

Policy Analysis

The Course Experience Questionnaire, Graduate Destinations Survey and Learning and Teaching Performance Fund in Australian higher education

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Executive summary

The *Course Experience Questionnaire* (CEQ) and *Graduate Destinations Survey* (GDS) are instruments jointly administered as part of an annual national population survey of the graduates of all Australian universities. The graduate survey is administered under the auspices of the federal government and with the agreement of the Australian Vice-Chancellors' Committee (AVCC). The survey instruments are designed to measure and quantify some of the important outcomes of Australian higher education, such as graduate satisfaction with courses, employment rates and commencing salaries. The data are analysed by an independent agency and reported by institution and by field of study. The survey's findings, in particular the comparative potential across institutions, are of interest to government policy-makers, institutional management and prospective students and are used for, among other things, quality assurance, information for prospective students and, most recently, performance-based incentive funding. During 2005, data from the CEQ and GDS were used for the first time as performance indicators for a strategic national *Learning and Teaching Performance Fund* (LTPF) administered by the federal Department of Education, Science and Training. This paper examines the background to the implementation of the CEQ and GDS, the goals, the uses for the data, including the LTPF and some of the criticism of this development, and the apparent influence on policy and practice within a higher education system that has developed a stronger market orientation and increasingly sought quantitative performance indicators.

The context: an overview of the Australian higher education system

The Australian higher education system has developed an innovative national approach to the evaluation of higher education that involves the use of the *Course Experience Questionnaire* (CEQ) and *Graduate Destinations Survey* (GDS) in a national survey of all graduates in the year following graduation. To appreciate the significance of this survey and the application of the comparative data within Australian higher education it is useful to begin with a description of the Australian context.

Higher education in Australia has developed as a mainly public university system, with 38 public universities. There are a small number of private universities and other providers of higher education, but these enrol only a small fraction on the nation's students. The public universities are somewhat differentiated in mission, size and activities, but most are large, comprehensive universities offering programs across most of the major fields of study. All of the universities are research institutions, though there are considerable differences in the intensity of the research activity.

Most Australian universities are established under State (or Territory) legislation, however the federal government is responsible for funding and regulating university education, exercised through the Department of Education, Science and Training (DEST). There has been a steady decline in the proportion of university revenue provided by government, with universities on average now receiving less than half of their annual revenue from public funding. Within the national regulatory and reporting framework, universities have considerable autonomy over their affairs, including over expenditure and programs, and are self-accrediting and largely responsible for their own academic standards. The trend in policy in recent years has been towards greater deregulation of university activities, though the government has retained the capacity to indirectly influence university activities through strategic funding and other mechanisms. The federal government plays a key role in quality assurance and quality improvement through the establishment of independent bodies such as the Australian Universities Quality Agency and the Carrick Institute for Learning and Teaching in Higher Education.

The number of students in the Australian university system expanded rapidly during the 1980s and early and mid 1990s. International students, predominantly from South-East Asia and with a strong interest in the fields of business, computing and engineering, have provided an important source of revenue in the face of the decline in per capita public funding and have helped create cosmopolitan campuses. The rate of growth of fee-paying international student enrolments is probably the most significant trend in Australian higher education of the 1990s.

The policy issues: Quality assurance, continuous improvement and performance indicators for higher education

Many of the contemporary issues for the Australian higher education system are familiar ones in developed nations. Federal policy for higher education has gradually changed direction: from the 1980s goals of participation expansion and equity, to the current objectives of market diversity and student-led choice. Since the late 1980s the government has expected universities to play a stronger role in national economic development. Federal policy has encouraged universities to be entrepreneurial and to seek alternative sources of revenue, including through the active recruitment of international students to study both on-shore and off-shore with Australian universities¹. A domestic national market in higher education has been strongly encouraged, on the assumption that students, if they have adequate information and act as rational consumers, will help stimulate diversity, efficiency and quality in the system (James, Baldwin & McInnis 1999).

The Australian practice of an agreed national approach to evaluation and performance indicators has coincided with the relaxation of direct control mechanisms over universities and the government priority of stimulating an informed market in undergraduate education. In addition, because of the small size of the Australian higher education system, its reliance on international student revenue and concern about the possible effects of internationalisation and globalisation on the student market, the interest in performance measurement has been underpinned by a desire to ensure standards and to protect and demonstrate the quality of Australian universities.

In the late 1980s, government interest in higher education turned to quality and quality assurance. The federal government department of the time engaged in a major project to develop quantitative indicators of the quality and diversity of the higher education system. This work occurred over a lengthy period and included the research carried out in 1991 by the Performance Indicators Research Group (Linke 1991) to trial a broad range of quantitative indicators suitable for evaluating performance in higher education. Some of the indicators were to be based on the existing data collections mechanisms at the time (such as the GDS), while others required the development of new data sources (such as the CEQ or new statistical data collected from students at the time of enrolment).

As a result of this work, Australia has developed an advanced system of national data collection and reporting. Universities are required annually to provide the government with statistics on various areas of institutional operations and performance. Some of this information, such as student demographics, is collected routinely by student questionnaire on enrolment, in accordance with federal data definitional requirements. Other information, such as completion rates, requires extensive internal institutional data collection and analysis.

The government publishes this information in a comparative formatⁱⁱ, listing well over 200 indicators. Indicators are reported annually for:

- Students (e.g. numbers overall, and by field of study, enrolment type, fee type, age, gender, basis of admission, and equity group membership)
- Staff (e.g. numbers overall, and by field, age, gender, and qualification level)
- Finances (e.g. operating revenue by source, operating expenses by category, assets by category)
- Student Outcomes (e.g. retention rates, progression rates, graduate employment, and graduate satisfaction with courses and teaching)

The crude data for Student Outcomes is statistically adjusted on the basis of the student demographics of each institution and other factors known to influence outcomes in order to give an indication of 'value-added' effects. Both crude and adjusted data are reported. Much of the data for the above Student Outcomes indicators are derived from the *Graduate Survey*.

The Graduate Survey: Graduate Destination Survey and Course Experience Questionnaire

The GDS and CEQ are national, coordinated surveys of recent university graduates. Distributed together, they are collectively known as the *Graduate Survey* (Appendix 1). Both domestic and international students are included in the surveys, with the exception of students studying at offshore campuses. Conducted annually and administered by individual institutions, data is collated and analysed by external agencies (Graduate Careers Australia, GCA; Australian Council of Educational Research, ACER). The results of both surveys are reported in a variety of aggregations and levels of detail by universities, GCA, ACER and the government.

Graduate Destination Survey

The GDS has been conducted since 1971 by GCA (formerly Graduate Careers Council of Australia). This survey collects information on the employment (including industry, occupation and salary level) and further study (including level and field) patterns of recent graduates. Administered by individual institutions, the GDS was traditionally a means by which institutions initiated a relationship with alumni. National employment outcomes of graduates in various fields of study were, and still are, made publicly available for the information of prospective and current students and careers advisorsⁱⁱⁱ. The published GDS data reveal a detailed picture of the employment and further study outcomes by institution and field of study, including trends in the labour market.

