements are envisaged by the Australian Government to be consultative, particularly in relation to development of the academic/learning and teaching standards:

Key to the success of the new quality assurance arrangements – and meaningful academic standards in particular – will be the active involvement of the academic community. It will be critical to strike the right balance to avoid generalisation or over-prescription.

The Government will ensure that the new arrangements are developed in close consultation with the sector. Discipline communities will ‘own’ and take responsibility for implementing academic standards (working with professional bodies and other stakeholders where appropriate) within the academic traditions of collegiality, peer review, pre-eminence of disciplines and, importantly, academic autonomy (_Transforming Australia’s Higher Education System_, p 32).
Two recommendations of the Bradley Review, Recommendations 19 and 23, provide additional information on the reform agenda and its relationship to the LTAS project.

Recommendation 19 deals with the independent national regulatory body that has since become TEQSA, and the associated framework central to the body's operations. The following extract from Recommendation 19 highlights the specific reference to "learning outcomes".

That the Australian Government adopt a framework for higher education accreditation, quality assurance and regulation featuring:

- accreditation of all providers based on their capacity to deliver on core requirements including:
  - new quality assurance arrangements involving the development of standards and implementation of a transparent process for assuring the quality of learning outcomes across all providers of higher education; and

- an independent national regulatory body responsible for regulating all types of tertiary education. In the higher education sector it would:
  - Carry out quality audits of all providers focused on the institution's academic standards and the processes for setting, monitoring and maintaining them. This would include auditing the adoption of outcomes and standards-based arrangements for assuring the quality of higher education (p. 116).

Recommendation 23 is also particularly relevant to the LTAS project, (see Box 2) as its preamble emphasises the need to develop the outcomes outlined in Recommendation 19 in a disciplinary context with discipline-level quality assurance processes. As clarified in the following excerpt:

A discipline-based approach will be required to strengthen the quality assurance framework as the nature and level of learning outcomes in higher education depend heavily on the particular field of study and reflect the judgments of those who are expert in it. While generic standards in the National Protocols or the Australian Qualifications Framework provide important reference points, by themselves they can only describe the nature and level of expected learning outcomes to a limited extent without being contextualised in specific disciplines. Moreover, standards evolve and are not absolute or timeless – rather they are continually being re-defined and created as knowledge grows in existing fields and as new fields emerge (reference given). Standards that do not capture this dynamism will not be credible (p. 133-4).

Recommendation 23 from the Bradley Review

That the Australian Government commission and appropriately fund work on the development of new quality assurance arrangements for higher education as part of the new framework set out in Recommendation 19. This would involve:

- a set of indicators and instruments to directly assess and compare learning outcomes; and

- a set of formal statements of academic standards by discipline along with processes for applying those standards.

Bradley Review of Higher Education (p. 137)

The Bradley Review discusses the need to develop discipline-level academic standards and to explore the processes associated with this approach. In particular, the aim of this work “should be to judge whether this methodology will assist Australia to put into practice the most systematic and advanced system of assurance of learning outcomes as soon as possible” (p. 136).

International trends

The third initiative related to the LTAS project concerns international trends in the development and measurement of learning outcomes. A number of countries are engaged in articulation and monitoring of learning outcomes and comparable work in Australia is desirable for many reasons, particularly to ensure international employability of Australian graduates.

One such initiative is the Tuning Project. This project began in Europe as the “universities' contribution to the Bologna process” and is based on a ‘tuning’ methodology that seeks to (re-) design, develop, implement, and evaluate study programs at various levels, eg bachelors, masters. The Tuning Project provides a platform for developing reference points expressed in terms of learning outcomes and competences at subject area level. The LTAS project has collaborated and compared approaches with leaders of the European Tuning Project and has used the Tuning Discipline documentation as reference material for development of the threshold learning outcomes.
International learning outcome-related projects specifically mentioned in the Bradley Review include the Assessment of Higher Education Learning Outcomes (AHELO), a feasibility study being conducted by the Organisation for Economic Co-operation and Development (OECD), in which Australia is participating. Another is the comprehensive subject benchmark statement work undertaken in the United Kingdom over the last ten years. Initiatives taking place in Ireland, Scotland and a number of Canadian provinces were also noted in the review.

**ALTC’s discipline-based project networks**

The ALTC’s Discipline-based Initiative scheme was specifically mentioned in the Bradley Review as one way to assist in the implementation of academic standards across discipline communities. The ALTC’s network structures, particularly those arising from the Discipline Support Strategy, provided the platform to not only implement these standards, but to facilitate their development. Moreover, as a result of funding over 70 standards-related projects, the ALTC has the experience, contacts and credibility to support discipline communities in the development of standards.

1.2 The Learning and Teaching Academic Standards (LTAS) project

The Australian Government, both directly through a specific contract and indirectly through base funding of the Australian Learning and Teaching Council, funded a one-year demonstration project to inform the further development of Learning and Teaching Academic Standards.

**Scope**

The project takes as its starting point the award-level descriptors defined in the Australian Qualifications Framework (AQF)1 http://www.aqf.edu.au/. The AQF provides considerable detail but, at its simplest level, expected outcomes are described for each level of qualification. For example, graduates at the level of a bachelor degree are expected to have broad and coherent knowledge and skills for professional work and/or further learning.

The LTAS project aimed to define and describe threshold learning outcomes encompassed within that “broad and coherent knowledge and skills for professional work and/or further learning” in selected specific discipline areas.

Threshold learning outcomes were defined in terms of minimum discipline knowledge, discipline-specific skills and professional capabilities including attitudes and professional values that are expected of a graduate from a specified level of program in a specified discipline area.

**Purpose and objectives**

The purpose of the LTAS project was to facilitate and coordinate discipline communities’ definition and dissemination of academic standards.

The objectives of the project were to:

1. engage discipline communities and institutions in the standards-setting agenda
2. define the appropriate level of detail and specificity for program/degree learning outcomes on a discipline-by-discipline basis
3. articulate the relationships between program/degree level threshold learning outcomes and existing professional or academic accreditation standards and express that relationship in an academic standards framework
4. achieve national agreement on a set of threshold learning outcomes for the disciplines
5. create a bank of peer-reviewed resources (for inclusion in a repository) for reference by both TESQA and institutions in developing their processes further.
6. produce a final report comprising six discipline components and a summary report of ‘lessons learned’ for future implementation.

**Discipline areas encompassed in the demonstration project**

Broad discipline areas were defined according to Australian definitions of Field of Education from the Australian Standard Classification of Education. They correspond to the broad structural arrangements of faculties or aggregates of departments within Australian universities.

Six broad discipline groups participated in the demonstration project, others followed in the second half of 2010 and in 2011. The six initial discipline groups were:

- arts, social sciences and humanities
- business, management and economics
- creative and performing arts
- engineering and ICT
- health, medicine, and veterinary science, and
- law.

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1. As established at the time of commencement of the project. The project also took into account revisions made during 2010.
It was beyond the scope of this project, a feasibility/demonstration project, to facilitate the development of academic standards in all discipline areas. The intent was that these selected disciplines would provide the blueprint for others to follow. Each discipline group also chose which AQF level or levels to work with according to the priorities in their discipline.

**Working definition of ‘academic standards’**

A working definition of ‘academic standards’ was agreed upon for the project:

> Academic standards are learning outcomes described in terms of discipline-specific knowledge, skills and capabilities expressed as threshold learning outcomes that a graduate of any given discipline (or program) must have achieved.

Defining learning outcomes at the threshold level was based on a considered rationale. Threshold does not signal that aspirational outcomes are discouraged. On the contrary, it establishes a baseline above which aspiration can be clearly identified. Threshold learning outcomes offer a number of positive benefits, most notably the following:

- They protect autonomy and diversity by providing institutional scope for ‘aspirational’ learning outcomes to be matched to mission.
- Disciplines, not institutions, ‘own’ and define the core (or threshold) attributes of their discipline.
- The concept of threshold competencies aligns with professional accreditation.
- Threshold outcomes simplify international benchmark comparisons.

**Principles underlying use of academic standards for quality assurance**

To ensure that the process of setting academic standards would be accepted and supported by the academic community, some principles were developed to safeguard this process. These principles were:

1. Overall the process for developing and using academic standards must be collaborative, transparent, evidence-based, outcomes-based, responsive, sustainable and feasible:
   - Academic standards, in the context of this project, will be expressed as threshold learning outcomes (TLOs) that are able to be assessed. Descriptors of input and process, e.g., student/staff ratios, student entry scores, class sizes, teaching methods, may support but are not substitutes for evidence of achievement of threshold learning outcomes.
   - Threshold learning outcomes will ultimately and ideally be defined by each discipline community for each level of qualification, i.e., bachelors, masters, doctorate.
   - Regular review of TLOs will be required to maintain currency with advances in knowledge and practice.
   - Threshold learning outcomes in Australia must be comparable with appropriate international standards.
   - Processes for assuring and demonstrating that TLOs have been achieved must be efficient, transparent and sustainable, and should include external reference points, and
   - Processes for assuring academic standards must not give rise to perverse consequences, e.g., standardisation of curricula or standardised tests.

2. Autonomy of academic decision-making must be protected and diversity across the sector must be encouraged:
   - Individual institutions may set their own learning outcome standards beyond the defined threshold learning outcomes in any or all disciplines in response to their individual missions and program objectives.
   - Individual institutions will determine the curriculum, teaching methods, resources and assessment methods leading to the demonstration of the achievement of the defined learning outcomes of graduates in their institution.

**1.3 Project governance and management**

A steering group chaired by a vice-chancellor and member of the ALTC Board and comprising senior members of the academic and professional communities and DEEWR was appointed to oversee the project implementation (See Appendix 1).

A project implementation team was appointed comprising:
- a project leader with experience in senior management in universities, higher education and accreditation in the professions and extensive experience in outcome-based curriculum development and national education policy
- Discipline Scholars, at professorial level with senior academic leadership experience, outcomes-based curriculum design experience and international recognition in their disciplines to lead each of the discipline projects
- project officers to assist each of the Discipline Scholars
- discipline reference groups to support each discipline project, and
- support staff located at the ALTC to assist the project director and discipline groups.

See Appendix 2 for the project team and list of Discipline Scholars and project officers.
1.4 Project Plan

The project officially commenced with a peak disciplinary body national forum. Attendance at the one-day forum was by invitation only to:

- leaders of the professions/disciplinary bodies/scholarly academies/universities
- chairs of councils of deans
- peak bodies from industry and employers, and
- student and graduate representatives.

The main purpose of the forum was to:

- determine the focus for the project in each broad discipline area, eg accounting within business grouping or history within arts, social sciences and humanities grouping
- develop a project plan for each defined discipline project including specific deliverables and timelines, and
- advise on and commit to processes and support structures for the Discipline Scholar.

The LTAS Forum was structured and intended as a ‘working session in discipline groups’ rather than a communication forum. Attendance was by invitation only and the acceptance rate was high. More than 100 people attended and remained for the entire program.

Discipline project plans

The key deliverable for the Discipline Scholar was the production of a document specifying threshold learning outcomes at an agreed level for selected qualification level. To facilitate this work, the Discipline Scholars:

- convened a representative sub-committee of discipline experts, nominated by the discipline group, who were responsible for consultation and approval of drafts
- appointed a project officer to undertake research in support of the discipline sub-committee and organise consultations. Research included interrogating existing ALTC reports and undertaking a wider literature search.
- attended monthly Discipline Scholar meetings at the ALTC to report on progress and insights into the process.

Discipline Scholars produced detailed project plans which varied based on their different starting points in the standards-setting process, discipline priorities and the advice given by forum participants. However, the basic approaches were similar in covering the following eight steps:

1. establishing reference/advisory groups
2. drafting a set of threshold learning outcomes (TLOs) based on the Australian Qualifications Framework and existing work, eg Australian accreditation standards, European Tunings project, UK’s Quality Assurance Agency subject benchmarks
3. seeking feedback from key stakeholder groups on the draft TLOs
4. engaging broader discipline communities in relation to the draft TLOs, the LTAS project, and the new quality and standards framework
5. revising draft TLOs based on stakeholder and broader community feedback and international benchmarks
6. gaining endorsement/ratification of final TLOs
7. disseminating stakeholder endorsed TLOs to the discipline and wider communities
8. documenting the standards-setting process to ensure project sustainability and organisational learning.

The manner in which each of these steps was undertaken, was determined by each discipline group.

Focus of discipline groups

Although the focus varied, each discipline group followed a similar process:

The Arts, Social Sciences and Humanities Discipline Group planned to:

- focus on history and geography as two ‘demonstration disciplines’
- develop TLOs at bachelor level for these two disciplines
- establish two discipline reference groups, one each for history and geography, and
- work closely with key stakeholder groups including the Australasian Council of Deans of Arts, Social Sciences, and Humanities (DASSH), Australian Curriculum, Assessment and Reporting Authority (ACARA), Australian Historical Association (AHA), Institute of Australian Geographers (IAG), International Network for Learning and Teaching Geography in higher
education (INLT), and the New Zealand Geographical Society (NZGS).

The Business, Management and Economics Discipline Group planned to:
• focus on the discipline of accounting
• develop TLOs at the bachelor and masters coursework levels for this discipline
• establish both a disciplinary reference group (to assist in the drafting of the TLOs) and an expert advisory group (for the governance function), and
• work closely with key stakeholder groups including the Australian Business Deans Council (ABDC), particularly the ABDC Associate Deans Teaching and Learning Network, Accounting and Finance Association of Australia and New Zealand (AFAANZ), Institute of Chartered Professional Accountants, National Institute of Accountants, CPA Australia, and the Business Council of Australia.

The Creative and Performing Arts Discipline Group planned to:
• focus on the broad discipline of the creative and performing arts
• develop TLOs at both the bachelor and masters coursework levels, and
• work closely with key stakeholder groups including DASSH, the Australian Council of University Arts and Design Schools (ACUADS), Australasian Association for Drama, Theatre and Performance Studies (ADSA), National Council of Tertiary Music Schools (NACTMUS), Tertiary Dance Council of Australia (TDCA), Aus Dance, Australian Association of Writing Programs (AAWP), and the Australian Screen Production Education and Research Association (ASPERA).

