

Submission to the

Review of Higher Education

from the

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**Dr Hamish Coates
0423 475 605
coatesh@acer.edu.au**



Introduction

The document outlines areas that ACER believes should be considered in the 2008 Higher Education Review. The list is deliberately brief and not exhaustive. It outlines key strategies that would further advance Australia's vibrant and high quality university sector, and its capacity to produce learning, research and work-ready graduates.

A common theme among these topics is their focus on using evidence-based approaches to enhance the quality of Australian university education and our understanding of the learning that it produces. For some areas there is already a strong research base. For others, further research is required.

The focus on 'learning' (in its broadest sense) is important. Essentially, universities are institutions of learning. Yet much of the discourse in higher education is about teaching, research, service and administration. But these are simply vehicles for learning. Fundamentally, the success of higher education depends on how much learning is occurring. This is the core business.

Yet we need to develop methods to define, measure, monitor and enhance learning in higher education. In many ways, our understanding of learning is more advanced outside higher education. ACER's submission highlights areas in which greater attention to learning in higher education is required.

Our submission is presented thematically. It is most relevant to review questions 8, 9, 12, 13, 14 and 15. In summary, the areas that we highlight for consideration include:

1. An enhanced focus on measuring learning
2. New 'quality indicators' and standards for higher education
3. A focus on supporting students
4. Objective data to support admissions procedures
5. Measure the growth that results from university study
6. An increased emphasis on student equity
7. Evidence-based development of university staff and leaders
8. Clarified links between higher and vocational education
9. Monitoring graduate outcomes and pathways
10. Increased evidence-based research on higher education

1. An enhanced focus on measuring learning

Australian universities need to refocus their attention on students and their learning, and move beyond data on student perceptions of teaching. Subjective data on the quality of provision is important, but it is not sufficient to support national or institutional management and quality assurance. Further, it has led to important considerations being stifled or ignored.¹

First, it is critical that we refocus university attention on measuring student learning. While there are pockets of excellence, current assessment practices in Australian universities are problematic, with student knowledge and skill often being measured using uncalibrated tasks with unknown reliability and validity, scored normatively by different raters using unstandardised rubrics then, often with little moderation, adjusted to fit percentile distributions which are often specified a priori by departments, faculties or institutions.

A range of basic strategies that are in use around the world are barely or inconsistently deployed in Australia, creating weakness in our quality assurance system. Examples of strategies which might be considered include:

- technically rigorous moderation processes
- the use of objective data to calibrate and monitor assessment quality
- the use of psychometrically validated assessments for large-enrolment subjects
- the definition of performance standards, and
- the assessment of students' work readiness.²

There would be considerable educational value, for instance, in developing psychometrically validated curriculum-specific items or tests that lecturers in first-year accounting or biology could deploy with confidence to assess student performance. A related possibility would be to build a bank of expertly designed and calibrated items that could be embedded within routine student assessments. Alternatively, a statistical or social moderation procedure might be developed. Any or all of these could be developed by disciplinary clusters and would play an immediate role in building the capacity of universities to monitor and enhance academic standards.

Second, considerably more emphasis needs to be placed on validated routine assessment tasks that are used to track progress and capability, and upon which students' futures are based. Such validation may take place through university- and discipline-specific 'learning assessment units'. Universities have established evaluation and planning units over the last few decades. In the medium-term, they might develop institution-specific or collaborative units with a broad remit to monitor and enhance academic standards and, within this, a specific focus on validating student assessment.

2. New 'quality indicators' and standards for higher education

Australian higher education needs new indicators and data to help manage and enhance the quality of provision. These indicators could be framed within an academic standards framework.

In 2006 and 2007 a series of quality indicators were developed for vocational education and training in Australia and have already played an important role in focusing attention on outcomes-based quality improvement, even though they are yet to be released.³⁴

Yet the national indicator framework for higher education has not been revised since the late 1980s.⁵ This framework has served the sector well, but sector size, structure and dynamics have changed considerably since it was developed. Indicator frameworks must keep pace with such significant developments as the growth in international education, new data management technologies, advances in educational measurement, and contemporary conceptions of educational quality.

