



**Ideas & Issues in Higher Education:
CSHE research seminar series**

The University of Melbourne >

Centre for the Study of Higher Education

**International trends in academic standards:
establishing external reference points for
academic achievement**

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The University of Melbourne >

Centre for the Study of Higher Education

- A. Current dynamics in Australian higher education, of relevance to academic standards discussion
- B. The focus is on academic achievement standards
- C. Approaches to setting expectations and measuring academic achievement (5 decision points), and international trends in this area
- D. What this might look like, in practice



Dynamic 1: Market pressures for distinctiveness

University curricula are diversifying across a **range of dimensions**:

- duration
- modes of study
- liberal vs professional
- disciplinary specialisation; multiple disciplines; 'interdisciplinary'
- research involvement
- work integrated learning
- and more!

This is differentiating both cognate programs, and entire institutions.

It is involving not only the creation of new programs and the 'tweaking' of existing courses, but also the wholesale renewal of institutional offerings.



Dynamic 2: A new AQF?

The proposal for revision of the Australian Qualifications Framework, which includes:

- Replacement of the current sectoral divisions with a **single set of award levels**

(removing some of the current 'ambiguity' around diplomas and certificates; focusing the qualification level on the award itself, and away from the conferring institution)

- Definitions of awards based on explicit **learning outcome statements** and (notional) learning time/volume measures (with each award level including a description of knowledge, skills and competences)

and the following statements (emphases added):

"... the strengthened objectives for the AQF must **enable** and **facilitate**:

- development and accreditation of nationally recognised and **consistent** qualifications

....

- national and international **alignment** of qualifications" (p8)



A. Current dynamics in Australian higher education, of relevance to academic standards

Dynamic 3: Common reporting

Implementing the [Australian Higher Education Graduation Statement](#), which includes:

- **A description of the award**
(specific to the award, not just the level as in the AQF; generalisable to all graduates, not the individual)
- **Details of each graduate's academic achievements**
(including grades and an explanation of their; ability to include GPA or other results for comparative purposes, if appropriate; ability to include additional information on particular achievements, such as workplace learning or independent study)
- **Description of the system, including the AQF**



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A. Current dynamics in Australian higher education, of relevance to academic standards

Dynamic 4: Ongoing national concern about standards

For example - **Bradley Review**; new agency (TEQSA); AUQA paper

"Key points raised included:

- while Australia has been at the forefront internationally of measuring student employment and study outcomes and satisfaction, other countries are developing these kinds of measures and **Australia now lags in hard measures of learning outcomes**;
- there is a need to develop Australia's capacity to **document, measure and improve student learning outcomes**; and
- with the increasing diversification of the higher education sector, there needs to be a transparent, national system in place **which assures at least minimum standards of quality of educational qualifications across all higher education providers.**"

[p133, Review of Australian Higher Education: Final report. Bradley et al 2008]



**Setting and Monitoring Academic Standards for Australian Higher Education: A discussion paper. AUQA, May 2009*

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A. Current dynamics in Australian higher education, of relevance to academic standards

Dynamic 4: Ongoing national concern about standards

For example - Bradley Review; new agency (TEQSA); AUQA paper

- **a focus on student achievement**
(rather than teaching inputs or processes)
- **a central role for national disciplinary communities**
(in specifying standards)
- **national statements of learning outcomes**
(both generic and discipline-based)
- **descriptions or exemplars of achievement levels**
(both of minimum thresholds and graded achievement)
- **assessment measurement options**
(from local and various, to external and standardised)
- **reporting of achievement standards**
(for individual graduates, and for program and institutional comparison)



*Setting and Monitoring Academic Standards for Australian Higher Education: A discussion paper. AUQA, May 2009

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B. Focussing on academic achievement standards

“...‘academic standards’ is a broad term and has been used to apply to, among other things, academic programs and curriculum, teaching quality, rates of student progression through degree programs, and academic achievement (learning). **In this paper, the focus is specifically on academic achievement standards.** These refer to how much, intellectually and professionally, students have learned or acquired by the time they complete their higher education courses”

(page 7, *Setting and Monitoring Academic Standards for Australian Higher Education: A discussion paper.* AUQA, May 2009)