The Engineering and ICT Discipline Group planned to:
• focus on the broad discipline of engineering and ICT
• develop TLOs at the bachelor level
• remain internationally focused as engineering and ICT are connected to international accords
• establish both local, Australian-based reference and advisory groups and an international advisory group, and
• work closely with key stakeholder groups including the Australian Computer Society (ACS), Engineering Australia (EA), Australian Council of Engineering Deans (ACED), and the Australian Council of Deans of Information and Communications Technology (ACDICT).

The Health, Medicine and Veterinary Sciences Discipline Group planned to:
• focus on the broad discipline of ‘health’
• develop TLOs reflecting entry to the health professions
• build on existing work on accreditation standards and curriculum frameworks, and
• work closely with key stakeholder groups including Councils of Deans of medicine, dentistry, nursing and midwifery, health sciences, veterinary sciences, health professionals, and allied health.

The Law Discipline Group planned to:
• focus on the Bachelor of Laws degree and develop the appropriate TLOs
• build on existing standards that exist in law
• Work closely with key stakeholder groups including the Council of Australian Law Deans (CALD), Legal Admissions Consultative Committee (LACC), Australian Academy of Law (AAL), Law Council of Australia (LCA), COAG Standing Committee on Legal Practice and Relations with the Legal Profession, Australian Law Students Association (ALSA), Young Lawyers Committee, Australasian Profession Legal Education Council (APLEC), Australasian Law Teachers’ Association (ALTA), and the judiciary.

Detailed information on the rationale for each discipline group’s focus, as well as the steps taken to complete their work is covered in each discipline’s Standards Statement booklet. All booklets are available at http://www.altc.edu.au/resources

1.5 Communication Strategy

A communication strategy to increase understanding and build awareness was designed for the LTAS project, with particular emphasis on providing an ‘official voice’ to ensure the consistency of information. Communicating directly to target groups through keynote addresses and other forms of presentation as well as more informal meetings was essential to gain support and allow dialogue about potentially contentious aspects of the project.

A regular newsletter was developed to ensure the direction and outcomes of the project were communicated clearly. The key message stemming from the project was chosen for the title of the newsletter, Disciplines Setting Standards. A ‘Standards’ section accessible from the ALTC homepage was created and updated regularly.
2. Achievements of the LTAS project

2.1 Project outcomes and impact

The following description of project outcomes and impacts demonstrates that the project exceeded its objectives (refer Section 1) in significant ways. In summary, the project achieved:

• seven sets of threshold learning outcomes (TLOs) with supporting documentation
• disciplinary support/endorsement of the TLOs and the process by which they were developed
• disciplinary commitment to the integration, implementation and ongoing maintenance of developed TLOs
• disciplinary support for the development of TLOs in areas/levels outside the scope of this demonstration project
• uptake/piloting of TLOs in various programs of study
• uptake of the outcomes of the LTAS project by the wider discipline community
• development of resources and processes to support the development of TLOs
• identification of resources and development of search interface (the ALTC Resource Library)
• high levels of involvement/engagement by discipline communities in the quality assurance/standards-setting agenda
• heightened national and international awareness of Government reform agenda, establishment of TEQSA, and outcomes-based quality assurance
• facilitation of discussions between academia, employer groups, professional associations and accreditation bodies on core learning outcomes
• development/synthesis of reference points for national and international benchmarking
• the explicit expression of implicit and localised practices
• disciplinary modernisation
• in-depth disciplinary and institutional consideration of the implications for curriculum, assessment and accreditation, and
• foundations laid for sector-wide reform.

A description of these main outcomes and key impacts is provided below.

Seven sets of TLOs developed with supporting documentation

Each set of TLOs has been developed in close consultation with the sector and has undergone a number of feedback/refinement cycles. The TLOs are:

• clearly articulated
• assessable
• written for a broad audience including academics, students, parents and employers
• contemporary and forward thinking, and
• situated in a national and international context.

The supporting documentation in each set provides the necessary context for the TLOs to be read and understood. It includes information related to the:

• nature and extent of the discipline
• scope of the Standards Statement
• notes on the TLOs, and
• relationship between the TLOs and other benchmark statements, most notably those developed overseas, and existing Australian standards.

Together, these TLOs and supporting documentation form a collection of Standards Statement booklets for the following disciplines/programs of study:

• Accounting (bachelors, masters entry and masters advanced)
• Creative and Performing Arts (bachelors and masters by coursework)
• Health (covering entry to the professions)
• Law (Bachelor of Laws)
• History (bachelor-level)
• Geography (bachelor-level), and
• Engineering and ICT (bachelor-level).

These Standards Statements have been published in booklet format as well as on the ALTC website.
Disciplinary support/endorsement of the TLOs and the process by which they were developed

The TLOs and accompanying documentation, along with the process by which they were developed, have been endorsed by reference/advisory group members, most of whom are senior disciplinary leaders, e.g., chairs of peak academic bodies, chairs of councils of deans, chairs of employer groups. Discipline-specific TLOs were also endorsed by professional bodies including:

- Australasian Association of Writing Programs (AAWP) Executive Management Committee
- Australasian Association for Theatre, Drama and Performance Studies (ADSA)
- Australasian Council of Deans of Arts, Social Sciences and Humanities (DASSH)
- Australian Academy of Science’s National Committee for Geography
- Australian Business Deans Council (ABDC)
- Australian Computer Society (ACS)
- Australian Council of Deans of Engineering (ACED)
- Australian Council of Deans of Information and Communications Technology (ACDICT)
- Australian Council of University Art and Design Schools (ACUADS)
- Australian Council of Professional Historians Associations (ACPHA)
- Australian Geography Teachers Association (AGTA)
- Australian Historical Association (AHA)
- Australian Screen Production and Research Association (ASPERA)
- Council of Australian Law Deans (CALD)
- Deans of Arts, Social Sciences and Humanities
- Federation of Australian Historical Societies (FAHS)
- Engineers Australia (EA)
- Geographical Society of New South Wales (GSNSW)
- History Teachers’ Association of Australia (HTAA)
- Institute of Australian Geographers (IAG)
- National Association of Tertiary Music Schools (NACTMUS)
- Royal Geographical Society of South Australia (RGSSA), and
- Royal Geographical Society of Queensland (RGSQ).

‘In principle’ endorsement was given to the Creative and Performing Arts (CAPA) TLOs by the Deans and Directors of Faculties, Colleges and Schools of Creative and Performing Arts at their inaugural meeting. The Australian Council of Professors and Heads of Information Systems (ACPHIS) gave ‘in-principle’ endorsement to the TLOs developed by the Engineering and ICT Discipline Group. At the time of writing, endorsements were also pending from a number of other bodies not due to meet until 2011.

Disciplinary commitment to the integration, implementation and ongoing maintenance of developed TLOs

The integration, implementation and ongoing maintenance of the developed TLOs have been secured in most discipline groups to date: For example:

- In the Law Discipline Group, the project has initiated and supported the formation of a permanent group of associate and assistant deans with responsibility for teaching and learning in law schools. In June 2010, the LTAS: Law project convened a national forum of all Law Associate and Assistant Deans (with attendance from all but two law schools). This was the first time such a group had been convened. In July 2010, the Council of Australian Law Deans (CALD) endorsed the formation of a permanent Law AD Network to continue beyond the life of the LTAS project. A second national forum was held in Melbourne at the end of September 2010. One of the roles of the Network is to drive the implementation phase of the TLOs and to engage with the opportunities provided by the ALTC. CALD has indicated that it will continue to fund this group in order to provide Law ADs with the opportunity to advance legal education practice and research through sharing ideas, resources and the promotion of cooperation between law schools. It is envisaged that there will continue to be two meetings a year, with a discussion of current issues in legal education as the focus. The AD Network proposes to create: a publicly accessible web-based repository of resources in law teaching and learning; a private web-based sandbox for the Law AD Network to develop and work together for teaching and learning ideas in Australian law schools; and, a discussion group for current teaching and learning issues referred to the network from CALD. It seeks to foster professional development for Law ADs, and more formal collaboration for the purposes of benchmarking and the development of ALTC and other grant applications. It also intends working on the ongoing development and implementation of threshold learning outcomes for the discipline of Law.
• The Law Discipline Group project team worked constructively with the Law Admissions Consultative Committee (LACC) to explore how the Threshold Learning Outcomes for Law might relate to the currently prescribed Academic Requirements for Admission to practise. Discussion between the Discipline Scholars, certain members of the Council of Australian Law Deans (CALD) and the Chairman of LACC has led to a national proposal to revise the current academic requirements. At its meeting of 21 October 2010, LACC endorsed a proposal "integrating the present academic requirements for admission with the Threshold Learning Outcomes for Law", and referred the proposal to the State and Territory Admitting Authorities, to CALD and to the Council of Chief Justices, with a view to adopting the final proposal at LACC’s first meeting in 2011. If the proposal is adopted by the local Admitting Authorities (as has already occurred in at least one state) and then by LACC in 2011, it will be forwarded to the COAG Taskforce on the National Legal Profession Reform, in anticipation that it will be included in the proposed National Rules for Admission to Practise.

• The Creative and Performing Arts project team convened the first ever meeting of Deans and Directors of Faculties, Colleges and Schools of Creative and Performing Arts. This meeting was attended by 30 Deans or their representatives. Moves are now underway to formally establish a Deans’ Council of Creative and Performing Arts and, with it, a network of Associate Deans, Learning and Teaching, who will have a significant role in the national deployment and implementation of the learning outcomes. This paves the way for a sector-wide forum, capable of addressing national priorities in research and learning and teaching and, following the example offered by the Arts, Social Sciences and Humanities Associate Deans, Learning and Teaching, is likely to play a significant role in the ongoing management of the academic standards project.

• In the Creative and Performing Arts Discipline Group, the chairs of the peak discipline bodies (creative writing, dance, music and sound, screen and media, drama and performance, and visual arts) who had come together at a Discipline Reference Group meeting, agreed to bring their executives to a 2011 forum to further advance the LTAS project.

• From the Arts, Social Sciences and Humanities Discipline Group, a member of the History Discipline Reference Group proposed and received funding for an ALTC Priority Project, ‘After standards: Engaging and embedding History’s Standards using international best practice to inform curriculum renewal’. This significant project builds directly on the efforts of the History LTAS project work and involves 32 Australian higher education institutions offering a major in History.

• The Academy of Science’s National Committee for Geography is considering using the Standards Statement as one of the bases for development of a decadal plan for Geography. A national forum of stakeholders will be convened at the Academy during July 2011. This gathering is modelled on the ALTC’s approach to the February forum, which was a key part in the development of academic standards. Invitees will include representatives from major relevant government departments, CSIRO, Census, Google, ESRI and other organisations that make use of Geography as well as high-profile individuals who have spoken for Geography in recent times, eg Mr Tim Costello and Mr Dick Smith. Invited participants will be part of the consultation group for the new plan for Geography and three key developments will be proposed as signalling the beginning of the discipline’s renaissance in Australia:
  – the new Geography Standards Statement
  – the new (K-12) Australian curriculum for Geography, and
  – the growing community realisation that Geography – as it can be understood from the Standards Statement – is especially, if not uniquely, well-placed to help resolve key issues facing Australia and the planet, eg climate change, disaster mitigation, boat people, urban encroachment on agricultural lands, catchment management.

This conjunction of events, of which the Standards Statement is a key component, represents a critical moment in the history of the discipline in Australia. Moreover, in this context, this ALTC project has offered elements for a model for long-term strategic planning in one discipline as well as being a lynchpin in its prospective renaissance in academic, scientific and business and communities.

• The Australian Business Deans Council (ABDC) is leading a process, in collaboration with industry and key stakeholders, to assess Accounting learning outcomes against thresholds from 2011. The ABDC has agreed to seed fund this initiative. An ALTC grant application has also recently been approved. This project, ‘Hunters and gatherers: Strategies for curriculum mapping and data collection for assuring learning’, will be led by UTS, with four partner institutions participating, Bond University, QUT, RMIT and USQ. Funds are also being sought from key stakeholder groups such as joint accounting bodies (CPAA, ICAA, NIA), universities, and AFAANZ. Key stakeholders will also participate in-kind, eg offer expertise via reference group, contacts for wider stakeholder engagement, forum locations and sponsorship.

• From the Health, Medicine, and Veterinary Science Discipline Group, Discipline Scholars, Associate Professor Maree O’Keefe and Professor Amanda Henderson (together with colleagues at Monash, The University of Melbourne and The University of Queensland), received funding for an ALTC Priority Project, ‘Harmonising higher education and professional quality assurance processes for the assessment of learning outcomes in health’. This project extends the Health Scholars’ work of this year.
Disciplinary support for the development of TLOs in areas/levels outside the scope of this demonstration project

With the support of the discipline communities, TLOs and supporting documentation will be developed in a number of areas/levels outside the scope of this demonstration project. For example:

- The Australian Business Deans Council has selected the next business discipline for TLO development in 2011. The working group has been established and will be chaired by a member of the Accounting reference group who has gained standards-setting experience this year.

- The Creative and Performing Arts Discipline Group plans to proceed to develop TLOs for the honours, masters by research and PhD levels.

- The Council of Australian Law Deans, at its November meeting, agreed that its next focus should involve consideration of the development of TLOs for the Juris Doctor (JD) at AQF Level 9.

- In the Arts, Social Sciences and Humanities (ASSH), several scholarly societies have signalled their intention to develop threshold learning outcomes for their discipline in 2011 and beyond. These include the Australian Sociological Association, Australian Political Science Association, Asian Studies Association of Australia, and the Australian Anthropological Society. Other ASSH disciplines undertaking, or planning to undertake, TLO development include theology, food studies, demography/population and criminology.

- The Health, Medicine and Veterinary Science Discipline Group, strongly endorsed the need for further refinement/embedding of TLOs in the health disciplines and their accreditation standards.

Uptake/piloting of TLOs in various programs of study

A number of the TLOs developed this year have begun to be ‘used’ by members of various discipline communities. A number of Discipline Scholars have been sent examples where the developed TLOs have been mapped against institutional program objectives and graduate attribute statements. In some instances, the developed TLOs have been used to design curriculum in a pilot-testing capacity. Appendix 3 provides more detail of the take-up of the TLOs by particular discipline communities. Examples, provided by the discipline groups, are summarised below.