In particular, there is a need to develop more outcomes-focused indicators of quality and performance. Current indicators focus attention and practice on inputs and processes, and concentrate on instructional and institutional contexts rather than on learners and learning.⁶⁷ Increased focus on student learning and developmental outcomes will flow from defining indicators which highlight these issues as important.

It is too early to make decisions about the design or contents of a new indicator or standards framework for Australian higher education. A technically robust and research-based development process must be used to design a valid and efficient system that accounts for institutional and systemic complexity.

Early cross-institutional conversations suggest that it is likely that some kind of portfolio approach would work best – perhaps one that offers indicators on significant areas such as community engagement or internationalisation.⁸ This might include a core set of agreed upon indicators that all institutions might use, and a basket of further indicators that institutions could sample and deploy in order to demonstrate their individual characteristics.

3. A focus on supporting students

We need to refocus university attention on student's engagement with university study. Developments over the last few decades to research and enhance pedagogy are important, but this work counts for little if student engagement and outcomes are not improved. There is evidence that 'pedagogical enhancement' may not be 'trickling down' to students.⁹ There is a need to focus directly on learners.

We may be losing our awareness of how to manage and enhance students' engagement in learning. Universities and government collect a considerable amount of data *from* students, but very little data *about* students. This reduces the productivity of education, both through increased student departure, less efficient use of resources, and lower achievement.

Around 25 institutions took part in the Australasian Survey of Student Engagement (AUSSE) in 2007 and around 30 are taking part in 2008.¹⁰ Around 15 universities are taking part in the Staff Student Engagement Survey – a cross-institutional survey of staff which, for the first time in Australasia, is about students. To enhance the management of educational programs and resources, more should be done to develop these aspects of university education.

4. Objective data to support admissions procedures

Australia needs a valid and efficient university admissions process to optimise the equity and outcomes of higher education. Admissions procedures play a major role in the quality and productivity of our university education, but Australia lacks evidence about the comparability and efficacy of the various mechanisms currently used for selection.

There is considerable variation in the pathways that underpin university admissions in Australia. Such diversity is not essentially problematic. Rather, it reflects policies to open up a variety of pathways into higher education, and the autonomy and distinctiveness of each institution's approach to selection.

The lack of transparency in the different processes utilised, however, makes it difficult to objectively assess the effectiveness of individual selection methods. This is problematic from the point of view of aspiring students and for the system as a whole. It is critical that variations in practice do not impact the validity of processes and outcomes.

Australia needs a baseline and objective measure of student capability for university study. The use of assessments such as uniTEST, the Special Tertiary Admissions Test (STAT), and the International Student Admissions Test (ISAT) should be encouraged.¹¹ By providing objective data on the capability of all students, they offer opportunities for students who have the potential to succeed but who for reasons associated with disadvantage, might otherwise not be eligible for selection.

Selection into graduate programs should also be based on objective data on individual capability. Current decisions are based on uncalibrated and unstandardised data, which reduces their validity and efficiency. The Graduate Australian Medical Schools Admissions Test (GAMSAT) is widely recognised and endorsed as playing a vital role in the highly competitive area of medical school admissions.¹² Yet other postgraduate places and awards are allocated without the use of similar evidence. The provision of places and scholarships should be based on objective data from an assessment like the Graduate Skills Assessment (GSA).¹³

5. Measure the growth that results from university study

Australian higher education needs a means of assessing the value that university study adds to learners' knowledge and skill. While measures of student achievement provide information on graduate performance they do not index the growth in student learning that may be attributed to an educational process.

Value added analyses offer a powerful means of identifying the efficacy of different approaches to teaching and different programs.¹⁴¹⁵ In summary, education may be considered value adding if, while controlling for students' 'starting point' or prior learning, it produces a gain in student learning that is above expectation.