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B. Focussing on academic achievement standards

“An **academic achievement standard** is:
an agreed specification or other criterion,
used as a rule, guideline or definition,
of **a level of performance or achievement.**”

(page 8, *Setting and Monitoring Academic Standards for Australian Higher Education: A discussion paper*. AUQA, May 2009)



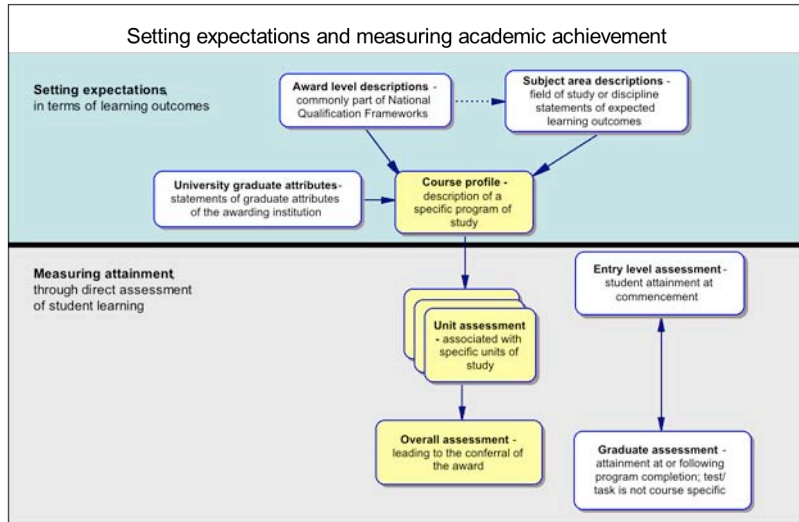
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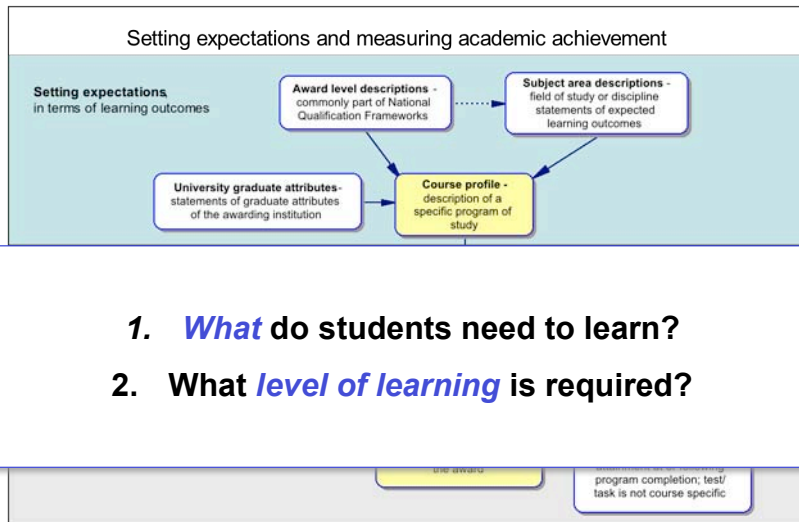
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C. Approaches to setting expectations and measuring academic achievement



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1. Determining *what* students need to learn

What distinguishes a science degree from the humanities? What defines a professional degree, and who determines the standards for such degrees? What discipline groupings make sense for the setting of national standards?

This is the area of most activity internationally. For example:

The **Subject Benchmark Statements** in the UK

These have been in place for a decade, covering 50 subject areas for bachelor degrees, and 18 in specialist areas of health care.

The **Tuning process** in Europe

Tuning provides the basis for “developing reference points at subject area level”. The second phase of Tuning Europe was completed in 2004, and involved 27 countries and nine principal subject areas: Business; Chemistry; Earth Sciences; Education; European Studies; History; Mathematics; Nursing; and Physics. Each group prepared a summary, based on a template, of the outcomes of consultation, including draft descriptors for both first and second cycle degrees.

Also *Tuning Latin America*, *Tuning USA*, and similar activities elsewhere, all focussed on describing the learning outcomes expected in particular subject areas



2. Determining the *level of learning* required

What constitutes a Masters level qualification? How might standards of different Masters qualifications be compared? How do they differ from Bachelor degrees?