- At The University of New South Wales, the Faculty of Law is beginning a comprehensive review of its LLB program, and the LTAS Bachelor of Laws TLOs are being used as the framework within which learning outcomes will be mapped across the degree. At this early stage, the TLOs have been given to all groups working on curriculum issues to inform their discussions. The TLOs have been found to be a very useful way of crystallising the beliefs and aspirations of UNSW law teachers about the learning process and of ‘teasing out’ the importance of aspects of the curriculum that might have previously not been as obvious.

- At the University of South Australia, the Bachelor of Laws TLOs have been incorporated into a joint Engineering, Nursing and Law Teaching and Learning project that seeks to articulate graduate qualities. The work involves using e-portfolios and e-portfolio pedagogy to scaffold and track graduate quality development. The TLOs have been aligned with UniSA graduate qualities so that students can see the connection between the two in tracking the development of their professional attributes.

- At The University of Queensland, awareness of the TLOs has begun to inform teaching policy and the design of new courses. An example of the former is an increased emphasis upon documenting quality assurance processes within the school, knowing that at some point in the future the school will be required to provide evidence supporting its claims about teaching quality. An example of the latter is the decision to make group work a major component of the assessment program for a capstone course as a direct result of the TLO requiring evidence of collaboration.

- Leaders of a Forum of Soil Scientists (September, 2010) requested outcomes specific to Soil Science. The Engineering and ICT TLOs were slightly modified and discussed. The resulting document will now be presented to the gathering of the teaching academics from the consortium (Sydney (lead), Melbourne, Adelaide, UQ, UWA) at Forum 3 (April 2011) for further discussion and likely adoption.

- Discipline Scholar, Professor Ian Cameron, was invited by the director of Mining Education Australia (MEA), to their bi-annual meeting in 2010 to speak on the latest developments of graduate attributes and learning outcomes. The Engineering and ICT TLOs were presented as a basis for the MEA’s curriculum review. The five learning outcome areas were very well received and perceived as much more usable than the current graduate attribute statement. Attendees considered their curriculum streams against the five areas, understanding the emphasis in their stream courses against the TLOs. Members would consider adapting these five TLOs when their ultimate alignment with the revised Stage 1 Competency Standards being approved by Engineers Australia is known. Attendees were also particularly interested in assessment and measurement of attainment against outcomes. It is likely that the MEA will adopt the statements and modify as necessary for their curriculum purposes.
Uptake of LTAS project outcomes by the wider discipline community

There is evidence that the uptake of the LTAS project’s outcomes extends beyond Australian institutions and of its influence in the broader discipline communities (both nationally and internationally). For example:

- The Geography and History Standards Statements have been used to inform and shape TLOs for Geography and History graduates in Syria. As part of recent (November 2010) EU-funded consulting work to upgrade the higher education sector in Syria, an Australian geographer drew from (with appropriate acknowledgement) the Australian Statements in her work.

- The Bachelor of Laws TLOs have been used as the framework for a new first-year student text. The text contains six chapters largely or entirely aligned with the TLOs.

- The entire Australasian Law Teachers Association’s 2011 Annual Conference http://www.alta2011.com/ will focus on assuring professional and academic standards for Law. Discipline Scholar Professor Sally Kift is delivering a keynote speech. She has also been invited to present at the Australasian Professional Legal Education Council’s 2011 Annual Conference.

- In November 2011, the Macquarie Centre for Legal Governance is hosting a Summit on ‘The future of legal professionalism, education, ethics and scholarship’. Involving peak legal organisations such as the Australian Academy of Law, the Rule of Law Institute Australia, the Law Council of Australia, and the Judicial Conference of Australia, the Summit will consider how legal education, scholarship, ethics and professional responsibility might be redesigned. The discussion will include the work of the LTAS project in Law as part of its review of the changing context.

- The Geography Standards Statement proved to be a valuable resource to the President of the Institute of Australian Geographers (IAG) – also the Discipline Scholar for ASSH – in preparing material for a new global reference ‘advertising’ the benefits of studying Geography in Australia.

The request for a 1,000-1,500 word submission for this publication came from the editor of i-studentadvisor magazine. The i-studentgroup (http://www.i-studentgroup.com/) currently produces a series of online magazines throughout the year that are distributed free to nearly 10,000 guidance counsellors, heads of sixth form (Year 11), IB coordinators and so on around the world. With access to 250,000 students, the magazines detail study options in various countries and focus on different subject areas. For 2010–11 a hardcopy subject guide is under preparation. It will have a print run of 10,000 copies and will be distributed to all i-studentadvisor counsellor subscribers, important education figures and attendees at international conventions.

As the editor noted, “This is a great opportunity to really promote the subject and country to thousands of readers around the world who we hope will use the guide as a first port of reference when considering their study options. We know from feedback from our subscribers that this kind of book would be of great use to both themselves and their students”.

Development of resources and processes to support the development of TLOs

A growing number of disciplines outside of the scope of this demonstration project have sought to become involved in the LTAS project. In particular, they have expressed interest in developing TLOs in their discipline and have sought support from the ALTC to conduct this undertaking in the form of advice on the processes associated with the development of discipline-based TLOs. In response, a discipline Partner Pack was devised, which provides a suite of documents and templates developed by the ALTC in the LTAS project. These documents have been distributed to a number of partners to date (or downloaded from the ALTC website), with a positive response from users. An updated copy of the Partner Pack will be available on the website in early 2011.

Identification of resources and development of search interface (the ALTC Resource Library)

As part of the heightened emphasis on outcomes-based quality assurance, it is envisaged that various stakeholder groups will need to be supported in their standards setting/regulation obligations, eg the assessment of academic standards, by having access to a variety of standards-related resources to use as reference points, examples, and so forth.

The ALTC Resource Library has been established, informed by the results of a preliminary scoping study of relevant national and international learning and teaching repositories, eg EvidenceNet, Merlot, ERIC, to identify best practice design methodology, web interface design, and search functionality structure.

The initial phase of the project focused on work commissioned by the ALTC. Resources were selected and identified by a review panel and peer-evaluated by selected members of the academic community who provided overview commentary speaking to the value of the work to the community in general and to disciplines specifically. Suggested keywords were provided through the evaluation process along with a ranking of the resource. This information supported the generation of web page metadata, the creation of a dynamic search facility and the position the evaluated resource occupies on a search results list. Two pilot evaluations were trialled to refine the process.

The search facility provides an overview of search structure including nomenclature and tips on searching, as well as an
advanced search capacity. The site also contains a portal with links to international good practice websites as well as other useful sites.

The repository, the Resource Library, is online and is accessible for reference by TEQSA, Australian higher education institutions, and other interested organisations through the identified hyperlink on the ALTC home page.

Procedures and workflows have been established to support the ongoing identification of ALTC projects focused on best practice in curriculum and academic standards. This process now forms part of the normal ALTC grants and projects administration workflow. Automated review flags have been built into the workflow to ensure currency of the resources identified as good practice.

High levels of involvement/engagement by discipline communities in the quality assurance/standards setting agenda

Providing the opportunity for members of all stakeholder groups to become involved in the LTAS project was an important component of project design. Based on the tabulation of LTAS project consultation records, disciplinary engagement has been extremely high. In total, members of the LTAS team have:

- hosted over 420 meetings/presentations/workshops to more than 6100 attendees
- received feedback (written and survey responses) from over 600 individuals and groups on the draft TLOs
- received in-kind support with venue hire, catering etc for many events and the dissemination of material/updates to stakeholder groups, and
- observed high levels of attendance and discussion at reference/advisory group meetings and other organised events, eg LTAS Forum, AuQF Keynote presentation and workshop, Panel Sessions at ALTC Assessment Forum and ATN Assessment Conference.

Interest in the LTAS project was also high with:

- 8388 visits to the Standards section of the ALTC website to the end of 2010
- 669 individuals subscribing to the official newsletter, *Disciplines Setting Standards*
- over 2960 individuals on Discipline Group contact lists
- over 100 invitations for Project Director, Emeritus Professor Christine Ewan and ALTC CEO, Dr Carol Nicoll to attend meetings/make presentations on the LTAS project, and
- considerable media coverage.

Heightened national and international awareness of Government reform agenda, establishment of TEQSA, and outcomes-based quality assurance

A direct result of the high levels of interest and engagement in the LTAS project has been the heightened awareness of the Government's reform agenda and its components, most notably TEQSA and its proposed outcomes focused quality assurance arrangements. This awareness raising has not only occurred within Australia – where it has been substantial – but also internationally through:

- presentations made at international conferences throughout 2010
- a number of reference/advisory groups having international membership
- the establishment of close ties with the European Tuning Project's coordinators and scholars, and
- hosting of visiting international delegations.

Facilitation of discussions within and between academia, employer groups, professional associations and accreditation bodies on core learning outcomes

Another important outcome arising from the high levels of involvement in the LTAS project is the number of successful discussions facilitated among stakeholder groups. In all instances, the developed TLOs derived from the need to acknowledge and integrate different perspectives existing within disciplinary communities regarding the expectations for graduates. This involved the 'bringing together' of various stakeholder groups to share perspectives and search for commonalities in what it means to be a graduate of that particular discipline. The result has been the identification of the learning outcomes central to the discipline. As noted by the Business, Management, and Economics Discipline Group:

> The Learning and Teaching Academics Standards (LTAS) project has been a catalyst to reverse deteriorating relationships and facilitate collaboration through a cooperative exercise. A ‘collaborative’ ethos has been steadily emerging between professional bodies, employers and academics throughout the year and there is evidence that there is optimism about this continuing into the future (through further collaboration).
This successful facilitation of various stakeholder groups also allowed for some parties to 'have a voice' in the development of standards in their discipline. As noted by one discipline group in their report:

At consultation sessions, several stakeholders from 'outside' the academy, eg community organisations, employers, noted their appreciation of being invited to and being able to, contribute in meaningful ways to the definition of the discipline, the outline of career opportunities, and the specification of TLOs. They observed that it was the emphasis on educational outcomes, rather than educational processes, that opened up this opportunity for them.

The Health, Medicine and Veterinary Science Discipline Group also noted their successful facilitation as an achievement:

Interdisciplinary dialogue has been fostered. At meetings and workshops representatives from different institutions and health care disciplines have come together to focus on commonalities in health care education.

So too did the Law Discipline Group, who suggested that:

The TLOs contribute to a shared vocabulary and agenda for curriculum reform that might make it easier for law schools to share ideas both with each other and with other disciplines.

Stakeholder facilitation, and the positive outcomes deriving from it were also noted by the Engineering and ICT Discipline Group with the following 'collateral' achievement outcomes listed:

- provision of opportunity for the multiple and diverse voices of all stakeholders to talk together about the value and impact of developing robust learning outcomes
- recognition that the sub-disciplines are mutually integrated in the undergraduate learning experience
- beginning a national dialogue concerning threshold standards including what is acceptable and, by default, what is not acceptable.

In their final reporting template, Engineering and ICT Discipline Group also noted:

The Discipline Scholars acknowledge the collaborative goodwill between the five professional organisations in developing the TLOs. While these bodies have recognised for some time the importance of making transparent discipline-specific learning outcomes, there is increasing awareness of the expectation that learning outcomes also need to be: interpretable; actionable and assessable by academe; robust for transition to industry; mindful that most endeavours are interdisciplinary; broad enough to allow for diverse contexts; specific enough to offer clear direction; and easily communicable to all stakeholders.

**Development/synthesis of reference points for national and international benchmarking**

In each of the LTAS project's demonstration disciplines, new or improved sets of academic reference points have been developed. In the Arts, Social Sciences and Humanities and Creative and Performing Arts Discipline Groups, the developed TLOs are the first national statements conceived for History, Geography and the Creative and Performing Arts. As such, they provide these discipline communities with much needed national reference points for benchmarking purposes. Further, as these learning outcomes are the core of the discipline and have been mapped to those existing overseas, eg Tuning, QAA, international benchmarking can arise from these reference points. This also applies to the other disciplines participating in the LTAS project, eg Accounting, Engineering and ICT, Health, where international benchmarking can more readily occur from the mapping of the TLOs to other international standards. Indeed, in those disciplines starting with established national reference points, this project has allowed for the synthesis of reference points to core, comprehensible, sets. This is in contrast to the long lists of competency statements that were the usual, and difficult to manage, benchmarking sources.

**The explicit expression of implicit and localised practices**

None of the LTAS project's demonstration disciplines began at a zero-base in their development of TLOs. Each had a number of sources to draw upon, including international reference points and various national competency/accreditation statements. Sources also resided in individual institutions where many had adapted their graduate attribute statements to the disciplinary level. They also resided in individual schools/departments where subject outlines and conversations with academics gave indications of learning outcome expectations. Most of these sources, however, were implicit and localised. The major outcome to note is that this project has made the localised and implicit explicit at the national level. Through the intensively consultative process undertaken, members of stakeholder groups were given the opportunity to share their assumptions with others and to have them discussed and debated at a national level. They were also able to share and provide feedback on local practices and underlying frameworks existing within the sector.
Disciplinary modernisation

By developing TLOs, the LTAS project provided the opportunity to undertake an in-depth examination of the demonstration disciplines. In some instances, this examination had not occurred for more than a decade. In others, it had never taken place before. This unique opportunity was embraced by the discipline communities and used as a way to devise TLOs reflective of the:

- current requirements of graduates, eg self-management
- global trends, eg ethics, sustainability, and
- anticipated needs, eg lifelong learning.

The result has not only been the development of contemporary and forward-thinking TLOs, but engagement in the task of a ‘disciplinary stocktake’. This task was wholeheartedly embraced by the discipline communities, with most feedback related to the requirements of graduates for today and tomorrow, and the need to align curricula to address these demands. Indeed, most of the discussions taking place in 2010 concerned the need to modernise curricula and to identify the central components in any such reform.

In-depth disciplinary and institutional consideration of the implications for curriculum and assessment

Central to the design of the LTAS project were the ever-widening rounds of consultation with stakeholder groups. The first two rounds were primarily geared towards awareness-raising and the seeking of feedback on draft TLOs respectively. The final round was the dissemination of the developed TLOs, which allowed stakeholder groups to consider the implications of the developed TLOs in relation to curriculum design/reform, assessment and accreditation. Through institutional visits and presentations at national events, Discipline Scholars have provided the opportunity for discussion and in-depth consideration of the next steps. The result has been the development of a shared understanding of future requirements, eg the need to provide evidence of TLOs attainment by students. It has also stimulated discussions on the appropriate ways to design curriculum aligned with these requirements, what to assess, and when. These discussions are ongoing but have, most importantly, begun.