The GDS is a relatively straightforward instrument with questions sufficiently broad to accommodate the diversity of Australian higher education institutions and graduates from all types of programs. Graduates are asked for the following information:

- highest qualification, including field and mode of study;
- demographic information and equity group information including age, sex and language group;
- whether or not they held paid employment during their final year of study;
- their work status at the time of the survey, including whether full or part-time, business type, duties, and annual salary;
- whether or not they were studying at the time of the survey and, if so, details of the level, field and institution; and
- their strategies for seeking employment.

Course Experience Questionnaire

Since 1992 the CEQ, a survey questionnaire developed by Paul Ramsden (Ramsden 1991; Wilson, Lizzio & Ramsden 1997), has been included in the Graduate Survey. The CEQ focuses on graduates' overall perceptions, looking back, of their course or program of study. The CEQ is a survey of all graduates, with the exception of research higher degree students. A variation of the CEQ, the Postgraduate Research Experience Questionnaire (PREQ), is used to survey PhD and masters by research graduates. As the CEQ involves the largest dataset and is, arguably, the most influential of the two surveys, the focus of this paper is upon the CEQ.

Questionnaire items

The questionnaire items comprising the CEQ are statements to which graduates respond on a five-point scale of 'strongly disagree' to 'strongly agree' (Figure 1). Provision is made for respondents to distinguish between two fields of study, or 'majors', within their course. Graduates who have completed a course with a single major respond to each item only once, whereas those whose course was either a combined degree (eg Bachelor of Arts/Law) or a double major (eg Bachelor of Science, with majors in both computer science and mathematics) answer separately for each field of study.

The CEQ currently comprises ten groups of between three and six items, or scales, and a single item, the 'Overall Satisfaction Index' (Appendix 2). The CEQ scales as originally developed by Ramsden were:

- Good Teaching Scale (GTS) (basic elements of effective teaching, e.g. clear explanations, feedback on progress, interest shown in student progress).

- Clear Goals Scale (CGS) (students know what is expected of them and what will be rewarded).
- Appropriate Assessment Scale (AAS) (assessment that rewards 'deep' learning rather than rote or surface reproduction).
- Appropriate Workload Scale (AWS) (manageable study load).
- Overall Satisfaction Item (OSI) (a single item, 'Overall, I was satisfied with the quality of this course').

		MAJOR 1					MAJOR 2				
		strongly disagree				Strongly agree	strongly disagree				Strongly agree
13	Overall, my university experience was worthwhile	1	2	3	4	5	1	2	3	4	5
14	The course sharpened my analytic skills	1	2	3	4	5	1	2	3	4	5
15	My lecturers were extremely good at explaining things	1	2	3	4	5	1	2	3	4	5
16	The teaching staff worked hard to make their subjects interesting	1	2	3	4	5	1	2	3	4	5
18	I felt part of a group of students and staff committed to learning	1	2	3	4	5	1	2	3	4	5
20	Students' ideas and suggestions were used during the course	1	2	3	4	5	1	2	3	4	5
22	I learned to explore ideas confidently with other people	1	2	3	4	5	1	2	3	4	5
23	The course developed my problem-solving skills	1	2	3	4	5	1	2	3	4	5
27	The staff made a real effort to understand difficulties I might be having with my work	1	2	3	4	5	1	2	3	4	5
28	I usually had a clear idea of where I was going and what was expected of me in this course	1	2	3	4	5	1	2	3	4	5
31	I felt I belonged to the university community	1	2	3	4	5	1	2	3	4	5

Figure 1. Excerpt from the CEQ section of the Graduate Survey form prepared by The University of Melbourne (2005).

An additional scale, the Generic Skills Scale (GSS) (e.g. written and oral communication, teamwork skills, capacity for critical thinking), was added for the purposes of the national survey. The Generic Skills Scale differs conceptually from the other CEQ scales insofar as it seeks student self-reports of their skill development.

In 2002, the government funded a project to expand the CEQ to measure broader dimensions of the student experience (McInnis, Griffin, James & Coates 2001; Griffin, Coates, McInnis & James 2003) in response to concern about the coverage of the instrument. These dimensions include the social environment for learning, the degree of challenge and stimulation and the quality of learning resources. This project led to the creation of the following scales:

- Student support scale
- Learning resources scale
- Learning community scale
- Graduate qualities scale
- Intellectual motivation scale

Universities are able to customize the CEQ by selecting a subset of scales for inclusion in the survey of their graduates. The GTS, GSS and OSI are the core requirement, while the other scales are optional.

Conceptually, the CEQ is designed to be a proxy measure of student learning outcomes, with items designed to probe student perceptions of the characteristics of the teaching that are believed to be associated with effective student learning. The CEQ is therefore conceptually different from instruments such as used in the National Survey of Student Engagement (NSSE), which seek to measure the degree of student engagement in purpose learning-related activities.

Survey methodology

System-wide participation in the Graduate Survey is the result of an agreement to collaborate on the part of Australian universities, through the Australian Vice-Chancellors' Committee (AVCC), the nation's council of university presidents. The AVCC and GCA have published methodology recommendations (AVCC-GCCA 2005) and a Code of Practice (AVCC-GCCA 2001) that provides guidelines for the collection and interpretation of survey data as well as the public disclosure of that information.

The GDS and CEQ are administered together, with the questionnaire items incorporated into a single document (Appendix 1). While the Graduate Survey is a national survey in that most higher education institutions participate^{iv}, it is not centrally administered and as a consequence both the questionnaire and the survey method vary between institutions. This variation is encouraged, in part, in keeping with the voluntary nature of the survey and the recognised diversity in the missions and priorities of individual institutions. A fundamental consistency of approach is ensured through the involvement of a Survey Reference Group (SRG) including GCA, DEST and AVCC representatives.

Questionnaire production and distribution

Individual institutions have designed and produced their own versions of the paper-based questionnaire, including the coding of forms so that graduates' responses can be matched to particular faculties or schools within institutions. Some institutions choose to 'brand' their documents with institution-specific cover pages and explanatory notes. Those institutions that choose to layout their own questionnaire do so in consultation with GCA and the SRG. Other institutions elect to have GCA prepare the questionnaire for them. GCA also provides the questionnaire in an online format.

Graduates are surveyed approximately four months after completing their course. As course completion dates vary between institutions and courses, and as mid-year completion is common, there are typically two survey distributions, each with follow-up of non-respondents, for each annual cycle. To standardise the information gathered, however, specified 'census' dates are used – October 31 for mid-year graduates and April 30 for end of year graduates.