This often (but not always) accompanies statements of expected learning outcomes. For example:

Tuning describes the **threshold** of achievement for particular award levels

(approach is usually to focus on what distinguishes each level of award, over and above the lower award. i.e. what a Masters graduate is expected to achieve beyond the achievements of a Bachelor graduate)

UK subject benchmark statements describe both **threshold** and **'typical'**

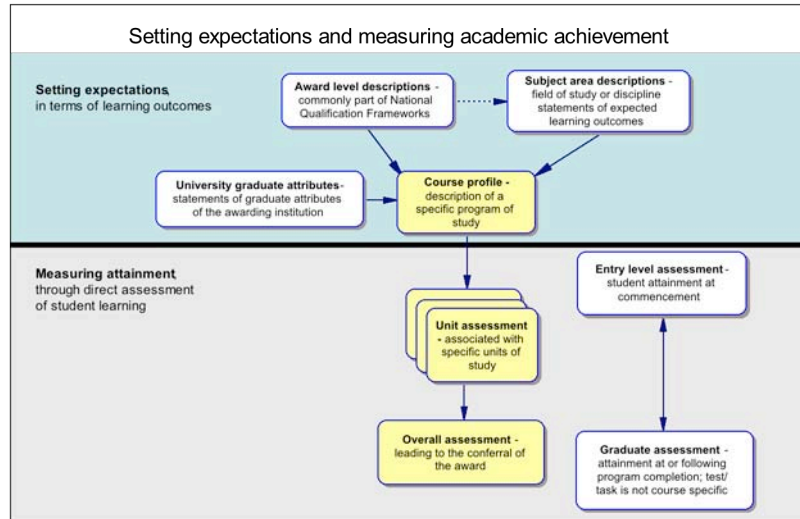
On graduating with an honours degree in biosciences, students should:

(threshold) be able to access bioscience information from a variety of sources and to communicate the principles in a manner appropriate to the programme of study

(typical) be able to access and evaluate bioscience information from a variety of sources and to communicate the principles both orally and in writing (eg essays, laboratory reports) in a way that is well organised, topical and recognises the limits of current hypotheses



C. Approaches to setting expectations and measuring academic achievement



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3. Determining what learning has been *achieved* (ie assessment)

What particular aspects of learning should be (can be) used to measure academic achievement standards? (eg skills, knowledge, competences, attributes)

On what particular tasks should performance be measured for the purpose of establishing achievement in a course? (eg projects or theses; portfolios; standardised exit tests; capstone subject assessment; ...)

This starts to get into contentious territory - particularly when standardised, external administered tests are considered. Yet assessment is an obviously critical part of the equation. It is necessary if we (and others) are to have confidence in the achievements of our graduates.



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It is important to distinguish between:

- the actual **measurement of learning**
- the **external referencing** of such measurement → 4. Benchmarking
- the **reporting of the outcomes** of such measurement → 5. Reporting



4. External **Benchmarking** of achievement standards

How does the standard of work required for the award of this degree (**threshold**) compare with a) nationally agreed standards? b) similar awards offered elsewhere? What standard of work is required for different grades / GPAs?

What method(s) should be used for benchmarking?

Possibilities include:

- Peer review of assessment (quite common between partner programs/institutions)
- External assessment of student work [all or samples] (eg external examiners in UK)
- Summary reports from standardised tests (eg CLA in USA; possibly AHELO)



C. Approaches to setting expectations and measuring academic achievement

5. Reporting on standards of achievement

Who needs to know?

government; potential students; graduates; employers; professional associations; ...

What information do they need?

pass rates; grade distribution; extent of 'value-add'; individual grades; ...



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Pilot Project to Measure Core Learning Outcomes

The Collegiate Learning Assessment (CLA) measures critical thinking, analytic reasoning and written communication using two different tasks -- a performance task and an analytic writing task. Such general skills are applicable and useful for both career and personal success and are important outcomes of college regardless of a student's major. Below are the 2006-2007 results from the CLA.