Foundations laid for sector-wide reform

Collectively, the outcomes presented and described above have laid some of the foundations necessary for the Government’s proposed reform agenda, particularly those related to the “new era of quality in tertiary education”. Specifically, this project has laid the foundations for:

- whole-of-program curriculum review and reform based on a national understanding of the core attributes required of a graduate in the discipline
- strengthened learning culture within the higher education sector
- integrated quality assurance arrangements satisfying multiple stakeholder groups including: academia, employer groups, professional associations and accreditation bodies
- holistic assessment practices suitable for assessing the full range of defined capabilities
- assuring confidence in the quality assurance arrangements employed
- cultural change characterised by optimism and collaboration
- comprehensive national benchmarking arrangements involving public and private providers and the ongoing engagement of international experts in discipline-based learning outcome definition, and
- a place for Australia in the global outcomes-based graduate mobility agenda with Tuning Europe, USA, Canada, Latin America, Lithuania, Russia, Africa, Asia and the Middle East.

Other achievements

The foregoing is a synthesis of the many achievements of the LTAS project into a smaller number of outcomes and impacts that appeared common across the discipline groups. Each discipline group forwarded many other achievements, which should be noted. These included:

- the first ever comprehensive inventory of the number and type of health care disciplines with bachelor level (or higher) professional entry-level qualifications in Australia
- a comprehensive list of professional/registration/accreditation/educational bodies associated with health disciplines was created. No pre-existing listing could be found prior to this project commencing.
- linkages between Health Workforce Australia (HWA) and the Australian Learning and Teaching Council (ALTC) have been fostered in an area of considerable overlap: competency standards
- the opportunity has arisen from this project to create greater alignment between academic quality assurance and professional accreditation processes
- growing recognition of the importance of developing robust methods of identifying evidence that a graduate has achieved threshold against the TLOs
• willingness on the part of members of the discipline to continue to build and share resources to progress evidence of outcomes
• evidence that the TLOs are intended to be used in academic communities to assist in the vertical and horizontal mapping of learning outcomes subjects and programs
• two texts on legal education have been commissioned that are either organised around or will draw on the TLOs
• Discipline Scholar, Associate Professor Mark Freeman, has been invited to publish on his experience in *Accounting Education: An International Journal* with Accounting Learning Outcomes Working Party Chair, Professor Phil Hancock
• an online survey was launched seeking responses from academics, graduates, employers and professionals to a set of questions about whether Creative and Performing Arts learning outcomes were thought to be appropriate for bachelor and coursework masters degrees and the extent to which respondents perceived that the learning outcome expectations were being achieved in degree programs in Australia. A total of 252 respondents completed this first-ever survey
• a contact list of breadth and depth has been developed (n = 649). This included representatives from 38 Australian universities, 21 private and other providers, and 20 other key stakeholders including professional bodies and peak bodies. The contact list can be a springboard to sustaining engagement in post-2010 implementation projects
• the Creative and Performing Arts TLO statements have been used as a template and modified for at least one other discipline – Journalism.
3. Lessons learned

As well as facilitating and coordinating the development of academic standards, the LTAS project was also designed to explore the feasibility and sustainability of the process.

Reflections on the lessons learned were captured in a final report where discipline groups (and ALTC staff) were asked to identify or make comment on the following areas:

1. critical factors leading to the success of this project
2. impeding factors
3. key advice from Discipline Scholars
4. key advice from project officers, and
5. recommendations for the next steps.

Together, the reflections in these categories (outlined in more detail below) provide a comprehensive blueprint for the further development of discipline-specific academic standards. It is a rich collection of ‘lessons learned’, many of which have been used to inform parts of the sustainable model outlined in Section 4. Providing support to discipline groups in their standard-setting work is a central feature of this blueprint. Other critical features include:

- the policy stimulus to engage in standards setting for quality improvement as well as quality assurance
- clear and sincere commitment to discipline groups being responsible for setting their standards
- senior discipline leader buy-in to reinforce the ownership of the standards-setting process
- clear parameters in which to set standards, eg four-six outcomes
- focus on outcomes first, allowing them to lead into other core issues such as assessment
- multi-stakeholder involvement including private providers, accrediting agencies, professional bodies, employers and recent graduates
- recurrent engagement with the discipline community at all levels
- consideration of international benchmarks
- a transparent and inclusive consultation process
- respect for expertise residing at the discipline level, and
- explicit use of existing networks.

3.1 Critical factors leading to the success of this project

The LTAS team identified a number of factors leading to the success of the project. Of these, the most commonly noted were the:

- context
- reference/advisory groups
- academic community
- stakeholder groups
- central support
- focus of the project
- Discipline Scholar interaction and within-group support
- project officers, and
- Discipline Scholars.

A summary of each success factor is given following.
Context

Most discipline groups cited the context in which this project operated as critical to its success. The most commonly mentioned context-related factor was the Australian Government’s commitment to a discipline-based approach to academic standards development. This laid the foundations: as one discipline group noted, “the disciplinary focus was attractive to the ‘academic tribe’ culture existing within higher education”. Another discipline group noted that the “explicit statement by federal government that the standards were to be defined by discipline communities – rather than being imposed from ‘outside’ – and acceptance by discipline communities of that claim” was a critical success factor.

A number of other context-related factors were identified, including:

- the recognised need for change in most discipline groups
- the concurrent reform process occurring within various discipline groups
- unmet employer expectations of graduates, and
- international trends in discipline-based standards development.

Indeed, the first point on this list – the recognised need for change in most discipline groups – was a particularly strong contextual factor. While the Government’s commitment to disciplines setting standards was the initial stimulus for this project, it was also used as a ‘means to other ends’, with most discipline groups using this stimulus to address other issues within their disciplines. For some, it was the need to address the multiple (and often compelling) demands placed by accrediting bodies and their associated administrative burden. The input rather than outcomes focus of some accrediting bodies was also seen as a problematic area. For others, it was the need to address aspects of the discipline, such as research and team-working skills that were perceived to be neglected.

Although important, the Government’s policy stimulus was not the only factor in the success of the project. Disciplines did not undertake the project merely to satisfy emerging compliance obligations, ie to be used by TEQSA. It became an organisational development exercise at the disciplinary level, with an opportunity to address other problematic and interrelated issues. The Government’s policy empowered disciplines to set their own standards, and encouraged them to take responsibility for the quality of graduates as a discipline rather than as a loose collective of academic departments. The opportunity was embraced by the participating discipline communities.

Reference/advisory groups

All discipline groups cited their reference/advisory groups as a critical factor in their success. Their support and advocacy functions were mentioned, most notably, the active role members took in providing feedback on draft TLOs and accompanying documentation. The ability to link into the members’ existing disciplinary networks was also highlighted. As one discipline group stated “we then had access not just to the executive boards of those bodies [of which the members were representatives], but also to their very extensive memberships. This allowed us to set up a network of contacts very early on in the project that was constantly called upon as the project unfolded”. The ability of the scholars to use disciplinary networks was a critical success factor. From their standing in their discipline communities, all scholars already had extensive networks on which to draw. However, their networks increased dramatically when added to those of the ALTC and reference/advisory group members.

Academic community

The support of the academic communities associated with LTAS project’s demonstration disciplines was also noted as a critical success factor. The willingness of these communities to engage in the project enabled the scholars to receive feedback representative of the broad academic community, including private providers. This support also enabled the developed TLOs to be owned by the discipline communities. As suggested by one discipline group: “The immense and demonstrated goodwill, engagement, and genuine concern for the development of higher education in Australia was one of the single most rewarding aspects of this project. It meant that feedback was freely given, constructive and often very perceptive. The sector will ‘own’ these threshold learning outcome statements in a real sense”.

Stakeholder groups

Closely related to the above, another critical factor recognised by many discipline groups was the support offered from peak stakeholder bodies. These bodies include councils of deans, associate deans networks, accrediting and admitting authorities, and professional associations. These, and many other bodies, assisted in the dissemination of information on the LTAS project to their members, eg newsletters forwarded to members, information hosted on their websites. They also circulated ‘calls for comment’ and encouraged their members to provide feedback to scholars on draft versions of the TLOs. This in-kind support by various stakeholder groups was viewed as crucial by many discipline groups and was often driven by the support of the body’s leaders, eg their executive officers, chairs and presidents.
Central support

The central support offered by the ALTC was also cited as a critical factor. As one discipline group stated, “Without [the] ALTC’s strong reputation as an honest broker with an existing reputation for long-term inclusive strategic change, engagement would have been lower”. Apart from the broker role, a number of other ALTC central support functions were mentioned, including:

• leadership offered by the CEO and Project Director
• resourcing (appropriate funding, in-kind support)
• the LTAS February Forum
• communications, and
• advice from the ALTC’s international contacts.

Closely managed project focus

Related to the central ALTC role, the scope of the LTAS project was also considered crucial to its success. The project’s “tight focus” on “one degree in one discipline” was noted as a critical factor by one discipline group. So too was the sustained single agenda of standards and the focus on a small set of TLOs. As noted by one discipline group:

The decision to go with a limited number of learning outcome statements at the threshold level proved to be prescient. Although it was an extremely difficult task to develop learning outcome statements of such economy, it made the project manageable, the process understandable, the national implementation possible, and the outcomes assessable.

Discipline Scholar interaction and within-group support

A critical success factor noted by many discipline groups was the other Discipline Scholars involved on the LTAS project. The “collegial good spirit from a group of gifted Discipline Scholars” was noted by one discipline group as a critical success factor. “Regular DS [Discipline Scholar] meetings and correspondence helped the DS share ideas, support the common project direction” suggested another discipline group. Another made the following comment on the team of Discipline Scholars:

This group was absolutely vital to the success of my project on numerous levels. At various times in the year individual scholars provided invaluable advice on the draft threshold learning outcomes; they were also extremely important sources of bibliographical information, academic wisdom and institutional knowledge. The collegial nature of this whole project was central to its success.

The appointment of a cohort of Discipline Scholars was an extremely successful strategy at this ground-breaking stage in the process. Not only did they support each other in their standards-setting task (as noted above), but they also operated as a synergistic collective, with the whole often delivering more than the sum of its parts. On many occasions, for example, scholars banded together to make presentations, knowing that the outcomes of each could not be viewed in isolation. They also contributed to a common communication source (the Discipline Setting Standards newsletter), where their individual outputs could be viewed as part of a broader enterprise with a common aim.

Project officers

The support offered by the project officers was often cited as a critical factor by Discipline Scholars and ALTC staff. These officers provided a wide range of support to their Discipline Scholars, and were described as the ‘engine room’ by one officer. While the financial/administrative support was crucial to the success of the project, their scholarly contributions were highly valued and appreciated by the Discipline Scholars and ALTC staff. Most officers had extensive experience in educational/curriculum design and played a crucial role in the development of their group’s TLOs by leveraging off this experience.

Discipline Scholars

The final factor critical to the success of the LTAS project was the Discipline Scholars appointed by the ALTC to facilitate the development of academic standards. Presenting at the Australian Quality Forum this year, LTAS Project Director, Professor Christine Ewan, described the appointed scholars as “incredibly dedicated, experienced, and extremely patient”. One scholar described his Discipline Scholar colleagues as “rooted and respected in their discipline; known by ALTC as being able to deliver; able and supported to act as change agents”.

In short, the appointed Discipline Scholars were given the responsibility to lead the facilitation of standards within their discipline communities, and have successfully done so.
3.2 Impeding factors

The success of the LTAS project was not without challenges. The impeding factors reported by the discipline groups were, for the most part, unique to the discipline, such as:

- the absence of a Creative and Performing Arts Dean's Council, and a network of associate deans of learning and teaching
- the scale of stakeholder engagement required in the Health, Medicine, and Veterinary Science Discipline Group and the absence of a pre-existing list of ‘Healthcare’ disciplines or qualifications to guide initial consultation planning
- the large numbers of students studying Accounting and the problems associated with an increasingly large number of casual academics required to meet the demand, and
- the time needed for some stakeholder groups to respond to requests for feedback.

There were, however, two common factors identified:

(a) the uncertainty regarding TEQSA and the potential ‘use’ of the developed standards, and
(b) the Australian Qualifications Framework (AQF).

Uncertainty

With reference to uncertainty with TEQSA and the use of the TLOs, comments such as the following were noted:

- The major impediment to the project was the lack of a proper framework – TEQSA – because everything had to be cast into the conditional when discussions about implementation were in progress.
- Lack of surety regarding possible forthcoming implications (was an impeding factor).
- Academics have indicated their unease that the sector is establishing TLOs without knowing how compliance will be assessed or what the penalties for non-compliance might be.
- The lack of clarity about the new quality agency, ie TEQSA, and its role in the future (was an impeding factor). This was exacerbated by poor reporting in the media over the year and the stances taken by some prominent stakeholder groups.
- Uncertainty about the ways in which the standards might be used for quality assurance purposes (was an impeding factor). This may have reduced the level of urgency stakeholders felt for the project. More significantly, it made some organisations ... unwilling to completely endorse the Standards Statements.

However, it is important to note that this uncertainty did, according to one discipline group, offer the benefit of “encouraging stakeholders to focus on the integrity of the standards themselves and their role in quality improvement rather than on their ‘political’ and regulatory implications”.

Australian Qualifications Framework (AQF)

With reference to the AQF, comments such as the following were noted:

- The LTAS project has taken place in the shadow of sectoral concern about the apparent inflexibility and prescriptiveness of the AQF.
- Lack of perceived consultation and relevance for AQF changes (was an impeding factor).
- Fluidity in the AQF, with which the standards were intended to be aligned (was an impeding factor). Over the course of the LTAS project three different consultation versions of the AQF were circulated nationally: September 2009; July 2010; and September 2010.

3.3 Key advice from Discipline Scholars

In their final reporting template, Discipline Scholars were asked: “Based on your experiences this year, what three-five most important pieces of advice would you give to a discipline group embarking on the development of TLOs in their discipline?” Their responses to this question were impressive, with a considerable amount of advice offered. In summary, Discipline Scholars stressed the importance of:

- engaging with all stakeholder groups
- using the expertise existing within the academic community and stakeholder groups
- securing the early endorsement of developed TLOs
- ensuring the support of leaders within the academic community, and
- drawing on existing national and international learning outcome statements.
Most scholars, however, were quite specific in aspects of their advice relating to each discipline. This advice arose from the specific direction taken by each discipline group and their experiences associated with this decision, particularly those aspects that worked well. Consequently, the key advice given by the Discipline Scholars is summarised below for each discipline group. The diverse styles of expression in this advice reflects the diverse styles of the disciplines and Discipline Scholars, a strength of the project.