Most institutions distribute the questionnaire paper to their graduates, although some utilise the services of GCA. The initial distribution may be specifically timed to coincide with the census date, or may be in combination with other mail-outs to graduates, such as graduation information, and so only loosely aligned with the census date. Either way, GCA recommends that institutions follow up non-respondents, twice if necessary. Institutions choose various forms of follow up, including complete mailout of the questionnaire, mailout of a reminder notice only, or email. Some encourage use of the online version. While some institutions contact non-respondents by telephone, the GCA discourages institutions from completing the CEQ in this way due to the unknown influence of verbal completion upon the psychometric properties of the questionnaire.

Response rates

Institutional response rates vary widely, usually between 30-80 per cent^v. In 2005, for example, the response rates for the CEQ ranged from 27 per cent to 71 per cent, with a median around 50 per cent. The GDS response rate is slightly higher for most institutions, perhaps due to the order and arrangement of items on the questionnaire. The variation in the institutional response rates is partly a result of the different procedures used to pursue non-respondents, and the differing intensity with which universities do so.

Data collection and collation

Institutions are also responsible for collection of completed questionnaires, coding of responses and data entry. In an effort to standardise practice, GCA provide coding instructions and spreadsheets for data entry. GCA collects this data from each institution, cleans and analyses it^{vi}, and provide institutions with the complete dataset in return (for a modest fee). In previous years, each institution received a dataset in which other institutions were de-identified. However, this is no longer done and datasets are transparent inasmuch as scores are reported for each institution by name.

Reporting and interpretation of the data

GDS and CEQ data are annually reported for each university on a field of study basis^{vii} ^{viii}. As students' perceptions of teaching are influenced by their field of study, Ramsden (1991) has argued that it is only appropriate to compare like courses or fields of study and that comparisons of institutional aggregates should be avoided. Accordingly, the reporting of CEQ data has focussed on course/field of study, allowing comparison of the quality of teaching in similar courses across different universities.

CEQ data are used for public information and as a guide for quality review and improvement at course level. The commercial guidebook the *Good Universities Guide* draws on the data to develop ratings of universities and courses for prospective students. The universities themselves occasionally use the data in their own marketing and recruitment campaign, but the principal institutional purpose is for self-review and continuous improvement. It is common for institutions to further analyse their own data and to produce internal reports for quality monitoring and development.

For these purposes, the CEQ is believed to be a valid, reliable and stable instrument. Studies using Rasch modelling have suggested that it measures a single dimension, however the original scales have face-validity and satisfactory construct-validity according to factor analysis (Ainley, *pers.comm*; Access Economics, 2005). Field of study is the single greatest influence on CEQ scores. Age is also an influence, with older graduates rating their courses more highly than younger graduates.

After many years of use of the CEQ some clear patterns have emerged. Typically, the differences between comparable courses across institutions are small on most of the CEQ scales^{ix}. Further, the results are relatively stable year to year, though there is evidence of slight improvement in some fields of study. As noted earlier, the responses of students are highly discipline specific: students in the liberal arts and sciences report the greatest levels of satisfaction, whereas students in professional and business courses such as engineering and economics report lower satisfaction levels (Ainley, *pers.comm*).

Small campuses appear to produce a student satisfaction 'halo effect'^x. The highest CEQ-ranking universities/campuses are generally small (and tend to have lower entry score requirements). Campus size and the 'intimacy' of the experience (small classes, ease of access to staff) appear to be significant factors in student satisfaction ratings. The effects of students' academic ability on their expectations and rating of teaching are not well understood. However, high-achieving secondary school students may tend to be more critical of their

university experience. Many students in the leading universities studied in private secondary schools where they received intensive support and guidance at a level that is usually not available to them in universities.

The annual CEQ report prepared by the GCA avoids overt rankings, but such comparisons can be made by third parties — the *Good Universities Guide*, for example, converts CEQ data into five-star ratings of the quality of teaching. There is little evidence that these ratings have significantly influenced the prospective student market.

Costs

While the Australian government funds GCA for their involvement, the cost to each institution is significant. Precise costs are difficult to calculate, given that institutional systems for GDS/CEQ administration are typically interwoven with their other planning and evaluation processes. However, it is possible to make the following ‘broadbrush’ estimation of costs to the sector – institutional costs of \$6M-\$10M (\$150K to \$250K per institution), in addition to \$0.5M of government funding.

Issues and concerns with the Graduate Survey

Various concerns and criticisms have been made about the national graduate survey over the years, most of which are methodological but some might be better described as political. Generally, the concerns have focused on the conflation of objectives of continuous improvement and accountability, the possible misuse of the data for marketing in a competitive system, and the potential for a standardised process to stifle diversity and innovation.

The CEQ has borne the most criticism. The GDS has been less controversial, for the design of the GDS instrument does not depend on the depth of theorizing that the CEQ does. Methodologically, some concern has been expressed about the narrow conception of ‘good teaching’ embodied in the CEQ items and scales and the expectation that students can make an ‘average’ judgement across an entire degree program. These are significant criticisms indeed, for they are at the heart of the validity of the measurement that is being purported. Other concerns are more procedural than conceptual, with the variations in survey methodologies among institutions and the variations in response rates raising questions about the appropriateness of comparisons between institutions, the acknowledged difficulty in accommodating demographic differences in the student population and other contextual factors (despite the employment of econometric measures in an effort to adjust raw data) (DESTa).

Impact

There has been no systematic research into the influences on institutional policies and practices of the GDS and CEQ. The analysis to follow is therefore based in the main part on the authors' observations as higher education researchers. First, and most obviously, the GDS and CEQ have simply drawn attention to the teaching function of higher education in a context in which many of the common quantitative indicators of performance are focused on research. Related to this important influence has been the creation of an explicit focus on teaching and learning outcomes rather than inputs or processes. In this regard, the comparative dimension of the data set has been particularly important, allowing institutions – notwithstanding differing contexts and missions – to place their performance on a field of study basis under some objective scrutiny.

Second, the GDS and CEQ data have provided important market information for prospective students. The dataset as a whole, and the willingness to collaboratively self-evaluate, have been valuable in assuring international markets of the quality of the Australian higher education system. At the level of individual institution or field of study the data have been available to prospective students and have been presented in modified form in commercial publications such as the Good Universities Guide. However, the use of the data in institutional marketing has not been particularly prominent. Further, the influence of the data on student decision-making is not altogether clear, with student choices patterns following well-established institutional reputations and institutional 'positional-status' in the market.

Third, the CEQ has stimulated management intervention in the evaluation of the quality of teaching and learning within units, subjects and courses. Most institutions have comprehensive systems for semi-standardised or fully-standardised evaluation for the purposes of accountability and continuous improvement. Arguably, the evaluation of teaching and learning has been to some extent 'de-professionalised' in that top-down management requirements tend to dominate the bottom-up initiatives of the academic community itself. The CEQ and its local institutional counterparts are therefore sometimes dismissed as symptoms of the managerialism seen by some to be pervading Australian universities.