Evaluating the value added by university study can be done by comparing data from an objective admissions test with data from subsequent student performance. This might involve, for instance, comparing uniTEST results with a third-year grade point average.

Alternatively, comparisons might be made between assessments conducted at the start of a degree, either before admissions or in the first year of study, with an objective assessment undertaken in later-year study.

While many of the significant advances that have been made in this area in school education could be transferred into higher education, much further design and testing would be required. The calculation of value-added estimates is technically complex, and these complexities are compounded by sampling, context and reporting considerations. The required methods are being tested and deployed in a number of Australian universities in 2008.¹⁶¹⁷¹⁸

6. An increased emphasis on student equity

It is vital that comprehensive work is undertaken to identify the most productive strategies for enhancing the participation of students in target equity groups in higher education. Participation in higher education is becoming more important in a society and economy that increasingly relies on advanced professional competency and capability. Higher education is important both for individual learners and graduates, and for Australia as a whole.

Australia needs a means of ensuring that all talented people have an equal opportunity to enter higher education, regardless of their background. As part of this, it is critical that talented people do not miss out on higher education because of where they live. People from regional areas and from lower socioeconomic areas of major cities should have the same opportunity to access and succeed in higher education as people from higher socioeconomic areas.

Since 1990, these ideas have underpinned a national student equity framework for Australian higher education. This framework has been the catalyst for a large number of important national, regional and institutional initiatives. More broadly, it has provided a firm foundation for advancing conversations about access and participation of students in university education.

As relatively recent reviews have shown, however, at a national level there has been little if any growth in participation of students from disadvantaged backgrounds. In certain instances, things have become worse.¹⁹ This is concerning, as it occurs alongside the existence of a well-accepted national framework, considerable investment by higher education institutions, and increasing value and demand for higher education.

ACER has designed the Graduate Pathways Survey for DEEWR in 2008, and as part of this is testing a number of new ways to identify disadvantage. Many of these are not new to education, but they are new to university education. Examples include measures of parental education and occupation, sibling education, childhood disadvantage, current student disadvantage.

It is hoped that a selection or combination of these measures will provide more robust estimates of individual background than current postcodes, which has been a necessary proxy but are known to be too broad brush and confounded by a range of factors. The provision of more reliable and valid information on access and participation in higher education will provide a better basis on which to frame and evaluate institutional and national policy and practice.

7. Evidence-based development of university leaders

The tertiary sector needs a more systematic approach to selecting and developing academic staff and leaders. Over the next decade a large number of current staff and leaders will retire. Coupled with the changing demands placed on institutional leaders, it is critical that we begin developing systems for building workforce capacity in this area.

The creation of the LH Martin Institute of Higher Education Leadership and Management is important. It is critical, among such work, that the higher education sector develop a robust framework for identifying and developing teachers and institutional leaders. The framework should define: the capabilities for effective leadership; ways to assess these; and the most effective ways to document performance and potential.

8. Clarified links between higher and vocational education

The lines dividing the vocational education sector and the higher education sector have become increasingly blurred over the past decade. In order to ensure that the training and education provision in Australia is efficient,

understood and effective, a comprehensive analysis of the common boundaries between these two sectors is required. A reconfiguration may be required to optimise entrance pathways, and student flows and outcomes. It is critical that providers across the tertiary sector work together to enhance workforce capability in Australia.

A number of vocational providers now offer degree level qualifications, and some universities have become dual sector institutions. The effect of these changes on quality of provision, satisfaction of students and efficiency of the system is relatively unknown. Articulation of students across these sectors is also poorly monitored, meaning that pathways between the sectors and their benefits for students is also somewhat of a mystery.