Notwithstanding this specificity of advice, many of the statements are broadly applicable to any discipline.

**Arts, Social Sciences and Humanities Discipline Group**

- Establish a reference/advisory group comprising responsive, co-operative, intellectually-gifted, disciplinary-networked, forthright, and articulate members. Related to this, any working group responsible for preparing initial draft of TLOs needs to be credible to the broad cross-section of the discipline.
- Ensure that there is abundant opportunity for stakeholders to comment on the standards as they are developed and to shape the process by which the standards are being reached.
- Ensure that the standards development process is ‘disconnected’ publicly from any specific/single individual or organisation. The standards need to be understood to be those of the ‘discipline’, not something created by the ALTC, by ‘Professor Bloggs’, or by the ‘Australian Society for XYZ’.
- There is probably value in developing TLOs for more than one degree level at a time. For instance, working simultaneously on bachelor and honours level qualifications encourages clarity about specific levels of attainment within each of those awards.
- Put a deadline on the process of determining standards which could otherwise end in a never-ending process of consultation and revision. Having said this, let stakeholders know that future revisions are possible after the standards have been in effect for some ‘trial’ period, so they do not feel they are committing themselves or their organisation indefinitely.

**Business, Management and Economics Discipline Group**

- Develop a clear persuasive argument, ie significant follow-on consequences, to get a fertile context for engagement and action:
  - ‘disciplinary tribes’ need to be engaged – not just those with a teaching and learning bent and enthusiasm
  - participants must believe the successful project outcomes are crucial for them to be engaged
  - it was useful to have a deadline (from Business, Management and Economics [BME] advisory group at February 11 leaders Forum) to drive outcomes, including the need to be pragmatic at times
  - it was very useful to have authoritative source documents:
    a) UK QAA accounting benchmark statement for bachelor degrees was useful in developing the ‘Nature and extent of Accounting’
    b) the five Dublin Descriptors were very useful to identify the main categories of TLOs at the beginning
    c) the revised AQF draft descriptors and the clear role they will have in TEQSA’s process of quality assurance were crucial to refinement during the process of development. They also provided a strong rationale for the standard expected and facilitated a reference point for alignment to a higher standard for masters (entry) degrees over bachelors degrees.
    d) 2008 Tuning surveys of generic and subject competencies helped to identify the areas to focus upon, regarding TLOs
    e) a key driver of success in implementation will be if TEQSA demonstrates commitment to its importance by funding the relevant peer review team to undertake assessment of the process. The lack of funding in the UK for this was repeatedly raised by those who had previously worked in the UK as a reason for the benchmark statements failing in the implementation process.
- Identify key leaders and key action roles for them to engage in and thus achieve support and commitment:
  - Australian Business Deans Council (ABDC) through its President, was the BME leadership group driving the leaders’ forum, the process re selection of drafting and advisory groups, promotion of national consultation processes, access to website for online surveys on drafts, reviewing endorsing drafts. This gave credibility and transparency to activities and empowered the community engagement.
  - ABDC Associate Deans’ Teaching and Learning, meant the ‘coal-face’ implementation group involved those who are already committed to and experienced in research via ALTC projects, provided further support to Discipline Scholars and promoted engagement in the project. Members of this group are also involved in the Discipline Scholars research on change processes.
- useful to have key stakeholders represented in February leaders forum and then advisory groups as they promoted the national consultation and the professional bodies in particular were active in promoting engagement post-meeting
- useful to have DEEWR (and AQF) active in BME advisory group – opened doors to engagement post-meeting and ensured a level of transparency to DEEWR about project progress.

- Plan and execute multiple, successive and ever-widening iterations of engagement across the nation (and at multiple sites in each state and in multiple modes) to ensure active engagement and dissemination of the agenda and commitment to follow-on at multiple levels (from deans to lecturers).
- The ongoing support of ABDC Associate Deans’ Teaching and Learning Network who were already committed to and experienced with a change agenda was valuable. They felt their contributions were valued and that they were being supported. This meant the national consultation cycle of engagement was broad and engaged a range of academics within a short time frame. Invitations for the DS to present at their respective universities after the initial consultative forum have resulted in ongoing engagement in the project and will foster sustainability for future disciplines.
- The national consultation briefings fostered engagement in the process and the desire to take ownership of the agenda.
- Following up contacts provided by private providers with face-to-face meetings and encouraging state-based hosts to promote briefings to all sectors deepened the engagement of this sector.
- Communication strategy focused the ‘community of practice’ and they were alerted to the progress of the agenda and deadlines for feedback.
- Expanding the contact list at every opportunity and engaging with those listed via regular e-Updates keeps the project front-of-mind.
- Supplementing face-to-face cycles with electronic opportunities for engagement is crucial to ensure everyone has multiple opportunities to have a say. This includes email listserv updates, online surveys and online discussion forums, hosted by multiple people, eg ALTC Exchange, the DS, academic association, professional bodies.
- Teleconferences of the Accounting Learning Outcomes Working Party were a good way to progress the drafting process. They allowed for good working relationships and facilitated speedy responses to drafting process. The presence of working party members at state presentations lent credibility to the process and meant participants felt they were hearing ‘from the source’ and gave credibility to the revision process.

- Ensure the most active key collaborating leader(s) and the key working party are not just trusted and engaged but are very responsive and feel supported and resourced by project leader. Sometimes this means being flexible and pragmatic. Trust building is crucial to sustainability.
- Without very engaged and responsive working party chair and advisory group chair, the project would have failed. If someone is engaged with cynical motives, eg merely CV building and distracted elsewhere, this project would have failed. If they are inefficient then it would have also failed.
- It was crucial that the DS was extremely active and responsive to both of them, actively anticipating their needs, eg drafting documents, offering advice, and regularly promoting them to others.
- Trust building amongst the working group members was crucial. The group met face-to-face for two days at the beginning and this included meals to spend time relaxing and building trust. Thus, when later teleconferences occurred there were personal relationships and commitments to draw on.
- Working party members accompanied the DS to almost every one of the consultation workshops.
- Because accounting was not the discipline area of the DS he could play a more facilitative role and not chair any drafting or advisory groups. This provided greater objectivity in the role. It also meant the ability to call on the ABDC President, Chair of the Accounting Expert Advisory Group (AEAG), to provide independent feedback during the development of Draft 1 – this made the resulting TLOs much tighter.
- Trust is built by being inclusive. Efforts were made to include all stakeholders in the consultation process from all provider and employer types as well as students. The working party was intentionally formed to have a balance of perspectives and experiences. Intentional efforts were made to review the impact of drafted statements “in the shoes of X”.
- ‘Be pragmatic and do something’. Disciplines have different starting points, eg Engineering has been working on their outcomes closely with the profession for over a decade. Recognising the context allows for success to be possible, which is likely to breed further success. It is ‘ok’ to take a long-term perspective and allow a decade to refine the process to something that is ‘tight’. It is better to do that, than come up with something that fits some stakeholders but does not actively involve others.

- Plan and execute multiple, successive and ever-widening iterations of engagement across the nation (and at multiple sites in each state and in multiple modes) to ensure active engagement and dissemination of the agenda and commitment to follow-on at multiple levels (from deans to lecturers).
- The DS actively sought evaluative data from working party members and participants at briefings to assist in understanding the key issues that would be refined via online survey.
- The drafting party regularly took time out to reflect. This allowed them to develop a set of guiding principles that would assist future disciplines (as well as keep a transparent record of what occurred.
- The role of advisory body. Careful consideration of representation to engage all stakeholders and enlisting personnel with credibility who met the Terms of Reference and had a profile to gain credibility in the business community.
Creative and Performing Arts Discipline Group

- Make good use of the expertise at your own institution
  - The University of Tasmania Centre for the Advancement of Learning and Teaching was an extraordinarily valuable and generous source of advice and criticism; and fellow academics teaching at the coal face are often one’s most perceptive critics.

- Establish the extent of the discipline community as a first principle and figure out the most effective ways in which to target individuals and groups
  - Key players in the academic sector are the deans and associate deans but do not underestimate the importance of program and course coordinators and academics working at the coal face.
  - Keynote addresses at national discipline-specific conferences are important in order to alert the academic community to what the ALTC is trying to achieve – this was done very effectively, not just by the Discipline Scholars but by the Project Director and CEO of the ALTC.

- Getting early endorsement of the draft learning outcome statements from the Discipline Reference Group and ‘in principle’ endorsement from the peak bodies meant that, in the subsequent round of workshops around the country, the TLOs were already carrying considerable weight.
  - Where possible, take time to run workshops that engage with program and course coordinators. They are the ones who will be intimately involved in the mapping of the TLOs into their degrees.

- Student and graduate engagement with the project was quite difficult to achieve. This is the reason why we incorporated an online survey of graduates, academics, practitioners and employers. The 252 respondents gave us very valuable feedback. Devise strategies for engaging these important informants.

Engineering and ICT Discipline Group

- Engage the hearts and minds of the leaders of the profession.
- Be prepared for many repetitive conversations.
- Have participants focus on the tasks that young graduates are required to do. Infer the capabilities from those.
- Engage the whole community – students, graduates, academics, professionals.
- Advertise early regarding meetings. It is difficult to get busy people there.
- Establish good engagement with a wide group of stakeholders (academics, professionals, recent graduates and current students).
- Do not get hijacked in the knowledge and content debates which are largely a diversion.
- Research carefully and thoroughly the existing literature and professional practice around learning outcomes.

Health, Medicine and Veterinary Sciences Discipline Group

- It is imperative to secure high-level endorsement at all stages of the project together with clearly identified project champions.
- Keep threshold learning outcomes simple.
- Anchor the threshold learning outcomes to existing standards/agreed reference points.
- Keep your stakeholders informed at all stages of the project.

Law Discipline Group

- Early support of peak academic and professional bodies is crucial. In some cases, it can be difficult to identify and engage with all relevant stakeholders. The early support of peak bodies in this process is critical.
- You may have to build your own supportive networks among academics:
  - Discipline Scholars may have to build capacity at the level that they consider to be most useful.
  - Some of the LTAS projects will not align neatly with sectoral networks which are either at too general or too senior a level. For example, in Law, the impact of the TLOs will be keenly felt by Associate Deans (Learning and Teaching). They can be powerful allies. Not only did they not already meet as a network, but at the start of the Law Project it was difficult for someone outside a particular law school to identify who performed this role.
- Draw on existing international and national precedents and expertise:
  - The various national professional standards and the Tuning and QAA projects offer a series of precedents that can be used to help craft the TLOs. Colleagues who have been involved in those endeavours may be able to provide advice about appropriate processes and bear-traps. We included colleagues from the United States, the United Kingdom and New Zealand in our Expert Advisory and Disciplinary Reference Groups.
• Be careful about ‘mission creep’ but be open to opportunities:
  – Early on, Discipline Scholars need to select the disciplines and degrees that will form the focus of their work.
  – Discipline Scholars need to justify their selection and should have the support of the peak organisations in their sector.
  – The mission needs to be achievable, worthwhile and legitimate.
  – Unexpected opportunities to engage with new organisations or to extend the mission in particular directions may emerge and these should be assessed on a case-by-case basis, sometimes in consultation with advisory groups, the ALTC and peak bodies.

• Be prepared for a significant amount of time on the road. Interstate commitments may expand well beyond your initial estimation. For example, we initially planned five sessions in five states as part of a national strategy for local consultations. This eventually expanded to 23 and included all states and territories. In addition, following these consultations, we were asked to address various meetings of state-based organisations.

3.4 Key advice from project officers

In their final reporting template, project officers were asked: “Based on your experiences this year, what three-five most important pieces of advice would you give to a project officer appointed to assist/support a discipline group embarking on the development of TLOs in their discipline?” A considerable amount of advice was offered, including the following:

• Know the task – be clear on the deliverables, the timeline and the budget available.
• Establish a process – maintain a calendar of events, keep comprehensive records and plan ahead.
• Know the people – find out who is involved, what they do and where they are during the project.
• Establish and maintain a good working relationship and open lines of communication with all parties.
• Know yourself – be aware of your own skills and capabilities and be prepared to take on new roles and responsibilities wherever possible.
• Establish yourself as the central point for all communications and activities as much as is possible.
• Be prepared for track changes, amendments and due dates – do not assume that what was given one week will still hold the following.
• Collect all evidence and data concerning the project’s activity. Build that evidence into the ongoing program.
• Adopt ideas from other discipline groups and alter to suit your own.
• Offer a constructive objective voice within your own project team.
• Acknowledge in writing the contributions offered by people (building and maintaining relationships).
• Maintain ongoing contact with the ALTC.
• Connect with any other project officers in your city – their support and the ability to share resources is very useful.
• seek early (and ongoing) clarification of ALTC procedures and processes, eg current standards/templates/procedures for documents, processes for approval, contacts etc.
• Be prepared for the direction of work within the project to change very quickly and in directions not anticipated.
• Develop effective communication lines and expectations with your Discipline Scholar(s).

A large number of more ‘in depth’ pieces of advice were also included, such as:

• systems knowledge – project officers needs to understand the organisational processes in which they are operating, eg financial systems, operational practices.
• ability to support the group in strategies undertaken – this will be enhanced by establishing an operational plan.
• time – to read as much information as possible and acculturate to the project. The project officer needs to understand the context of the TLOs, the challenges of the change process in this discipline, ‘political’ sensitivities, key stakeholder groups, acronyms etc.
• invite feedback in explicit, non-onerous ways for the key information or responses you seek but also enable open-ended input for interested parties to get involved more fully. Again, use multiple communication channels as organisational hierarchies do not guarantee information flow.
• use local, institutional networks to pilot or workshop consultation approaches and strategies, and to road-test ideas and drafts with often highly engaged and critical peers.
• communicate progress to your growing stakeholder network at intervals so that their input is acknowledged and reflected; goodwill, transparency and rigour are at the heart of the process and strong factors in achieving endorsement.
• note-keeping and email management – the LTAS project generates a vast amount of notes, files and emails. It is important to manage this well from the start of the project. This is particularly important for efficient report writing during and at the end of the project.
• communication between project officer and discipline group – it is vital to establish work practices and the ethos behind the approach used. The project officer’s work is enhanced by provision of opportunities to share ideas (‘Think Tank’ approach) and information, eg ‘smart’ strategies.
• preparedness to multi-skill and be flexible – a variety of skills are required such as: administrator, desk top publisher, researcher, promoter, events manager, editor, financial manager, independent adviser, coordinator, for the smooth management of the project. Be able and willing to be a 'jack of all trades' and flexible with work time frames.