Finally, the CEQ has had a deep influence on conceptions of effective teaching. Understandably, universities have tended to mirror the CEQ items in their questionnaires for internal subject and course evaluation. The conception of good or effective teaching embodied in the CEQ design has therefore become the dominant paradigm, at least from a management point of view. On the one hand this has been a positive outcome, for the CEQ contains items that indisputably relate to well-established good teaching practices. Equally, however, the CEQ is necessarily a broad, generic instrument that might be criticised for being bland, superficial and unlikely to detect important nuances of the educational environment in specific contexts. There have been concerns that the CEQ is not an appropriate instrument for measuring the quality of problem-based or enquiry-based learning environments.

The Learning and Teaching Performance Fund

The introduction in 2006 of the national *Learning and Teaching Performance Fund* (LTPF) was a development directly associated with the CEQ and GDS. Immediately upon announcement this initiative was contentious, as for the first time the data from the Graduate Survey would be used for funding purposes.

The background to the LTPF lies in the most recent of the irregular but frequent national reviews that take place in Australian higher education. In 2002, a wide-ranging review of higher education was undertaken by the Australian government (DESTb). One of the objectives was to review quality assurance mechanisms, in particular the assessment of teaching and learning quality. The premise was that existing quality assurance relied too heavily upon assessment of teaching 'inputs' – institutional reports of teaching approaches and internal processes – rather than student learning outcomes.

In response to this review, a package of reforms was announced in May 2003 (DESTc) to be implemented over five years. These reforms included national strategies for the promotion of teaching excellence through performance-based rewards and incentives. The *National Institute for Learning and Teaching in Higher Education* was formed (later renamed the *Carrick Institute for Learning and Teaching in Higher Education*), the existing program of national Awards for University Teaching was greatly expanded, and the LTPF was announced.

The aim of the LTPF is to reward universities for demonstrated excellence in teaching. Universities are ranked on the basis of existing datasets, including the CEQ and GDS. The most highly ranked institutions each receive a financial 'performance bonus'. The LTPF is an incentive fund, and not used for the allocation of core government funding. Compared to the overall government expenditure on higher education, the allocation to the fund is modest, however the status outcomes are significant. In 2006, the first year of

implementation, \$AUD 54 million^{xi} was distributed. The five universities most highly ranked among the 38 eligible institutions shared \$30 million, and the remaining money was shared between nine universities in the second band. Twenty-four participating institutions received no funds from the 2006 round. The total funds allocated for 2007 and 2008 are \$82 million and \$109 million respectively

The 2006 round of the LTPF employed seven performance indicators. Three were derived from the CEQ (GTS, GSS and OSI) and contributed 55 per cent of the overall institutional score, two were from the GDS (graduate progression to full-time employment and graduate progression to further full-time study), making up a further 22 per cent of the total, and two were based on institutional statistics collected annually by the government (student progression through their studies and student retention).

Development of the LTPF policy

The development of the LTPF provides an interesting case study of the consultative approach used to develop national policy of this kind. Following the announcement of the LTPF in May 2003, the government initiated a process of consultation with the higher education sector. Input from the AVCC informed the preparation of an issues paper, released by the government in April 2004 (DESTd), inviting submissions from across the sector. In addition, a series of meetings with nominated representatives from the nation's universities were held around the country. The AVCC subsequently released its response to the issues paper (AVCC 2004), including recommendations and a proposal that the AVCC continue to work with the government in the development of a model that would be acceptable to the sector.

Unsurprisingly, the commitment of significant funding allocated on the basis of performance data, and the prospect of 'league ladders', generated a wide range of methodological and political concerns within the sector. Formerly, the CEQ and GDS methodologies and data collected had not been subject to the levels of scrutiny that followed the announcement of the LTPF. The specific issues proposed for consideration in the DEST issues paper were as follows:

Benchmarking or ranking? Two alternative approaches were proposed for the allocation of funds: to all universities meeting or surpassing a set 'threshold' level of performance; or through a competitive process involving institutional rankings.

How many indicators should be used? The issues paper supported the adoption of multiple indicators for two reasons: no single measure is likely to adequately reflect the complexity of teaching and learning; and a single indicator is likely to encourage 'inappropriate manipulation' by institutions.

Should the data be adjusted for context? Differences in the characteristics of institutions, particularly in the characteristics of their student populations and fields of study, were recognised by the government as factors influencing a range of university statistics – including the proposed indicators for the LTPF. Earlier work by the government (DETYA 1998; reviewed in Access Economics 2005) had produced a formula designed to 'correct for' student characteristics such as gender, age, field of study, enrolment type and basis of entry to university, and for field of study differences. It was proposed that crude percentage scores for each of the indicators be adjusted, using such a formula.

Evaluation of whole institutions or of disciplinary elements? By drawing comparisons at the whole of institution level, much of the diagnostic potential of the Graduate Survey data is lost. The rankings become less useful for prospective students choosing courses, and for institutions seeking to highlight areas for improvement. An alternative approach tabled for consideration in the issues paper is to assess the performance of institutions within defined fields of study, and this approach will be adopted in 2007.

The target student cohort The outcomes for only undergraduate, domestic students are included. This group comprises approximately 56 per cent of all higher education students in Australia^{xii}. The government proposed that postgraduate students be excluded as university research funding is currently

influenced by postgraduate student data. In addition, the difficulties of collecting representative data from overseas students was cited as justification for their exclusion.

Implementation of the LTPF in 2006

In order to be eligible for performance assessment under the fund in 2006, institutions were first required to demonstrate that learning and teaching was a high priority for their institutions. For example, they were required to show that teaching was recognised in staff appraisal processes, and that the results from student evaluation of subjects were publicly available. Thirty-eight universities applied, and all were deemed eligible.

In August 2005, the government publicly released the percentage scores for each of the participating institutions against each of the seven performance indicators^{xiii}. For the CEQ indicators, the scores represented the percentage of students to either 'agree' or 'strongly agree' with the questionnaire items. The reporting was transparent inasmuch as both the raw scores and the adjusted scores were reported. The fact that the adjustments were tailored for each performance indicator was reflected in the effect upon individual institutions - raw scores were raised for some indicators, and lowered for others.

In calculating the overall score for each institution, the ordinal rank number within each of the seven tables was used. This information was sent to institutions, and they were each offered a 'right of reply' – an opportunity to present a case for special consideration on any of a number of specified grounds^{xiv}.

While the government did not publish a ranked set of results at any stage, the calculations were readily performed using the publicly available data. Unsurprisingly, league tables quickly appeared and discussion was animated, both in the Australian press and across the nation's higher education sector. The topic of discussion was predominantly focused upon rankings, as the nature of the funding allocation had yet to be announced. Even the institutions leading in the rankings did not know how much funding they would receive, if any.