[CLICK HERE](#) for information regarding the Collegiate Learning Assessment

	Performance Task	Analytic Writing Task
Freshman Score	1138	1177
Senior Score	1210	1232
New Transfer Score	1107	1124
Senior Transfer Score	1201	1224



Extract from page 5 of the VSA College Portrait of California State University, Long Beach http://www.collegeportraits.org/CA/CSULB/learning_assessment (Accessed 15 July 2009)

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International trends in establishing the standards of academic achievement in higher education

In higher education systems around the world, efforts are underway to focus attention on the nature, quality, and level of student learning.

Much of this activity is international, and features discipline-based groups collaborating to describe the learning most valued in their particular fields.

National and institutional autonomy is paramount, yet there is widespread agreement that university teaching and, importantly, university students and graduates, will benefit from greater clarity around learning outcomes.

Widespread agreement that assessment plays a central role in student learning. Assessment within or upon completion of a program of study directs student learning, and provides the measure of an individual's level of attainment.

Assessment is therefore central to consideration of academic achievement standards.

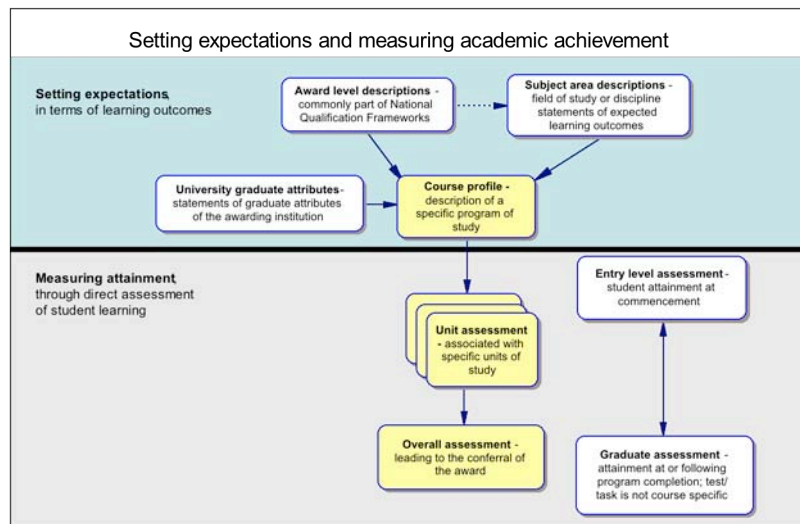
Various initiatives internationally are looking at the ways in which assessment can be used to measure student achievement against specified learning outcomes.



Extract from
Harris, K-L. (2009). *International trends in establishing the standards of academic achievement in higher education*.
Commissioned report for AUQA.

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D. What this might look like, in practice



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Following slides present just one possible approach, taking the Bachelor of Science as an example and with a capstone project or subject as the point of comparability



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What might curricula look like under a system of national standards?

One possible scenario, using a Bachelor of Science as an example

- **Nationally agreed statement of learning outcomes comprised of:**
 - statements for **Bachelor degree** (from revised AQF 'taxonomy')
 - statements for **Science**, with a particular focus on **discipline-based skills** (from national discipline-based consultation - 're AUQA/standards' paper)
- **Incorporates a capstone approach in the curriculum design**
 - the program of study culminates (final year or semester) in an integrative project ('capstone' project)
 - the project is assessed against the learning outcomes described for the degree
 - *for different institutions (and perhaps for different disciplines/students) the actual project design could vary*
- **Assessment of the project is used as the measure of standards**
 - the work is graded within the institution
 - samples of work at each grade (level) are assessed externally
- **Reporting**
 - a 'capstone grade' is included in the AHEGS (in addition to grades for individual units of study)
 - a standard explanation of the capstone grade is included on the AHEGS, for all BSc graduates, from all institutions



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In conclusion:

Greater attention to academic achievement standards:

- does not demand standardisation of curricula (at least, not if we get it right)
- is a process, and will take time (although it is already well underway in some subject areas)
- is essential for protecting the reputation of Australian higher education awards
- is set to become an aspect of institutional accountability in the (not too distant) future
- can have very real benefits for university teaching - & for our graduates - if we can get it right.



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For a detailed review of international trends, see paper available from CSHE website.