• information management – be organised! Spend a lot of time in the early stages thinking about your information/file management structures. Talk to other project officers about what they have done in terms of organising computer files and the types of information they regularly need to access. Save as many lists of things, eg. contact lists, document lists, in Excel rather than Word. When collecting initial information, eg compiling lists of contacts from web searching, it is better to collect more, eg organisation name, webpage, email address, postal address, phone number, other organisational contacts etc. than you think you will need, rather than have to go back and fill in gaps later. When using Excel, save each item of information in a separate column, eg first name, surname, title, position, organisation, PO box, city, state, and postcode should all have their own columns.

• development of systems early for recording stakeholder information with as much detail as possible, eg title, affiliation, role, contact, disciplinary interests, as this information will be applied on numerous occasions for different purposes, eg communications, reporting, targeting consultations/workshops etc. Make provision for connecting feedback to sources for both aggregation and traceability at later stages. Include affiliated roles among your stakeholders, eg educational developers and learning support advisers.

• devising a variety of consultation methods to maximise reach and representation in terms of mode, eg face-to-face, asynchronous and synchronous online communication, online surveys, and use both formal and informal consultations, ‘piggybacking’ on existing meetings of bodies, groups and events such learning and teaching days.

• being aware of the work that precedes your project – the project officers who are appointed after the period of the first year of the project have the benefit of the work and learnings (particularly in the form of our reporting documents and the Standards Statements, but also, for example, in terms of the different forms of discipline consultation and engagement that were used) from a range of disciplines. Future project officers are encouraged to capitalise on this work and use it to inform the effective and efficient development of their projects as much as possible.

• the importance of building relationships with other project officers – for each discipline, the task of developing the threshold learning outcomes is a very significant project. It is important to develop relationships with other project officers (past and present) for collegial support and, also, so that resources and ideas can be shared. It is especially important to be in regular contact with the ALTC.

3.5 Recommendations for the next steps

Each discipline group offered recommendations regarding the ‘next steps’. These recommendations were wide-ranging but had a number of commonalities. The need to maintain the project’s momentum was often mentioned, particularly in relation to:

• developing TLOs in other discipline areas/levels
• testing, embedding, and supporting the developed TLOs, and
• disseminating/discussing the developed TLOs (both nationally and internationally).

Most recommendations, however, were again quite discipline-specific and are summarised below for each discipline group.

Recommendations: Arts, Social Sciences, and Humanities Discipline Group

1. Support the establishment of threshold learning outcomes in other Arts, Social Sciences and Humanities (ASSH) disciplines and at levels over and above bachelor degree

Within the ASSH Discipline Group, several other disciplines, eg anthropology, criminology, demography, political science, sociology, indicated a clear willingness to develop their own TLOs. Some immediate support, both in terms of funding and standards-setting expertise, eg advice provided on a consultancy basis by the Discipline Scholar or key members of Discipline Reference Groups, could helpfully build on the momentum already established by work in the LTAS project and perhaps foster interest in the development of standards in an even broader array of disciplines. It would also be useful to actively encourage standards development amongst those disciplines that have not already indicated any interest in this process. For all of these disciplines as well as for those that have already established TLOs, it would also be useful to take up work to define the standards for qualification levels other than that of the bachelor degree, eg honours, PhD.

2. Support efforts to implement and evaluate the Standards Statements

DASSH “fully” endorsed the process undertaken to define the TLOs for History and Geography and went on to recommend that these now need to be tested in universities across Australia. There is clear interest in building on the momentum associated with the LTAS project.
3. Support discipline communities’ work to maintain the Standards Statements
   Most peak bodies representing ASSH disciplines operate with a voluntary secretariat and executive, drawn
   predominantly from academic communities. The organisations typically have very limited budgets, derived from annual
   membership fees and publisher payments for society journals. If these peak bodies and their members are expected
   to include in their future workload maintenance and review of TLOs, some form of support needs to be offered those
   organisations.

4. Support the investigation and promotion of alternative uses of the Standards Statements
   It has become apparent that the Standards Statements may have value in supporting, if not underpinning, activities
   over and above quality assurance. Stakeholders have suggested these could include: program design and curriculum
   development; discipline ‘stocktaking’ as a foundation for future review; benchmarking for reciprocal study abroad;
   promoting the discipline to domestic and international students as well as to the wider community; and as a ‘talking
   aid’ in conversations with prospective students, parents, career counsellors, employers, politicians, professional
   bodies, and scholars in allied disciplines. In another development, the Academy of Science’s National Committee for
   Geography has indicated its intention to use the Standards Statement as part of a broader national decadal plan for
   the discipline. Such outcomes point to the ‘value-adding’ potential of the Standards Statements. There may be real
   merit in more fully exploring alternative uses of the Standards Statements. That information might encourage other
   disciplines to engage in the work required to develop their own standards and point to ways standards can contribute
   more broadly than ever intended to high quality tertiary education in Australia.

5. Support the national and international dissemination of information about the LTAS project and its outcomes
   The LTAS project appears to have very successfully supported the development of academic standards in selected
   discipline areas. It is critical to maintain the momentum this work has built by ensuring that the project’s outcomes are
   publicised widely across Australia. This might take the form of a national launch of the various Standards Statements,
   eg perhaps modelled on the 2010 February Forum. This promotion could be accompanied productively by
   opportunities for stakeholder groups to discuss ways in which the Standards might now be implemented, maintained
   and employed (see Points 2, 3 and 4 above). There is also an excellent opportunity now to publicise the process and
   outcomes of this successful venture in other relevant jurisdictions through, for instance, conference presentations and
   visits to key institutions and stakeholders, eg EUROGEO, the Higher Education Academy. During the year of this
   project (2010) it has been very apparent that key higher education stakeholders from countries as diverse as Canada,
   Syria and Thailand are interested in the Australian project and its outcomes.

   (EUROGEO is a European, non-governmental, non-profit organisation founded in 1979 which networks geographers
   from all walks of life and organisations who are interested in the theory, methods, and practice of Geography.)

Recommendations: Business, Management and Economic Discipline Group

- Fund strategically placed, collaborative projects in 2011–13 that promote the development of efficient, reliable and
  valid systems of moderation and peer review
- Fund annual symposium on standards in 2011 and 2012 to support the formative processes underway
- Fund mentoring program for some Discipline Scholars to provide part-time support to new disciplines in 2011 to
  define standards
- Continue collaborative efforts with European Tuning and other benchmarking efforts, eg UK
- Establish the TLOs as valid expression of discipline’s thresholds and clarify their potential use in future standards audits
- Work collaboratively with disciplines to identify appropriate approaches that fit standards assessment, eg when a
  professional body’s accreditation process, such as that for speech pathology, can suffice, and clarify extensively.

Recommendations: Creative and Performing Arts Discipline Group

The chief objective will be to maintain the momentum achieved this year. This would be exemplified by the formal
development of a Council of Deans of Creative and Performing Arts in early 2011. If possible, the creation of a network of
Associate Deans by mid-2011 would follow and, once there is a clearer idea of how TEQSA is going to operate, they
would become involved in operational aspects of discipline-based quality assurance.

The key LTAS objective for 2011 will be to develop the TLOs for honours, masters by research and PhD as a subsequent activity.

Recommendations: Engineering and ICT Discipline Group

The development of the national academic standards offers an excellent opportunity to promulgate best practice
teaching, learning and assessment materials across the Engineering and ICT schools in Australia. In order to achieve this,
several additional steps are:

1. Develop rubrics that document the required attainment levels of each of the standards. These will underpin a criterion-
   referenced assessment strategy. These rubrics will need to be customised by program leaders for their own contexts.
2. Develop best practice teaching, learning and assessment resources to support the development of each of the TLOs. These resources will ensure development of the outcomes across all the levels of a program and will provide productivity improvements across the sector. For an example, see the AAEE-Scholar site (Australasian Association for Engineering Education, 2010).

3. Develop communities of practice around the TLOs and in technical subject domains. This builds on what AAEE and ACEC, the Australian Computing Education Conference, have already achieved.

4. Research how these steps can be integrated to deliver a higher quality educational system, particularly as it relates to the work of individual academics. What are the levers for change?

**Recommendations: Health, Medicine and Veterinary Science Discipline Group**

“The advisors group strongly endorsed the proposal from Professor Angus, President, Council of Medical Deans, that maintaining momentum and harnessing acquired knowledge, processes and networks was needed into the next phase to refine/embed threshold learning outcomes in health disciplines, and that this work should continue to be led by the current scholars. The exact nature of this work was discussed, with three main activities recommended:

1. evaluation of the outcomes and assessment of the threshold learning outcomes in practice
2. assisting professions who are not at the registration level to catch up, and
3. brokering with AUQA and registration/accreditation bodies to ensure that a doubling up of processes and auditing requirements does not occur.”

Excerpt from the Minutes of meeting of Project Advisory Panel, 24 September 2010.

**Recommendations: Law Discipline Group**

1. Uncertainty over ‘Phase Two’ and the nature of TEQSA
   
   Senior law academics indicated unease that the sector is establishing TLOs without knowing how compliance will be assessed or what the consequences of non-compliance might be. TEQSA will need to work with the disciplines to ensure the verification processes are seen as legitimate and proportionate to risk so that members of the sector do not feel that they have created a 'rod for their own backs'. Any suggestion that the verification of compliance process is unfair may have significant repercussions for those who have contributed to the LTAS project.

2. The next stage for Law
   
   In an effort to minimise the above possibility, it has been suggested to the Council of Australian law Deans (CALD) that it should extend its involvement with the ALTC and with the Academic Standards. Some suggestions relate to an expansion of the range of Standards Statements for TLOs (the New South Wales Legal Profession Admission Board's Diploma in Law, the Honours component of the Bachelor of Laws, the Juris Doctor, Practical Legal Training, Graduate Diplomas, Masters of Law, SJDs or PhDs). At its November meeting, CALD decided that its next focus should be on the Juris Doctor.

   Other suggestions related to the successful implementation of the TLOs for the Bachelor of Laws and engagement with compliance requirements in anticipation of the new national standards framework under the Tertiary Education Quality and Standards Agency (TEQSA). How can the TLOs best operate in conjunction with professional standards (in Law, the CALD Standards and the Priestley requirements)? How can the discipline sustain and take advantage of the national and sector-wide connections that have been created by the project? For Law, the most obvious of these is the Law Associate Deans Network, which CALD has already agreed to support.

### 3.6 Summing up

The project has achieved a significant level of support across a broad range of sectors and disciplines and built considerable momentum, largely through having a tangible product that is seen to offer a range of benefits.

A great deal has been learned about what works and what does not and the type of support that would generate an efficient and effective ongoing process. These principles will be incorporated into the Partner Pack.

To ensure that the momentum and high national and international visibility that has been established continues productively, two critical factors need to be addressed:

1. clarification of the place of these discipline standards within the new quality assurance framework and, therefore, the nature of the work that should follow
2. creation of an efficient, minimally bureaucratic infrastructure to support the ongoing development, review and maintenance of discipline standards in a cost-effective and collaborative manner.

The next section addresses the second of these factors.
4: Threshold learning outcomes: Their potential use in outcomes-based quality assurance

The LTAS project has identified conditions under which threshold learning outcomes can be developed and “owned” by discipline communities. One of the deliverables for the LTAS project was, through consultation, to highlight and evaluate opportunities for sustainable incorporation of TLOs into the new quality assurance regime. This section sets out suggestions for a sustainable process for developing, maintaining and monitoring disciplinary based academic standards.

In sum, this project has succeeded beyond expectations in the level of engagement of the discipline communities that has been achieved. It has earned acceptance both as a successful project and for the new quality assurance framework. It has credibility, high national visibility and an extraordinary level of active stakeholder involvement at a senior level. This success, however, carries a risk. Failure of the new quality assurance framework to follow through on the commitment made by the professional and academic bodies and peak industry groups will create a credibility gap. At risk is the loss of goodwill from major stakeholders which will be essential to their future involvement.

Hence, this section synthesises the experience, observations and consultation from the project and proposes a feasible means of maintaining the disciplinary standards infrastructure and momentum that the project has initiated.

4.1 Policy context: TLOs have to ‘count’

This project was successful, not only in producing sets of TLOs but in achieving broadly based endorsement of both the process and outcomes from peak bodies in industry, the professions and academia. It must be acknowledged that the commitment to the process is an outcome not just of the skills of the groups involved, but of the policy context under which the process was commenced and conducted. Discipline communities responded enthusiastically to the Australian Government’s statement:

Key to the success of the new quality assurance arrangements – and meaningful academic standards in particular – will be the active involvement of the academic community ...

Discipline communities will ‘own’ and take responsibility for implementing academic standards ... within the academic traditions of collegiality, peer review, pre-eminence of disciplines and, importantly, academic autonomy ...

Australian Government, 2009
Transforming Australia’s Higher Education System p.32

A considerable level of momentum and peak body support has developed and new disciplines are volunteering to participate in the process without expectation of significant funding support. The more explicit emphasis on outcomes-based quality assurance signalled in the Bradley Report and other documents relating to the basis of TEQSA’s operations and authority had not yet been operationalised at the time of writing this report.

When the LTAS project was commenced it was anticipated that a dialogue between TEQSA and the discipline communities would have formed part of the final stages of the project. This did not prove possible because of the timeline of TEQSA’s establishment. Nevertheless, it is anticipated that experience gained in this project will be useful when TEQSA begins its detailed consultations and considerations in this area.