In November 2005, the government Minister responsible for higher education announced the funds allocation to a higher education audience gathered to celebrate the 2005 national university teaching awards, reinvigorating sector-wide discussion of the fund and the performance indicators employed. Fourteen universities received funding, allocated as a \$1 million base grant plus an additional amount on a per capita basis according to domestic undergraduate student load. An upper band of five institutions shared \$30 million, with more than \$10 million awarded to one large research-intensive university. The remaining \$14 million was distributed between the nine universities forming the second band.

Since the first application of the fund, the government has sought feedback from the sector and the government has recently announced changes for the 2007 round - the performance indicators will be equally weighted, and comparison will be made on the basis of four broad fields of study, rather than whole institutions, for example.

A critical analysis of the Australian experience

The concerns with the LTPF and the value issues associated with merit of such a scheme are a long way from resolved. The LTPF is a contentious policy within the Australian higher education sector and the future shape of this policy initiative and the current funding model are not clear. However, the Australian government appears committed to the continued use of incentive funding measures as part of the overall funding model for higher education. At the time of writing, development is under way of a national Research Quality Framework (RQF) to identify and reward research performance. Clearly there is a belief in

government that performance-based funding with its combination of financial rewards and substantial prestige effects will focus institutional activities and energies in beneficial ways.

The Australian experience shows, once again, that once quantitative indicator information is available there is a tendency for it to be used for purposes for which it was not designed (Cuenin 1988; Cave *et al.* 1997). Performance indicators at institutional level provide commercially sensitive information, especially in an increasingly market-oriented higher education system. From the government perspective, there is an understandable desire to be assured of the quality of Australian universities and a belief that external pressure is needed to stimulate enhancement efforts. These objectives are awkwardly juxtaposed with the imperative to communicate to domestic and international stakeholders the high quality of the system as whole and are possibly incommensurable within the current LTPF policy model with its inevitable rankings and the implications of poor performance for the lower ranked institutions.

In the past, the willingness of some universities to participate in the CEQ and GDS has occasionally been tested. The LTPF exercise has opened up further cracks in an already fragile policy framework. Nonetheless, it is now quite difficult for a university to opt to withdraw from the agreement to participate in the CEQ and GDS data collection. To do so might imply concerns about performance and would make the possibility for performance comparison limited (though institutions could of course conduct independent surveys and compare the findings with the publicly available national data).

The ultimate test for the effectiveness of the GDS and CEQ is whether there has been a positive impact on the quality of university teaching and learning. As noted earlier, this is a very difficult assessment to make with confidence, especially given the large number of variables at play in a system undergoing ongoing growth and change. Clearly the CEQ data have provided a hitherto unavailable objective, external reference point for the quality of teaching against which institutions can judge their performance and this has been valuable.

The national survey of graduates has also resulted in greater internal evaluation. Most institutions have invested heavily in evaluative activity and the quantitative information base on teaching quality is now considerable in most universities, including time series trend data. In addition, many internal approaches to evaluation at institutional level are now based on or mimic CEQ items or scales — in this regard the influence on the prevailing conceptions of effective teaching has been significant.

Overall, from a quality improvement perspective, never before have Australian universities had so much information on their performance available to them. However, the influence of these activities on improvement in undergraduate education is far from clear. Despite the attention which has been drawn to the quality of teaching for the best part of a decade or more, the evidence of improvement is at best modest. In fact, the patterns in the CEQ data are notable for their consistency over time. There appears to be at least four interwoven reasons for this situation (James 2000). First, the feedback on performance provided by the CEQ is often ambiguous. Much of what is valued in university teaching is difficult to measure, given the often high levels of abstraction of learning outcomes and graduate qualities, and important information is lost when it is quantified and codified at a blunt aggregate level. Further, the quantitative performance indicators being used in Australia for measuring teaching quality have a highly subjective element to them. This means that performance indicator data are contestable and are open to various interpretations.

The second problem for effective ‘knowledge management’ is the inherent lag-time involved in the measurement process. There is a lengthy period between the outcomes monitored through graduate CEQ responses and the university actions that produced these outcomes. Internal university feedback loops are tighter, but even so the delays in feedback cause adjustments to be made well before evidence is available on the outcomes of previous actions:

This creates a learning loop with the potential for wildly erratic fluctuations, and intelligent anticipation takes over. However, awareness of the delay dilemma may also create subtle climates of

complacency or fatalism, for it is easy to be dismissive of lagged measurement data that is perceived to be of questionable relevance in an altered context. (James 2000)

Third, causal links between actions and outcomes are often unclear. Our understanding of the relationship between actions and outcomes in higher education is not fully understood — precisely what universities do to and for graduates, and how they do it — the value-adding effect of higher education — is not yet fully mapped (see Pascarella & Terenzini 1991). As a consequence it can be difficult to identify the precise reasons for apparently high-performance of courses (or low-performance for that matter). Further, the performance indicators do not in themselves identify the actions that might be taken to lead to improvement.

Finally, quality assurance and the use of performance data have been perceived by many academic staff as an intrusion on academic work, part of a creeping ‘managerialism’. The history of quality assurance in Australia is largely one of management intervention. The teaching staff who ultimately make the day-to-day decisions and actions that lead to quality improvement may find little personal or professional meaning in data collected as a management requirement and with a highly generic instrument.

These observations suggest some natural limits on the capacity of universities to reliably and validly detect and measure their teaching performance for the purposes of continuous improvement. Overall, however, despite some concerns such as we have indicated, the CEQ and GDS are now widely viewed as useful policy developments, the findings are of value to the sector and both surveys appear firmly embedded for the foreseeable future. The CEQ/GDS policy framework has been made possible by a small higher education system (in international terms) and a reasonably homogenous one. In addition, the institutional agreement to participate in the exercise has hinged on a shared commitment to quality and quality improvement and a collective interest in the international marketing of Australian higher education. Almost paradoxically, while Australian universities operate in a quite competitive environment there is also acknowledgement of the need to act in the interests of the sector as a whole. The competition-collaboration nexus is therefore played out in interesting ways, especially with regard to quality assurance and performance indicators.

The concerns with the LTPF are likely to lead to ongoing adjustments of the funding model and the performance data on which it is based. One future possibility is the use of a national graduate examination, for which the scene is partially set. The Graduate Skills Assessment (GSA), developed by the Australian Council for Educational Research with government funding, has been designed to assess the so-called ‘generic skills’ of university graduates (ACER *nd*). The test has the following components: critical thinking; problem-solving; interpersonal understanding; and written communication. The GSA was piloted in early 2000. It has been suggested that at university entry level, the test could be used by institutions to assess areas in which students might need assistance. At exit level the results could be used by institutions to determine entry into graduate courses, and by employers to assess generic skills for employment purposes. More significantly perhaps, the GSA could also be used to gain insights into the ‘value-added’ across institutions that enrol cohorts of differing academic achievement level at entry point. The GSA has appeal for the Australian government as it offers the promise of a direct indicator of student learning rather than a proxy. Graduate examination of any kind, however, has not received strong support from Australian universities.