9. Monitoring graduate outcomes and pathways

Australia would benefit greatly from information derived from longitudinal study of the outcomes and pathways of university graduates. Information provided by the Graduate Destination Survey has been very useful in understanding graduates' immediate transitions beyond study.²⁰²¹ The Longitudinal Surveys of Australian Youth (LSAY) program provides much useful information on higher education outcomes in general, but the samples generally do not have large numbers of respondents from individual fields of study or institutions. The Graduate Pathways Survey, being developed by ACER for DEEWR in 2008, will offer further insight on destinations. Such cross-sectional collections are very useful, but suffer from a range of methodological limitations associated with the reliability of sampling and of measurement.

A longitudinal study of university learners and graduates has the capacity to provide an enormous amount of information for policy and planning. Such a project has already been established in the field of medicine.²² Longitudinal tracking would help maintain contact with individuals, capture more extensive and reliable input from graduates, and build rich insight into how work and further study interact to shape people's careers and capabilities.

The EU-funded REFLEX project (based at the University of Maastricht but being conducted in 15 countries) has been investigating related issues in a European context (although other countries such as Japan have been involved) with a focus on the knowledge and skills required of what they call 'the flexible professional'.²³ REFLEX focuses on three broad questions: (1) Which competencies are required by higher education graduates in order to function in the knowledge society? (2) What role is played by higher education institutions in helping graduates to develop these competencies? (3) What tensions arise as graduates, higher education institutions, employers and other key players each strive to meet these own objectives. It has developed and used a number of instruments to provide the information required to address these questions. There would be benefits in Australia connecting with this work. This would not

only reduce costs but also facilitate international sharing of experience and cross-national analysis.

10. Increased evidence-based research on higher education

Australian higher education needs an independent, national higher education research institute. There is a significant need for more evidence-based, policy-relevant and independent research on higher education in Australia. Higher education plays a significant role in the Australian economy and community life, and it is important that we develop robust insights into current and developing policy and practice.

While higher education is a global industry and much research is imported from abroad, Australia has a distinct and innovative system and it is critical that research is conducted in Australia to suit our contexts and needs. A considerable amount of research is conducted by institutions, but this tends to be commercially focused, is often not released publically, and can lack independence or relevance to other providers. While enhancement work has been sponsored through the Australian Learning and Teaching Council, this work is explicitly not research-based and is generally not evidence-based or policy-focused.

The provision of high-quality independent research on higher education should play a vital role in developing the sector. It is critical that the need for further development in this area be considered as part of the 2008 Higher Education Review.

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³ PhillipsKPA (2006). Investigation of Outcomes-based Auditing. Melbourne: Victorian Qualifications Authority. Coates, H. (forthcoming). Development of Instruments and Collections for the AQTF 2007 Quality Indicators. Canberra: DEEWR.

⁴ Coates, H. & Hillman, K. (2007). *Development of Instruments and Collections for the AQTF 2007 Quality Indicators*. Canberra: Department of Education, Employment and Workplace Relations.

⁵ Linke, R. D. (1991). *Report of the Research Group on Performance Indicators in Higher Education*. Canberra: DETYA.

⁶ See:

http://www.dest.gov.au/sectors/higher_education/policy_issues_reviews/key_issues/assuring_quality_in_higher_education/technical_note_1.htm#wbc_purpose=basic

⁷ Coates, H. (2007). Excellent Measures Precede Measures Of Excellence. *Higher Education Policy and Management*, 29(1), 87-94.

⁸ Krause, K-L., Coates, H., James, R. (2005). Monitoring the internationalisation of higher education: Are there useful quantitative performance indicators? In M. Tight (Ed.), *International Perspectives in Higher Education Research*. London: Elsevier.

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- ⁹ See: www.acer.edu.au/ausse
- ¹⁰ See: www.acer.edu.au/ausse
- ¹¹ See: <http://www.acer.edu.au/resources/tertiary.html>
- ¹² Coates, H. (2007). *Establishing the criterion validity of GAMSAT*. Melbourne: ACER.
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- ²² See: <http://www.medicaldeans.org.au/msod.html>
- ²³ See: <http://www.fdewb.unimaas.nl/roa/reflex>