4.2 How might discipline-based TLOs be best used?

Quality improvement within institutions

It is already evident in activities subsequent to the project that institutions, via the Deans’ Councils and groups of Associate or Assistant Deans Teaching and Learning, are working on approaches to using TLOs as the basis of internal audit, curriculum renewal and assessment at the discipline level. Equivalent bodies in the larger private provider organisations are similarly taking a practical interest in using TLOs for curriculum and internal quality assurance. TLOs have the potential to be used in cross-institutional moderation or assessment arrangements.

As a component of external quality assurance

Outcomes-based quality assurance, whether focused at the level of the institution, the degree or the discipline program will, of necessity, develop approaches to assuring that graduates of a program are achieving a nationally defined minimum standard.

Other aspects of outcomes-based quality assurance can be addressed in other ways, for example, measures of the student experience or generic attributes or the quality of teaching, but the proverbial ‘bottom line’ is assurance that graduates in specific disciplines have an agreed threshold of discipline-specific capability irrespective of their graduating institution. Generic graduate attributes are not a sufficient indicator of student capabilities within the discipline environment.
Communication, for example, involves very different skills in the context of a lawyer/client interview than it does in the context of managing an engineering project.

The definition of discipline reference points or learning outcomes is a global phenomenon and Australian graduates will increasingly need to position themselves alongside their international colleagues.

4.3 Verifying achievement of the required standards or learning outcomes

There is considerable international and national precedent for expert panels reviewing samples of student work and assessment relating to samples of learning outcomes.

Alternatively, or in addition, expert panels in a given discipline could review with the institution the approaches it has taken to aligning curriculum and assessment with its defined learning outcomes and the processes it has employed to benchmark its assessment results and standards with other institutions or external reviewers.

Whichever approach is adopted the key difference between outcomes-based quality assurance and ‘fitness for purpose’ quality assurance is that there is a reference point, benchmark or threshold that is common across all institutions offering that program and against which evidence of achievement must be assessed. The TLOs provide that reference point at the discipline and program level. The nature of the evidence required could be defined by TEQSA or could be negotiated between the agency and the provider.

Multiple patterns of outcomes-based quality assurance are possible and TEQSA’s consultation processes will identify those most acceptable and feasible in the Australian context. These approaches need not be universal but can be selective and based on a risk assessment. Some possibilities suggested during the course of the LTAS project include:

- identify target disciplines over a three- or five-year cycle and review all institutions on one or more of those disciplines over the cycle
- identify target AQF levels over a three- or five-year cycle and review a sample of discipline qualifications at those levels in all institutions or a sample of institutions
- identify a cycle of institutional reviews and require each institution to nominate two-three disciplines for discipline audit at specified AQF levels
- evaluate the criteria and processes used by the major professional accrediting bodies and, subject to negotiated conditions and regular review, license them to perform the relevant discipline audits for entry level qualifications
- operate a cycle of risk-based rolling discipline or AQF level audits parallel to, but separate from, institutional audits, and
- specify the processes to be used and the evidence to be provided for audit of discipline or AQF level (or both) and invite proposals from each institution as to how they intend to present the evidence.

Whichever of these options or combinations is considered, expert panels will need to have credibility and expertise in the disciplines under review. Where adequacy of institutional assessment of learning outcomes is to be reviewed, it is essential that those conducting the review have knowledge of the content and norms of the discipline. This applies whether the review is focused on a particular AQF level or on disciplines, since outcomes at given AQF levels will only be able to be audited in the context of a specific discipline or set of disciplines. Similarly, meaningful assessment of generic attributes or skills can only be interpreted within a disciplinary context.

4.4 Discipline expert panels

For any review that requires a judgement on adequacy of assessment of learning outcomes in specific disciplines, panels would need to incorporate recognised disciplinary expertise. Some contributors to the LTAS project suggested that this expertise should be equivalent to the expertise brought to bear on the evaluation of research funding proposals in order for learning outcomes quality assurance to be credible. For this purpose:

- discipline expert panels could be maintained on a register with rolling membership to promote consistency and organisational learning
- expert panels could be comprised of one ‘professional auditor’ experienced in review processes and AQF descriptors, with the majority having recognised expertise in the discipline or cognate discipline
- discipline experts could be recruited by a call for expressions of interest (EOI) from disciplinary bodies or from individuals to form discipline review panels for a specified number of reviews or period of time.

4.5 Elements of a sustainable outcomes-based quality system

Maintaining a system of outcomes-based quality assurance and institutional regulation that leads to quality improvement, as opposed to just identification of quality deficits, requires a sound conceptual base and a sustainable infrastructure linked to support for institutional development.
A sustainable system for the maintenance of learning outcomes-based quality assurance would require the following elements:

1. an efficient system for review of learning outcomes assessment that has face validity and meets the needs of institutions, TEQSA and other stakeholders transparently and efficiently. Possible approaches are outlined above.

2. an independent central agency to manage an accessible repository of existing standards and a system of support for setting and revising standards

3. a set of protocols for determining the eligibility of disciplines to access support from the central agency

4. a system of support for disciplines that initiate a standard-setting process

5. a system of support for accrediting bodies, professional associations and discipline societies to ensure their capability to engage effectively with the system

6. a simple set of guidelines and templates for disciplines to follow in their deliberations

7. an online searchable resource for examples of outcomes, assessment and review processes and supporting research and/or literature

8. a system of support for higher education providers, accrediting bodies and professional associations preparing to embed the learning outcomes in their curriculum and quality assurance (QA) processes, and

9. a process for identifying gaps in knowledge or practice and for commissioning studies to fill those gaps.

A number of these elements is outlined in general terms below.

1. An efficient system for review of learning outcomes assessment that has face validity and meets the needs of institutions, TEQSA and other stakeholders transparently and efficiently

A number of basic principles need to be agreed upon to underpin the quality assurance of graduate outcomes. These include:

- academic autonomy and institutional diversity should be respected and encouraged
- the responsibility for assessing learning outcomes rests with accredited higher education providers. However, outcomes-based quality assurance requires that institutions are able to provide evidence acceptable to an expert panel that their graduates are achieving or exceeding the defined threshold learning outcomes.
- a roster of priority disciplines would assist in the direction of effort by disciplines and institutions conducting curriculum review and renewal
- protocols and programs for review of specific disciplines and of institutions must be promulgated with sufficient lead time to allow adaptation of existing institutional processes
- protocols and processes for review of outcomes assessment should recognise the considerable variation in nature and capacity of institutional data management systems and should not make unreasonable demands
- quality assurance programs should be risk-based and proportionate
- review of AQF level or disciplinary threshold learning outcomes assessment should not give rise to unintended consequences such as stifling innovation, gravitation towards the mean or ‘teaching to the test’
- the relationship between TEQSA processes and professional accreditation should be addressed specifically in order to avoid wasteful duplication and excess burden on institutions
- external reference points should be a standard component of learning outcomes assessment. This could take the form of expert discipline panels drawn from the disciplines themselves both in Australia and overseas
- while comparability has benefits, a ‘one size fits all’ approach to audit of outcomes assessment is unlikely to be sufficiently sensitive to allow for established disciplinary practice in assessment. Hence, disciplines should be involved in the design of audit processes and data requirements in their discipline.

These principles are underpinned by the assumption that it will continue to be the role of the institutions to manage assessment of their graduates with an additional responsibility being to demonstrate to TEQSA that they are implementing curriculum and assessment practices that ensure the achievement of threshold learning outcomes at appropriate AQF levels. This will require the production of evidence and some form of external validation of that evidence.

One of the biggest issues facing an outcomes-based quality assurance process is the need for robust systems development within institutions to provide evidence of student performance against intended learning outcomes or programs and majors. In addition to archiving graded student work data, the archiving of key process data, eg curriculum alignment, peer review and moderation, might be relevant. Specific collaborative projects between institutions and/or the relevant auditing body might be necessary to develop the capacity of both staff and systems. The ALTC could have a role in establishing and monitoring those collaborative projects.
2. An independent central agency to manage an accessible repository of existing standards and a system of support for setting, reviewing and maintaining standards

The established credibility and reputation of the ALTC and the success of the Learning and Teaching Academic Standards (LTAS) demonstration project suggested the ALTC as the appropriate body to provide this independent central infrastructure.

The ALTC is developing a system of support based on its experience in the demonstration project. In overview the ALTC has commenced the development of systems to administer guidelines and provide hands-on support by peer mentors for discipline groups embarking on a standards-setting project. In addition, it is maintaining the repository of developed standards and a system for regular review.

However, recent Federal budget announcements indicate that the ALTC will not continue and it is suggested, therefore, that an alternative be indentified that is able to provide this type of support.

3. A set of protocols for determining the eligibility of disciplines to access support from the central agency

Criteria would be needed to identify those disciplines that are eligible to access financial, project management and peer support for standard-setting. Not all disciplines may need all forms of support, and some may have a higher priority on the national agenda than others.

In applying for support, discipline groups could be required to mount a proposal that addresses criteria and protocols that would be revised regularly in the light of experience.

A lead agency and project leaders would need to be identified by each discipline. Following from the demonstration project, this process has already commenced with new disciplines undertaking standard-setting work.

4. A system of support for disciplines that initiate a standard-setting process

The ALTC is providing several types of support for discipline-based groups during 2011:

- limited funding support for a part-time project leader – subject to consultation this could be of the order of $20,000 for part-time release from normal duties
- limited project management support to assist lead agencies to establish and maintain working groups and reference groups and to meet deadlines
- templates and guidelines for learning outcomes, examples and a [Discipline] Standards Document – see item 5 below
- limited consultancy support from peers who have led successful prior projects – the ALTC maintains a small register of Discipline Scholars from the demonstration project and standards project leaders who are prepared to provide advice on a consultancy basis as needed.

5. A simple set of guidelines and templates for disciplines to follow in their deliberations

The ALTC has developed a set of templates and guidelines for establishing discipline advisory groups, documenting their deliberations, conducting consultations and producing draft and final documents reporting on the discipline standards and examples.

Examples of these as developed to date are currently posted on the ALTC website at www.altc.edu.au/standards/.

6. An online searchable resource for examples of outcomes, assessment and audit processes and supporting research and/or literature

The ALTC has, as part of the LTAS project, developed an online searchable Resource Library for disciplines, higher education providers, TEQSA and other stakeholders. The resources have been identified by the LTAS project participants and by other experts and have been reviewed and annotated to identify their scope and utility in the implementation of outcomes-based QA. The database is accessible through www.altc.edu.au.

An extension of this online database will hold the standards documents for each discipline as they are developed.

7. A system of support for higher education providers, accrediting bodies and professional associations preparing to embed the learning outcomes in their curriculum and quality assurance (QA) processes.

A particular priority is the provision of opportunities for academic staff to debate and share with each other approaches to:

- defining and embedding mission-based outcomes in addition to threshold outcomes
- mapping outcomes onto curricula;
- assessing outcomes
- ensuring consistency in grading standards
- developing systems for record keeping to allow outcomes assessment to be demonstrated at audit
- using outcomes-based assessment for curriculum renewal and improvement, and
- establishing and assessing standards for inter-disciplinary studies.
8. A process for identifying gaps in knowledge or practice and for commissioning studies to fill those gaps

In the absence of certainty about the future of teaching and learning grants and awards there is no framework for achieving this.

4.6 Issues for consideration

A number of issues present themselves for resolution as part of the TEQSA consultation process.

Disciplines

- Is there a priority list of ‘disciplines’ subject to national attention?
- What criteria and process should be used to identify them?
- How could ‘non-priority’ discipline areas be encouraged to engage with curriculum renewal?
- How do we deal with disciplines that are not priorities but want to participate?
- How do ‘disciplines’ and regulated professions interact?
- Should we think about specifying a more outcomes-focused approach for national accreditation agencies as part of national registration reforms?

External quality assurance process

- What is the desired focus and cycle?
- How will auditors or review panels be ‘retrained’?
- What will be the role of expert panels and/or professional accreditation committees?
- How will institutions be consulted to ensure that outcomes-based quality assurance is feasible within reasonable resource constraints?

4.7 Conclusion

Whatever the eventual outcomes from TEQSA’s consultations and operational decisions, a coordinated approach to providing these elements will be essential for an effective outcomes based quality assurance process.
Appendix 1: LTAS Project Steering Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Affiliation</th>
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<tbody>
<tr>
<td>Professor Daryl Le Grew</td>
<td>Chair, Board Member, Australian Learning and Teaching Council (ALTC)</td>
</tr>
<tr>
<td>Dr Claire Atkinson (ex officio)</td>
<td>Director, Quality Assurance Unit, Department of Education, Employment and Workplace Relations (DEEWR)</td>
</tr>
<tr>
<td>Dr George Brown</td>
<td>ALTC Board Member and Group Academic Director, Think: Education Group</td>
</tr>
<tr>
<td>Professor Anthony Cahalan</td>
<td>Past Chair, Australasian Council of Deans of Arts, Social Sciences and Humanities</td>
</tr>
<tr>
<td>Professor Jane den Hollander</td>
<td>Board Member, Australian Learning and Teaching Council (ALTC)</td>
</tr>
<tr>
<td>Professor Christine Ewan</td>
<td>Project Director, Learning and Teaching Academic Standards project, Australian Learning and Teaching Council (ALTC)</td>
</tr>
<tr>
<td>Professor Richard Henry</td>
<td>Deputy Vice-Chancellor/PVC (Academic), University of New South Wales Chair, Committee of Universities Australia</td>
</tr>
<tr>
<td>Dr Carol Nicoll</td>
<td>CEO, Australian Learning and Teaching Council (ALTC)</td>
</tr>
<tr>
<td>Ms Catherine Vandermark</td>
<td>Branch Manager, Higher Education Quality Branch, Department of Education, Employment and Workplace Relations (DEEWR)</td>
</tr>
<tr>
<td>Dr David Woodhouse</td>
<td>Executive Director, Australian Universities Quality Agency (AUQA)</td>
</tr>
<tr>
<td>Mr Michael Algar</td>
<td>Executive Officer, Manager, Events and Secretariat, Australian Learning and Teaching Council (ALTC)</td>
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Appendix 2: LTAS project: Project Team, Discipline Scholars and project officers

ALTC Project Group

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<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Organisation</th>
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<tbody>
<tr>
<td>Project Director</td>
<td>Emeritus Professor Christine Ewan AM</td>
<td>Queensland University of Technology</td>
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<tr>
<td>Project Executive Officer</td>
<td>Ms Angel Tang</td>
<td></td>
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<tr>
<td>Senior Project Officer</td>
<td>Dr Adam Morgan</td>
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<tr>
<td>Web Resources Manager</td>
<td>Ms Trish Treagus</td>
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Discipline Scholars and Project Officers