A more likely future direction, perhaps, is the use of an enhanced survey instrument that measures student engagement for current students. Such an approach would reduce the problem of the lag time associated with the CEQ graduate survey, as well as provide a superior proxy measure that is one step closer to student learning — that is, a shift from measuring student perception of teaching behaviours to measuring the learning activities of students.

Overall, the policies described in this paper illustrate one nation’s response to a more complex operating environment for universities, one in which a premium is placed on new levels of performance monitoring, quality assurance and evaluation. In part these systems are a flow-on from external requirements for public accountability, but they are also driven by an internal institutional commitment to understand

performance against external reference points. Australia has made considerable progress in establishing a quality assurance framework and in building a data set of performance indicators at system, institution and discipline levels. Up to now, indicator data has been intended principally for use within universities to aid self-review, rather than as information to aid public choice. The publication of performance data has not reached the levels of public dissemination commonplace in the UK and USA. However, the idea of university ranking is gradually becoming more legitimised both within universities and the community more broadly. Notably, the Times Higher Education Supplement university rankings and the Shanghai Jaoi Tong Index have had significant impact in Australia and will continue to do so.

Resources for policy-makers

For information on the role of the Australian government in quality assurance and performance management (note, in particular, the link titled ‘performance management tools’):

http://www.dest.gov.au/sectors/higher_education/policy_issues_reviews/key_issues/assuring_quality_in_higher_education/the_role_of_the_australian_government.htm

Graduate Careers Australia (GCA): <http://www.graduatecareers.com.au>

Information on the Learning and Teaching Performance Fund (LTPF) can be found at: http://www.dest.gov.au/sectors/higher_education/policy_issues_reviews/key_issues/learning_teaching/ltpf/

The Department of Education, Science and Training of the Australian Government: <http://www.dest.gov.au>

Australian Universities Quality Agency (AUQA): <http://www.auqa.edu.au>

The Carrick Institute for Learning and Teaching in Higher Education: <http://www.carrickinstitute.edu.au>

References

Access Economics Pty Ltd. (2005). *Review of Higher Education Outcome Performance Indicators*. Report prepared for DEST. June 2005. Available at http://www.dest.gov.au/sectors/higher_education/publications_resources/profiles/review_highered_outcome_perf_indicators.htm Accessed 23 June 2006.

Ainley, J. (*pers. comm*). *Using the Course Experience Questionnaire to Draw Inferences About Higher Education*. Paper presented to the 1999 conference of the European Association for Research on Learning and Instruction.

Australian Council of Educational Research (ACER). (nd). *Graduate Skills Assessment – GSA*. Accessed 31 July 2006. <http://www.acer.edu.au/tests/university/gsa/intro.html>

Australian Vice-Chancellors’ Committee (AVCC). (2004). *Assessing learning and teaching: The AVCC proposal for the learning and teaching performance fund*. AVCC. August 2004. Available at http://www.avcc.edu.au/documents/publications/policy/statements/AVCC-response_ALTPF.pdf Accessed 23 June 2006.

Australian Vice-Chancellors’ Committee and Graduate Careers Council of Australia (AVCC-GCCA). (2001). *Code of Practice for the Public Disclosure of Data from the Graduate Careers Council of Australia’s Graduate Destination Survey, Course Experience Questionnaire and Postgraduate Research Experience Questionnaire*. January 2001. Canberra. Available from http://www.avcc.edu.au/documents/policies_programs/graduates/2003/COP_2001.pdf Accessed 4 August 2006.

Australian Vice-Chancellors’ Committee and Graduate Careers Council of Australia (AVCC-GCCA). (2005). *Standard Recommended Methodology for the Graduate Destination Survey, Course Experience Questionnaire and Postgraduate Research Experience Questionnaire*. May 2005. Available at

http://www.graduatecareers.com.au/content/download/2611/10493/file/Std_Recommended_Methodology_May_2005.doc Accessed 23 July 2006

- Cave, M., Hanney, S., Henkel, M. & Kogan, M. (1997). *The use of performance indicators in higher education: The challenge of the quality movement*. (3rd ed.), London: Jessica Kingsley.
- Cuenin, S. (1988). *Performance indicators in higher education: A study of their development and use in 15 OECD countries*. Paris: OECD.
- Department of Education, Science and Training (DESTa). *Characteristics and Performance Indicators of Australian Higher Education Institutions, 2000: Occasional Paper Series*. December 2001. Available at http://www.dest.gov.au/sectors/higher_education/publications_resources/statistics/publications_higher_education_statistics_collections.htm#studpubs Accessed 3 August 2006
- Department of Education, Science and Training (DESTb). *Higher Education at the Crossroads: An overview paper*. DEST. April 2002. Available at <http://www.backingaustraliasfuture.gov.au/publications/crossroads/default.htm> Accessed 23 June 2006.
- Department of Education, Science and Training (DESTc). *Our Universities: Backing Australia's Future*. Available at <http://www.backingaustraliasfuture.gov.au/Default.htm> Accessed 23 June 2006.
- Department of Education, Science and Training (DESTd). *Learning and Teaching Performance Fund: Issues Paper*. April 2004. Available at http://www.dest.gov.au/sectors/higher_education/policy_issues_reviews/key_issues/learning_teaching/ltpf/2006ltpf.htm#2004_Issues_Paper Accessed 23 June 2006
- Department of Education, Training and Youth Affairs (DETYA) (1998). *The Characteristics and Performance Indicators of Australian Institutions, Occasional Paper Series*. 98-A, Higher Education Division, Department of Education, Training and Youth Affairs, December 1998, Canberra.
- Griffin, P., Coates, H., McInnis, C. & James, R. (2003). The Development of an Extended Course Experience Questionnaire. *Quality in Higher Education* 9, 3: pp. 259-266.
- James, R., Baldwin, G., & McInnis, C. (1999). *Which University? The factors influencing the choices of prospective undergraduates*. Canberra: Australian Government Publishing Service.
- James, R. (2000). Quality assurance and the growing puzzle of managing organisational knowledge in universities. *Higher Education Management* 12,3: pp.41-59.
- Linke, R. (1991). *Performance indicators in higher education*. Canberra: Australian Government Publishing Service.
- McInnis, C., Griffin, P., James, R. & Coates, H. (2001). *Development of the Course Experience Questionnaire (CEQ)*. Canberra: Australian Government Publishing Service.
- Pascarella, E.T. & Terenzini, P.T. (1991). *How College Affects Students: Findings and Insights from Twenty Years of Research*. Jossey-Bass, San Francisco.
- Ramsden, P. (1991). A performance indicator of teaching quality in higher education: The Course Experience Questionnaire. *Studies in Higher Education* 16, 2, pp.129-150
- Wilson, K., Lizzio, A. and Ramsden, P. (1997). The development, validation and application of the Course Experience Questionnaire. *Studies in Higher Education* 22, 1, pp.33-53.