Architecture and Building (July 1 commencement)

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<tr>
<th>Discipline Scholar</th>
<th>Project Officer</th>
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<tbody>
<tr>
<td>Professor Susan Savage (Architecture)</td>
<td>Dr Barbara Jack (Architecture)</td>
<td>Queensland University of Technology</td>
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<tr>
<td>Associate Professor Sidney Newton (Building)</td>
<td>Ms Rosalie Goldsmith (Building)</td>
<td>University of New South Wales</td>
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Arts, Social Sciences and Humanities

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<tr>
<th>Discipline Scholar</th>
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<tbody>
<tr>
<td>Professor Iain Hay</td>
<td>Ms Jill Rashleigh</td>
<td>Flinders University</td>
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Business, Management and Economics

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<tr>
<th>Discipline Scholar</th>
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<tr>
<td>Associate Professor Mark Freeman</td>
<td>Ms Cheryl Bell</td>
<td>University of Sydney</td>
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Creative and Performing Arts

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<tr>
<td>Professor Jonathan Holmes</td>
<td>Ms Wendy Fountain</td>
<td>University of Tasmania</td>
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Engineering and ICT

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<th>Discipline Scholar</th>
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<tr>
<td>Professor Ian Cameron</td>
<td>Dr Sue Wright</td>
<td>University of Queensland</td>
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Health, Medicine and Veterinary Science

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<th>Project Officer</th>
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<tr>
<td>Professor Amanda Henderson</td>
<td>Dr Rachael Pitt</td>
<td>The University of Adelaide</td>
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Law

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<tr>
<td>Professor Sally Kift</td>
<td>Ms Rachael Field</td>
<td>Queensland University of Technology</td>
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Science (July 1 commencement)

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<tr>
<th>Discipline Scholar</th>
<th>Project Officer</th>
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<tr>
<td>Professor Susan Jones</td>
<td>Dr Jo-Anne Kelder</td>
<td>University of Tasmania</td>
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## Appendix 3: Examples of uptake of TLOs by the academic community

<table>
<thead>
<tr>
<th>Uptake</th>
<th>Where</th>
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<tbody>
<tr>
<td>The TLOs were presented during a workshop given at Imperial College,</td>
<td>Imperial College, London</td>
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<tr>
<td>London. The TLOs raised discussions around how breadth and depth in</td>
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<td>engineering programs could be addressed through their application into</td>
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<td>programs. Many saw significant value in the statements due to their</td>
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<td>simplicity and the direct expression of what engineering capabilities</td>
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<td>are needed by graduates. Some were planning to use them as the basis</td>
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<td>of discussions about standards in the UK and elsewhere due to the</td>
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<tr>
<td>coherent framework they represent.</td>
<td></td>
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<tr>
<td>At a recent Higher Education Research and Development Society of</td>
<td>HERDSA meeting, RMIT</td>
</tr>
<tr>
<td>Australia (HERDSA) meeting on e-portfolios, an academic from the</td>
<td></td>
</tr>
<tr>
<td>engineering school spoke of the five Engineering and ICT TLOs that</td>
<td></td>
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<tr>
<td>he had encountered at a workshop given by a Discipline Scholar</td>
<td></td>
</tr>
<tr>
<td>(Associate Professor Roger Hadgraft) a week earlier. The academic</td>
<td></td>
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<tr>
<td>described the TLOs as ‘useful’ in describing in a clear and concise</td>
<td></td>
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<tr>
<td>way what engineers do. As such they are useful in that students can</td>
<td></td>
</tr>
<tr>
<td>use them to support and direct their own learning.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Numerous pieces of anecdotal evidence – current and near-future</td>
<td>Southern Cross University</td>
</tr>
<tr>
<td>program reviews explicitly have expressed an intention to take the</td>
<td>University of Tasmania</td>
</tr>
<tr>
<td>TLOs as a starting point and ensure they are aligned.</td>
<td>University of the Sunshine Coast</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Key stakeholders and individual business schools engaged in post-</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>endorsement implications. AACSB-accredited business schools have</td>
<td>The University of Queensland</td>
</tr>
<tr>
<td>indicated the standards will overlay existing program learning</td>
<td>The University of Sydney</td>
</tr>
<tr>
<td>outcomes quite easily.</td>
<td>University of South Australia</td>
</tr>
<tr>
<td></td>
<td>The University of Western Australia</td>
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<td></td>
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<tr>
<td>Integration of the draft Threshold Learning Outcomes into the</td>
<td>RMIT</td>
</tr>
<tr>
<td>statements of graduate capabilities within the RMIT Chiropractic</td>
<td></td>
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<tr>
<td>programs.</td>
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</tr>
<tr>
<td>La Trobe University, Bendigo has been using the bachelor degree TLOs</td>
<td>La Trobe, Bendigo</td>
</tr>
<tr>
<td>to remap the creative arts degree at Bendigo as it is being revised.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>The Creative and Performing Arts coursework masters TLOs have been</td>
<td>UTas</td>
</tr>
<tr>
<td>written into the assessment rubric for one of the key units in the</td>
<td></td>
</tr>
<tr>
<td>degree (Master of Fine Art and Design) and tested in assessing a</td>
<td></td>
</tr>
<tr>
<td>number of candidates in Semester 2 in 2010 at the University of</td>
<td></td>
</tr>
<tr>
<td>Tasmania (UTas). The rubric will be further refined in 2011.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>The Creative and Performing Arts TLO document is being referred to</td>
<td>ANU</td>
</tr>
<tr>
<td>(in its draft form) in the review of the BMus at Australian National</td>
<td></td>
</tr>
<tr>
<td>University (ANU).</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>A similar process is about to occur at the University of South</td>
<td>UniSA</td>
</tr>
<tr>
<td>Australia in their writing program.</td>
<td></td>
</tr>
<tr>
<td>Uptake</td>
<td>Where</td>
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<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------</td>
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<tr>
<td>The Australian National University (ANU) College of Law had already begun a major review of its LLB curriculum, mapping a variety of skills across the curriculum and working with course conveners to make sure that there are adequate opportunities for students to learn, to be assessed on, and to receive feedback on those skills. The LTAS project confirmed its choices of skills. It also confirmed its decision to work toward better alignment between course objectives and assessment practice.</td>
<td>ANU</td>
</tr>
<tr>
<td>At the University of Wollongong (UoW), the LTAS project has impacted on curriculum review and a substantial project around curriculum mapping of graduate qualities.</td>
<td>UoW</td>
</tr>
<tr>
<td>The School of Law at Deakin University has embarked on a course review. LLB Course Goals were developed by incorporating the Threshold Learning Outcomes (TLOs). As a result of the local consultation at Deakin University, the School is proposing to introduce a new unit on Legal Theory and Practice in the context of Negotiation.</td>
<td>Deakin</td>
</tr>
<tr>
<td>At Southern Cross University (SCU), TLOs are being used as part of an assessment mapping exercise of all core LLB units within the school. Assessment items are being mapped against a range of criteria (generic graduate attributes, skills and values); identified learning outcomes in specific units, and TLOs. Two assessors are re-designing aspects of their assessment to align with specific identified TLOs.</td>
<td>SCU</td>
</tr>
<tr>
<td>The University of Tasmania (UTas) has used the TLOs to help to confirm aspects of its Law Faculty’s curriculum review process and consider the requirements of its degree.</td>
<td>UTas</td>
</tr>
<tr>
<td>Review of Practical Legal Training competencies: The Australasian Professional Legal Education Council is discussing a review of the Practical Legal Training competencies in 2011 and has indicated that they will be guided by the TLO development process for the Bachelor of Laws.</td>
<td>Australasian Professional Legal Education Council</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
<tr>
<td>AACSB</td>
<td>Association of Advance Collegiate Schools of Business</td>
</tr>
<tr>
<td>AAL</td>
<td>Australian Academy of Law</td>
</tr>
<tr>
<td>AAWP</td>
<td>Australian Association of Writing Programs</td>
</tr>
<tr>
<td>ABA</td>
<td>American Bar Association</td>
</tr>
<tr>
<td>ABDC</td>
<td>Australian Business Deans Council</td>
</tr>
<tr>
<td>ACARA</td>
<td>Australian Curriculum, Assessment and Reporting Authority</td>
</tr>
<tr>
<td>ACS</td>
<td>Australian Computer Society</td>
</tr>
<tr>
<td>ADDICT</td>
<td>Australian Council of Deans of Information and Communications Technology</td>
</tr>
<tr>
<td>ACED</td>
<td>Australian Council of Engineering Deans</td>
</tr>
<tr>
<td>AEAG</td>
<td>Accounting Expert Advisory Group</td>
</tr>
<tr>
<td>ACPHIS</td>
<td>Australian Council of Professors and Heads of Information Systems</td>
</tr>
<tr>
<td>ACUADS</td>
<td>Australian Council of University Arts and Design Schools</td>
</tr>
<tr>
<td>ADSA</td>
<td>Australasian Association for Drama, Theatre and Performance Studies</td>
</tr>
<tr>
<td>AFAANZ</td>
<td>Accounting and Finance Association of Australia and New Zealand</td>
</tr>
<tr>
<td>AGTA</td>
<td>Australian Geography Teachers Association</td>
</tr>
<tr>
<td>AHA</td>
<td>Australian Historical Association</td>
</tr>
<tr>
<td>AHELO</td>
<td>Assessment of Higher Education Learning Outcomes</td>
</tr>
<tr>
<td>ALSA</td>
<td>The Australian Law Students’ Association</td>
</tr>
<tr>
<td>ALTA</td>
<td>The Australasian Law Teachers’ Association</td>
</tr>
<tr>
<td>ALTC</td>
<td>Australian Learning and Teaching Council</td>
</tr>
<tr>
<td>ANZACLL</td>
<td>Australian and New Zealand Academic Law Librarians</td>
</tr>
<tr>
<td>APLEC</td>
<td>Australasian Professional Legal Education Council</td>
</tr>
<tr>
<td>AQF</td>
<td>Australian Qualifications Framework</td>
</tr>
<tr>
<td>AUQA</td>
<td>Australian Universities Quality Agency</td>
</tr>
<tr>
<td>ASPERA</td>
<td>Australian Screen Production Education and Research Association</td>
</tr>
<tr>
<td>ASSH</td>
<td>Arts, Social Sciences and Humanities</td>
</tr>
<tr>
<td>ATN</td>
<td>Australian Technology Network of Universities</td>
</tr>
<tr>
<td>BME</td>
<td>Business, Management and Economics</td>
</tr>
<tr>
<td>CALD</td>
<td>Council of Australian Law Deans</td>
</tr>
<tr>
<td>CAPA</td>
<td>Creative and Performing Arts</td>
</tr>
<tr>
<td>CLE</td>
<td>Continuing Legal Education</td>
</tr>
<tr>
<td>CLEA</td>
<td>Clinical Education Association</td>
</tr>
<tr>
<td>COALA</td>
<td>Coalition of Australian Law Administrators</td>
</tr>
<tr>
<td>COAG</td>
<td>Council of Australian Governments</td>
</tr>
<tr>
<td>CPAA</td>
<td>CPA (Certified Practising Accountant) Australia</td>
</tr>
<tr>
<td>DASSH</td>
<td>Australasian Council of Deans of Arts, Social Sciences, and Humanities</td>
</tr>
<tr>
<td>DEEWR</td>
<td>Department of Education, Employment and Workplace Relations</td>
</tr>
<tr>
<td>EA</td>
<td>Engineering Australia</td>
</tr>
<tr>
<td>FAHS</td>
<td>Federation of Australian Historical Societies</td>
</tr>
<tr>
<td>GSNSW</td>
<td>Geographical Society of New South Wales (GSNSW)</td>
</tr>
<tr>
<td>HERDSA</td>
<td>Higher Education Research and Development Society of Australia</td>
</tr>
<tr>
<td>HTAA</td>
<td>History Teachers’ Association of Australia</td>
</tr>
<tr>
<td>HWA</td>
<td>Health Workforce Australia</td>
</tr>
<tr>
<td>IAG</td>
<td>Institute of Australian Geographers</td>
</tr>
<tr>
<td>ICAA</td>
<td>Institute of Chartered Accountants Australia</td>
</tr>
<tr>
<td>INLT</td>
<td>International Network for Learning and Teaching Geography in higher education</td>
</tr>
<tr>
<td>JD</td>
<td>Juris Doctor</td>
</tr>
<tr>
<td>LACC</td>
<td>Law Admissions Consultative Committee</td>
</tr>
<tr>
<td>LCA</td>
<td>Law Council of Australia</td>
</tr>
<tr>
<td>LLB</td>
<td>Bachelor of Laws</td>
</tr>
<tr>
<td>LTAS</td>
<td>Learning and Teaching Academic Standards</td>
</tr>
<tr>
<td>NACTMUS</td>
<td>National Council of Tertiary Music Schools</td>
</tr>
<tr>
<td>NIA</td>
<td>National Institute of Accountants</td>
</tr>
<tr>
<td>NZGS</td>
<td>New Zealand Geographical Society</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>Priestley 11</td>
<td>The eleven law subjects that must be completed before admission to practise as a legal practitioner in Australia</td>
</tr>
<tr>
<td>PhD</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>QAA</td>
<td>Quality Assurance Agency for Higher Education (UK)</td>
</tr>
<tr>
<td>RGSQ</td>
<td>Royal Geographical Society of Queensland</td>
</tr>
<tr>
<td>RGSSA</td>
<td>Royal Geographical Society of South Australia</td>
</tr>
<tr>
<td>SJD</td>
<td>Doctor of Juridical Science</td>
</tr>
<tr>
<td>TAFE</td>
<td>Technical and Further Education</td>
</tr>
<tr>
<td>TDCA</td>
<td>Tertiary Dance Council of Australia</td>
</tr>
<tr>
<td>TEQSA</td>
<td>Tertiary Education Quality and Standards Agency</td>
</tr>
<tr>
<td>TLO</td>
<td>Threshold Learning Outcome</td>
</tr>
<tr>
<td>UA</td>
<td>Universities Australia</td>
</tr>
<tr>
<td>UKCLE</td>
<td>United Kingdom Centre for Legal Education</td>
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