Appendix 1: Standard *Graduate Survey* form, produced by Graduate Careers Australia, for April 2006 – four pages, printed in A4 booklet form. Reproduced with permission.

Course Experience and Graduate Destination Survey



your feedback

- please mark responses LIKE THIS: ☒ • use BLOCK LETTERS
- mark only ONE BOX, unless instructed • use a DARK pen

your qualification(s)

What is the FULL TITLE of the qualification(s) you completed in 2005 at your institution?

Write all your qualifications, including combined/double degrees. For example: BACHELOR OF COMMERCE, DIPLOMA OF EDUCATION, BACHELOR OF ARTS / BACHELOR OF LAWS

What were the major fields of education in your qualification(s)?

For example: ACCOUNTING, PSYCHOLOGY, GENERAL NURSING, INFORMATION SYSTEMS

What was the level of your highest qualification listed above?

- ☐ bachelor degree (pass)
- ☐ bachelor degree (honours)
- ☐ bachelor degree (graduate entry)
- ☐ graduate certificate
- ☐ graduate/postgraduate diploma
- ☐ graduate qualifying or preliminary
- ☐ master degree by coursework
- ☐ doctorate by coursework
- ☐ associate degree
- ☐ advanced diploma or diploma
- ☐ other award course

In what year did you commence your qualification(s) listed above?

Did you complete your qualification(s) as part of a combined/double degree?

- ☐ yes
- ☐ no

Were you mainly enrolled full time or part time?

- ☐ full time
- ☐ part time

What was your main mode of study?

- ☐ internal (on-campus)
- ☐ external (distance)
- ☐ mixed mode (internal and external)

Which of the following best describes your situation for the qualification(s) you have just completed?

- ☐ I was a HECS student and I deferred some or all of my HECS debt
- ☐ I was a HECS student and I paid all of my HECS upfront
- ☐ I was an international fee-paying student
- ☐ I was an Australian fee-paying student

Did you receive any credit or advanced standing towards your qualification(s)?

- ☐ yes
- ☐ no

about you

What was your age in years on 30 April 2006?

What is your sex?

- ☐ female
- ☐ male

Were you in Australia on 30 April 2006?

- ☐ yes
- ☐ no

Would you describe yourself as having a disability?

- ☐ yes
- ☐ no

Are you of Aboriginal or Torres Strait Islander origin?

- ☐ no
- ☐ yes, Aboriginal
- ☐ yes, Torres Strait Islander
- ☐ yes, Aboriginal and Torres Strait Islander

What is the main language spoken in your home?

- ☐ English
- ☐ other

Were you born in Australia?

- ☐ yes
- ☐ no

If you were born overseas, in what year did you first arrive in Australia?

Are you a permanent resident or citizen of Australia?

- ☐ yes
- ☐ no

What is your home postcode?

What is your country of residence?

What was the full title of your highest previous educational qualification?

For example: BACHELOR OF COMMERCE, DIPLOMA OF EDUCATION, SECONDARY EDUCATION CERTIFICATE

What is the level of this previous qualification?

- ☐ no previous qualification
- ☐ completed secondary education
- ☐ undergraduate diploma
- ☐ bachelor (pass or honours)
- ☐ postgraduate degree or diploma
- ☐ other

your course experience

Please tell us about your course experience. The term 'course' in the questions below refers to the major field(s) of education or program(s) of study that made up your qualification(s).

If you have completed a qualification with a single major field of education (for example, medicine, architecture, pharmacy, law or physiotherapy), write this major field of education in the box under the heading MAJOR FIELD ONE and only use the left series of response boxes. Check that you have written this major field of education on the front of this survey form.

If you completed a qualification with more than one major field of education (for example, accounting and mathematics, or psychology and sociology), or a combined/double qualification (for example, arts/science or commerce/law), write one major field of education in the box under the heading MAJOR FIELD ONE, a second major field of education in the box under the heading MAJOR FIELD TWO, and use both series of response boxes. Check that you have written both of these major fields of education on the front of this survey form.

	MAJOR FIELD ONE					MAJOR FIELD TWO				
	strongly disagree				strongly agree	strongly disagree				strongly agree
The staff put a lot of time into commenting on my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The teaching staff normally gave me helpful feedback on how I was going	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To do well in this course all you really needed was a good memory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was generally given enough time to understand the things I had to learn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The course helped me develop my ability to work as a team member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It was always easy to know the standard of work expected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The sheer volume of work to be got through in this course meant it couldn't all be thoroughly comprehended	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The teaching staff of this course motivated me to do my best work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The course sharpened my analytic skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My lecturers were extremely good at explaining things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The teaching staff worked hard to make their subjects interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The workload was too heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The course developed my problem-solving skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The staff seemed more interested in testing what I had memorised than what I had understood ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The staff made a real effort to understand difficulties I might be having with my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I usually had a clear idea of where I was going and what was expected of me in this course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There was a lot of pressure on me as a student in this course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The course improved my skills in written communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It was often hard to discover what was expected of me in this course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As a result of my course, I feel confident about tackling unfamiliar problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My course helped me to develop the ability to plan my own work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too many staff asked me questions just about facts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The staff made it clear right from the start what they expected from students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall, I was satisfied with the quality of this course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What were the best aspects of your course?

What aspects of your course were most in need of improvement?

OFFICE USE ONLY

ceqmaj1 (ASCED)	<input type="text"/>	ceqmaj2 (ASCED)	<input type="text"/>	industry (ANZSIC)	<input type="text"/>	empnat2 (SACC)	<input type="text"/>	dulies (ANZSCO)	<input type="text"/>
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your further study

What was your position regarding study on 30 April 2006?

- ☐ studying full time
☐ studying part time
☐ not studying Go to the next section, 'your job search strategies'.

What is the full title of the qualification you were studying on 30 April 2006?

For example: MASTER OF SCIENCE, DIPLOMA OF MARKETING

What were your major fields of education in that qualification?

For example: ACCOUNTING, MANAGEMENT, HISTORY, MEDICINE

What was the level of this qualification?

- ☐ bachelor degree (pass)
☐ bachelor degree (honours)
☐ bachelor degree (graduate entry)
☐ graduate certificate
☐ graduate/postgraduate diploma
☐ graduate qualifying or preliminary
☐ master degree by coursework
☐ master degree by research
☐ doctorate by coursework
☐ doctorate by research
☐ associate degree
☐ advanced diploma or diploma
☐ other award course

What was your main mode of study?

- ☐ internal (on-campus)
☐ external (distance)
☐ mixed (internal and external)

At which institution were you enrolled?

In what month and year did you commence this qualification?

For example, write 'March 2006' as '03/2006'.

 /

your job search strategies

Have you actively sought employment within the last year?

- ☐ yes ☐ no Go to the next section, 'your contact details'.

Which of the following methods did you use to actively seek employment within the last year?

MARK ALL THAT APPLY.

- ☐ university careers service
☐ careers fair or information session
☐ other university source (such as faculties or lecturers)
☐ advertisement in a newspaper or other print media
☐ advertisement on the internet
☐ résumé posted on the internet
☐ family or friends
☐ approached employer directly
☐ employment agency
☐ work contacts or networks
☐ other, please specify:

your contact details

Please provide your contact details so that your name can be removed from follow-up lists, and so that your university records can be updated.

What is your name?

What is your email address?

What is your postal address?

What was your university student identification number?

the next step

Please return your completed questionnaire as soon as possible in the enclosed reply paid envelope to

Thank you very much for completing this questionnaire. The feedback that you provide on this form plays a significant role in enhancing Australian university education.

Careers information and the results of previous surveys are available from

www.graduatecareers.com.au

This website is a FREE resource from Graduate Careers Australia for graduate job-seekers. Search for graduate jobs, browse articles designed to help you write job applications, succeed at interviews, research your ideal career, enhance your prospects with further study and much more.

OFFICE USE ONLY

maj1 (ASCED) fumaj1 (ASCED)

maj2 (ASCED) fumaj2 (ASCED)

maj3 (ASCED) furinst (E306)

maj4 (ASCED) permnat (SACC)

other1

other2

other3

other4

origin gdscode ceqmode preqmode

GCAID

Appendix 2: *Course Experience Questionnaire* items currently in use. Note that when incorporated into the Graduate Survey, the items not presented in scale-groups (see Appendix 1).

Course Experience Questionnaire (CEQ) scales and items

Scale	Item
Good Teaching	The staff put a lot of time into commenting on my work
	The teaching staff normally gave me helpful feedback on how I was going
	The teaching staff of this course motivated me to do my best work
	My lecturers were extremely good at explaining things
	The teaching staff worked hard to make their subjects interesting
	The staff made a real effort to understand difficulties I might be having with my work
Generic Skills	The course helped me develop my ability to work as a team member
	The course sharpened my analytic skills
	The course developed my problem-solving skills
	The course improved my skills in written communication
	As a result of my course, I feel confident about tackling unfamiliar problems
	My course helped me to develop the ability to plan my own work
Overall Satisfaction	Overall, I was satisfied with the quality of this course
Appropriate Assessment	To do well in this course all you really needed was a good memory
	The staff seemed more interested in testing what I had memorised than what I had understood
	Too many staff asked me questions just about facts
Appropriate Workload	I was generally given enough time to understand the things I had to learn
	The sheer volume of work to be got through in this course meant it couldn't all be thoroughly comprehended
	The workload was too heavy
	There was a lot of pressure on me as a student in this course
Clear Goals and Standards	It was always easy to know the standard of work expected
	I usually had a clear idea of where I was going and what was expected of me in this course
	It was often hard to discover what was expected of me in this course
	The staff made it clear right from the start what they expected from students
Grad Qualities	The course provided me with a broad overview of my field of knowledge
	The course developed my confidence to investigate new ideas
	University stimulated my enthusiasm for further learning
	I learned to apply principles from this course to new situations
	I consider what I learned valuable for my future
Intellectual Motivation	My university experience encouraged me to value perspectives other than my own
	I found my studies intellectually stimulating
	I found the course motivating
	Overall, my university experience was worthwhile
Learning Community	The course has stimulated my interest in the field of study
	I felt part of a group of students and staff committed to learning
	Students' ideas and suggestions were used during the course
	I learned to explore ideas confidently with other people
	I felt I belonged to the university community
Learning Resources	I was able to explore academic interests with staff and students
	The library resources were appropriate for my needs
	The study materials were clear and concise
	It was made clear what resources were available to help me learn
Student Support	Course materials were relevant and up to date
	Where it was used, the information technology in teaching and learning was effective
	I was able to access information technology resources when I needed them
	Relevant learning resources were accessible when I needed them
	Health, welfare and counselling services met my requirements
	The library services were readily accessible
	I was satisfied with the course and careers advice provided

Endnotes

- ⁱ A number of Australian universities have joined international consortia for the delivery of on-line education. See, for example, the *Universitas 21* network for international higher education, <http://www.universitas.edu.au/>
- ⁱⁱ The Australian government department concerned with higher education, the Department of Education, Science and Training (DEST), publishes these statistics annually. An archive of reports, commencing 1992, is available at <http://www.dest.gov.au/archive/highered/statistics/characteristics/contents.htm> while more recent reports (from 2001) are available from http://www.dest.gov.au/sectors/higher_education/publications_resources/statistics/publications_higher_education_statistics_collections.htm Accessed 23 June 2006.
- ⁱⁱⁱ Graduate Careers Australia annually publishes summary data in an accessible format, including a 'schools edition'. Available at <http://www.graduatecareers.com.au/content/view/full/24> accessed 20 July 2006.
- ^{iv} In 2005 there were 43 participating higher education institutions, including several private providers such as Bond University.
- ^v GCA publish annual research reports of the GDS, CEQ <http://www.graduatecareers.com.au/content/view/full/821#survey>
- ^{vi} ACER undertakes the analysis of the CEQ and PREQ data, on behalf of GCA. An explanation can be found at http://www.acer.edu.au/research/projects/course_experience.html Accessed 23 July 2006
- ^{vii} The AVCC publishes spreadsheets of the CEQ data (prepared by ACER on behalf of GCA), with data nested by institution, course and field of study. These files are available from http://www.avcc.edu.au/content.asp?page=/policies_programs/graduates/index.htm Accessed 23 July 2006
- ^{viii} The GCA publishes annual research reports of the GDS and CEQ <http://www.graduatecareers.com.au/content/view/full/821#survey>
- ^{ix} see annual CEQ reports available from GCA <http://www.graduatecareers.com.au/content/view/full/821#survey>
- ^x see annual CEQ reports available from GCA <http://www.graduatecareers.com.au/content/view/full/821#survey>
- ^{xi} One Australian dollar equates to approximately 0.76 United States Dollars, 0.59 Euro and 87.46 Japanese Yen – conversion rates as at 3 August 2006.
- ^{xii} Based on DEST statistics for 2004.
- ^{xiii} Technical Note No.2. *Student Outcome Indicators for the Learning and Teaching Performance*. http://www.dest.gov.au/sectors/higher_education/policy_issues_reviews/key_issues/assuring_quality_in_higher_education/technical_note_2.htm. Accessed: 21 June, 2006.
- ^{xiv} Six criteria were specified, including: 'Evidence that the statistical year was atypical', and "Evidence that a high result against one indicator directly contributed to a lower result against another indicator". In *Administrative Information for Providers 2006*, available at http://www.dest.gov.au/sectors/higher_education/policy_issues_reviews/key_issues/learning_teaching/ltpf/2006ltpf.htm Accessed 21 June 2006.